

# Courses

---

## Certificate Courses

---

### (z)

---

#### **High Quality Prediction Using Machine and Deep Learning**

In this 1.5-hour long project-based course, you will be able to: - Understand the theory and intuition behind Simple and Multiple Linear Regression. - Import Key python libraries, datasets and perform data visualization - Perform exploratory data analysis and standardize the training and testing data. - Train and Evaluate different regression models using Sci-kit Learn library. - Build and train an Artificial Neural Network to perform regression. - Understand the difference between various regression models KPIs such as MSE, RMSE, MAE, R2, and adjusted R2. - Assess the performance of regression models and visualize the performance of the best model using various KPIs.

#### **How to create a marketing analytics dashboard using Hubspot**

By the end of this project, you will learn how to create a customized report dashboard in Hubspot, will learn how to add existing marketing reports, adjust the view of the marketing dashboard. Your new skills will help you efficiently manage marketing and stay up to date on marketing reports in Hubspot.

#### **Hosting SQL Server and Database with Azure**

In this guided project, you will host a SQL server and database with Azure and use the Microsoft SQL server management studio to connect to the SQL server. We will also explore different SQL database deployment and pricing options. By the end of this project, you will be confident in hosting an SQL database on an SQL Server on Azure. In order to complete this project successfully, you need an Azure account. If you do not have an Azure account, you will be prompted to create one in the project.

#### **Getting Started with iOS Mobile Application Development**

Learn about iOS development by learning about the OS and the development platform. Discover how to set up and prepare a local environment. Get acquainted with the Swift playground and write code in Swift. By the end of this course, you'll be able to: - Demonstrate a working knowledge of the general principles of mobile apps and the iOS ecosystem -Set up and explore the XCode environment -Demonstrate an understanding of how XCode is used in the Swift app development process -Write Swift code and create UI with the use of Swift playgrounds -Navigate the Swift UI -Manipulate data in Swift You'll gain experience with the following tools and software: -Swift application and

software -iOS software and development environment -Mobile OS -XCode -Objective-C  
-UI frameworks -Testflight -UI storyboard -MVC -APIs

### **0FMI8S8GEemv18QXkU05g to Cybersecurity Tools and Cyber Attacks**

This course gives you the background needed to understand basic Cybersecurity. You will learn the history of Cybersecurity, types and motives of cyber attacks to further your knowledge of current threats to organizations and individuals. Key terminology, basic system concepts and tools will be examined as an introduction to the Cybersecurity field. You will learn about critical thinking and its importance to anyone looking to pursue a career in Cybersecurity. Finally, you will begin to learn about organizations and resources to further research cybersecurity issues in the Modern era. This course is intended for anyone who wants to gain a basic understanding of Cybersecurity or as the first course in a series of courses to acquire the skills to work in the Cybersecurity field as a Jr Cybersecurity Analyst. The completion of this course also makes you eligible to earn the Introduction to Cybersecurity Tools and Cyber Attacks IBM digital badge. More information about the badge can be found <https://www.youracclaim.com/org/ibm/badge/introduction-to-cybersecurity-tools-cyber-attacks>

### **0HaFhw9Eeun9Q55jnd9A Applying Project Management in the Real World**

In this final, capstone course of the Google Project Management Certificate, you will practice applying the project management knowledge and skills you have learned so far. We encourage learners to complete Courses 1-5 before beginning the final course, as they provide the foundation necessary to complete the activities in this course. As you progress through this course, you will “observe” a project manager in a real-world scenario and complete dozens of hands-on activities. You will: - analyze project documents to identify project requirements and evaluate stakeholders - complete a project charter and use it as a tool to align project scope and goals among stakeholders - identify tasks and milestones and document and prioritize them in a project plan - define quality management standards and explore how to effectively share qualitative data - demonstrate your project’s impact through effective reporting By the end of this course, you will have developed a portfolio of project management artifacts that will demonstrate the skills you have learned throughout the entire program, such as your ability to manage stakeholders and teams, organize plans, and communicate project details. These artifacts can exhibit your career readiness when applying for jobs in the field. To further prepare you to interview for project management jobs, you will reflect on past projects, develop an “elevator pitch,” and anticipate common interview questions. Current Google project managers will continue to instruct and provide you with the strategies, tools, and resources to meet your goals. After completing this program, you should be equipped to apply for introductory-level jobs as a project manager. You will also have the opportunity to claim a certification of completion badge that will be recognizable to employers.

## 01- **Configuring Kotlin for Android with IntelliJ IDEA**

In this 1.5 hour guided project, I will show you how to configure IntelliJ IDEA, an integrated development environment for Android development using Kotlin. We will cover Software development kits, Java Development kits, and additional plugins. Basic knowledge of the Kotlin languages is helpful but not required for this project.

## 0glw5n\_yEeyoNA5LwAIntegrate apps into Hootsuite dashboard

At the end of this project, you will have all the basic skills to integrate apps into your Hootsuite Dashboard. You will be able to discover the different types of apps that you can install and you will be able to easily and quickly integrate them into your dashboard on Hootsuite.

## 0y0BADm8Ee2sBcL6nkg9Certified SAP Professional

Becoming a Certified SAP Professional is the seventh course in the SAP Technology Consultant Professional Certificate program. Now that you've completed the first 6 courses, including the project, you'll spend time considering the next steps in your SAP career. You'll explore different industries, portfolios, and domains. You'll dig deep into available career development resources, build your resume, practice interviewing, and look at the jobs available in the market. You'll spend time assessing what SAP learning journey you wish to pursue, including what certifications are required for which role. You'll then create your own SAP career development plan, listing the actions you need to take to achieve your desired SAP role. By the end of this course, you will: Know the next steps you need to take to become an SAP professional. Have a clear understanding of the different industries, portfolios, and domains you may want to specialize in as an SAP professional. Know the SAP certification opportunities available on the SAP Learning Hub. Be aware of other industry-standard technical certifications and how they can support and enhance your SAP credentials and experience. Have clear guidance on writing CVs or resumes, undertaking interviews and positioning yourself as the best you can be.

## 1ly4sTEyEeu4yQpBCnHFeatures in ProfitBooks

By the end of this project you will be able to use ProfitBooks to manage your small business' income. You will learn about sales orders, invoices, services, and estimates. You will be able to take a sales order from beginning to end in the system, as well as reconcile invoices attached to sales orders. As you continue through the project you will learn how to manage inventory, add services, and create estimates for customers. You will gain the fundamentals to manage income using ProfitBooks. ProfitBooks hosts your information on the secure and widely-trusted Amazon Web Services (AWS). The company has also implemented additional security features like secure-access, built-in firewalls, encrypted data storage and periodic back-ups to keep your data safe. You can read more about their security policy here: <https://www.profitbooks.net/cloud-data-security/>

## 1d1BcvOPEeuKAutWfzZ Business Communication using Power Automate

Imagine you're organizing a fundraising event. After the event, it is necessary to send thank-you notes to donors, but donations are hard to track since they arrive before, during and after the event, and manually sending emails to each donor would take too long. Thankfully, such manual and repetitive business processes are easy to automate, and this guided project, “Automize Business Communication using Power Automate” is for any business professional who is looking to automate any similar business task. With Power Automate, you will create a flow that can be triggered every time someone makes a donation. When you press Run, the flow will display a form with certain fields that have to be populated, such as name, e-mail, address, donation amount (or any other information we need about the donor). When the event ends, we will have a list of all the people who made donations in an Excel table. Then you will make another flow that will send thank-you notes to each donor on the list. After that, the flow will single out the people who donated the largest amounts and forward that list to the manager who can then send them a special thank-you note or a small gift. The requirement for taking this project is to have a free Microsoft account, but if you don't have it, you can create one in just a few clicks (notes on how-to are included in this project). Since this project uses Power Automate (part of the Microsoft Power Platform), you will also need access to a free Microsoft 365 Developer Program subscription. In the first task you will be given instructions on how to sign up for it! Anyone can learn to use Power Automate regardless of their educational background! If you would like to make your life easier by automating manual, time-consuming business tasks which are hard to track, then this project is for you! Let's get started!

## 2jTqHscpEeyduR0glaX Python Programming in Python

In this course, you will be introduced to foundational programming skills with basic Python Syntax. You'll learn how to use code to solve problems. You'll dive deep into the Python ecosystem and learn popular modules, libraries and tools for Python. You'll also get hands-on with objects, classes and methods in Python, and utilize variables, data types, control flow and loops, functions and data structures. You'll learn how to recognize and handle errors and you'll write unit tests for your Python code and practice test-driven development. By the end of this course, you will be able to:

- Prepare your computer system for Python programming
- Show understanding of Python syntax and how to control the flow of code
- Demonstrate knowledge of how to handle errors and exceptions
- Explain object-oriented programming and the major concepts associated with it
- Explain the importance of testing in Python, and when to apply particular methods

This is a beginner course for learners who would like to prepare themselves for a career in back-end development or database engineering. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.

## 2x116249EeyQu0p0tV Visualizing Data using Microsoft Sway

Do you want to wow your audience with interactive, engaging presentations? With Microsoft Sway, you're no longer limited to picking pre-designed templates that make

your presentations look like everyone else's. You don't have to have any design skills to transform and showcase information in modern, interactive, and attention-getting ways. Sway lets you customize styles to your liking, and intelligently suggests unique styles that suit your presentation! This Guided Project, "Create Visually Engaging Presentations using Microsoft Sway" is for creative-minded, keen learners, who want to improve their business communication and delivery effectiveness, or simply learn something new. In this 2-hour long project-based course, you will learn how to create a new Sway, add content to a Sway, customize a Sway using different design elements, and share a finished Sway on the web. After completing this project, you'll be able to create modern, professional-looking presentations for any occasion in minutes using Sway! Sway is free to use for anyone with a Microsoft Account (Hotmail, Live, or Outlook.com). If you don't already have an account, you'll learn how to create one here. Are you excited to make an impression on your next presentation? Then what are you waiting for? Let's get started!

### **39YbojmlEeujW6cdzr0gQ Cisco Switches with Port Security**

Welcome to the CCNA 1.5: Securing Cisco Switches with Port Security. This project is the fifth in the CCNA learning series that is designed to help you acquire the hands-on skills required to pass the CCNA certification exam. In this 2-hour guided project, you will secure Cisco Local Area Networks by disabling unused switch ports, implementing different port security modes, and verifying port security settings on Cisco switches.

### **3S- u6ajHEeuCfAr94DTRdQ Simulation of Covid-19 Testing Process Using R Simmer**

Welcome to "Simulation of Covid-19 Testing Process Using R Simmer". This is a project-based course which should take under 2 hours to finish. Before diving into the project, please take a look at the course objectives and structure. By the end of this project, learn gain introductory knowledge of Discrete Event Simulation, use R Studio and Simmer library, create statistical variables required for simulation, define process trajectory, define and assign resources, define arrivals (eg. incoming customers / work units), run simulation in R, store results in data frames, plot charts and interpret the results.

### **3Udu3BZrEeustE7pensev ProfitBooks**

ProfitBooks is an online accounting and payroll management software for small businesses. It allows users to organize offices finances and track all activities related to their business. This free online tool allows you to manage your money without accounting knowledge, grow sales with powerful invoicing tools, track inventory with ease, and run your business with total confidence. This project will take a deeper look into the Expenses tab in Profitbooks. We will explore the functions and features Profitbooks has to offer small business owners for managing their business expenses. In this project we will create a purchase order, record an expense for a project we add to the system, record a purchase, create a payment voucher and add a vendor into the

system. ProfitBooks hosts your information on the secure and widely-trusted Amazon Web Services (AWS). The company has also implemented additional security features like secure-access, built-in firewalls, encrypted data storage and periodic back-ups to keep your data safe. You can read more about their security policy here: <https://www.profitbooks.net/cloud-data-security/>

### **3YQ- Lead Management with HubSpot** **IXTKEyrDAqvINCGXQ**

In this course, you will learn how to create and implement an effective lead management strategy for your business using HubSpot’s tools. After learning the importance of lead management within the context of the buyer’s journey, you will learn best practices for auditing and mapping out your process as well as for using a sales and marketing SLA. You’ll learn how to organize your leads by both segmenting them and qualifying them within a lead qualification framework. Nurturing relationships with your leads will be a key part of these practices, as well. Next, you’ll learn how to assign values to leads in order to prioritize outreach along with how to quickly assign each lead to the right representative on your team. You’ll learn to use metrics to track your lead management results and report them using HubSpot’s dashboard. Finally, the course will culminate in the application of your skills to build a lead management flow in HubSpot. By the end of this course you will be able to:

- Describe the importance of lead management
- Create an effective lead management strategy
- Segment, qualify and organize leads in HubSpot
- Create a lead nurturing email campaign
- Prioritize leads with lead scoring in HubSpot
- Manage Sales Qualified Leads with Lead Routing
- Identify metrics to track lead management results
- Report on lead management results
- Create a lead management dashboard in HubSpot
- Experience and build a lead management flow in HubSpot

Regardless of your current experience, this course will teach you the practices you need to create a lead management flow in HubSpot and successfully nurture your lead relationships. This course is intended for anyone interested in jumpstarting their career in sales - whether you’re changing careers and looking for an entry-level role, or want to hone your skills in your current role as a sales representative. It does not require any background knowledge or experience to get started. Throughout the course, you will complete exercises that ask you to apply the skills you have learned in a practical way, such as mapping your lead management process, scoring leads with a worksheet, and creating a lead routing workflow. You will compile your work and submit it as a project at the end of the course.

### **3bkT0tzVEequERkqB5iCw for Data Analysis**

Spreadsheet tools like Excel are an essential tool for working with data - whether for data analytics, business, marketing, or research. This course is designed to give you a basic working knowledge of Excel and how to use it for analyzing data. This course is suitable for those who are interested in pursuing a career in data analysis or data science, as well as anyone looking to use Excel for data analysis in their own domain. No prior experience with spreadsheets or coding is required - all you need is a device with a modern web browser and the ability to create a Microsoft account to access Excel online

at no cost. If you have a desktop version of Excel, you can also easily follow along with the course. Throughout this course, you'll gain valuable experience working with data sets and spreadsheets. We'll start by introducing you to spreadsheets like Microsoft Excel and Google Sheets, and show you how to load data from multiple formats. From there, you'll learn how to perform basic data wrangling and cleansing tasks using functions, and expand your knowledge of data analysis through the use of filtering, sorting, and pivot tables. There is a strong focus on practice and applied learning in this course. With each lab, you'll have the opportunity to manipulate data and gain hands-on experience using Excel. You'll learn how to clean and format your data efficiently, and convert it into a pivot table to make it more organized and readable. The final project will allow you to showcase your newly acquired data analysis skills by working with real data sets and spreadsheets. By the end of this course, you'll have a solid foundation in using Excel for data analysis. You'll have worked with multiple data sets and spreadsheets, and will have the skills and knowledge needed to effectively clean and analyze data without having to learn any code. So let's get started!

### **3ibvQHHEe2xPRKed Des of Accounts Payable and Receivable Management**

This course is for those interested in starting a career in bookkeeping. The course builds on the knowledge and skills covered in the first course in this professional certificate, Fundamentals of Accounting and Reporting, and dives deeper into accounts payable and receivable management. You will not only learn concepts related to accounts payable and receivable, but also demonstrate the basic concepts of computerized accounting using Tally. Tally is a revolutionary product which has been created with greater flexibility and a new look and feel. By the end of the course, you will be able to: - Classify inventory - Manage accounts receivable and accounts payable - Manage purchase and sales orders - Track costs of purchase - Manage cost and profit centers - Create and maintain budgets using TallyPrime - Generate reports No prior experience in bookkeeping is required. To be successful in this course, you should have completed the first course in this program, Fundamentals of Accounting and Reporting, or have the equivalent skills and knowledge.

### **3IKd0IIEEuV3LQ1M0 Management in Salesforce**

The second course in the Salesforce Sales Operations Professional Certificate, Lead Management in Salesforce, is for anyone who is curious about entry level sales roles that require foundational skills in Salesforce, the sales operations specialist role specifically, and how to use tools in Salesforce to manage leads in a real world business setting. This second course will give you a foundational understanding of how to help sales and marketing teams optimize the lead management process. Specifically, this course shows how a sales operations specialist would support a marketing associate and sales development representative to make the lead management more effective and efficient. You will learn the basics of data management, how to upload lead data into Salesforce, and then how to effectively train team members to manage leads using the different tools available in the Salesforce Sales Cloud. These are crucial skills for anyone interested in entry level sales jobs. For this course, it is recommended (but not required) that you have some background knowledge of sales and CRM, as well as an understanding of the basics

of Salesforce platform navigation. If you're a total beginner with these concepts, you can still be successful in this course — however, it might require some additional work on your part. By enrolling in this course, you are taking the next step to kickstarting your career in Salesforce. Congratulations on continuing this exciting journey!

### 3pCB7HgGEemBleArpYNSHGAty and Database Vulnerabilities

This course gives you the background needed to understand basic network security. You will learn the about Local Area Networks, TCP/IP, the OSI Framework and routing basics. You will learn how networking affects security systems within an organization. You will learn the network components that guard an organization from cybersecurity attacks. In addition to networking, you will learn about database vulnerabilities and the tools/knowledge needed to research a database vulnerability for a variety of databases including SQL Injection, Oracle, Mongo and Couch. You will learn about various security breach types associated with databases and organizations that define standards and provide tools for cybersecurity professionals. This course is intended for anyone who wants to gain a basic understanding of Network Security/Database Vulnerabilities or as the fourth course in a series of courses to acquire the skills to work in the Cybersecurity field as a Jr Cybersecurity Analyst.

### 3poShluBEeu1VAlifz6jWWW Forms with JavaScript and HTML

By the end of this project, you will have written and tested JavaScript and HTML code that validates data values entered into input fields on an HTML form. Data validation is a valuable skill in web development. Notifying users of input errors not only improves the user experience it also helps to ensure that any data collected via a form is as accurate as possible before sending it to a server for processing. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### 4Br8LH\_REeydHow to design Facebook and IG stories using Canva FhcQw

In this project you will learn how to design stories for Facebook and Instagram using the Canvas platform. Canvas is a great option for those looking for a user-friendly and easy-to-use platform to create attractive designs for their own business or social media content. Canva has many elements that are free and it gives you a lot of freedom when designing. In addition to this, Canva has paid content that offers another endless number of elements and possibilities for the design but they are not mandatory or totally necessary, so the user has the freedom to choose how much content or elements they want to have at their disposal. Canva is an extremely useful tool for those who are just starting out and even becomes a very good tool for those who have spent years designing in more advanced programs. It is a fast option that does not need to be installed on your computer and as long as you have an Internet connection, it will be an accessible tool.

### 4Gq3LMRxEqd0WatepDnMG Create a Database with the Modeling Tool in MySQL Workbench

In this project you will use the Modeling and Design Tool in MySQL Workbench to design and create a multiple-table relational database. As a DBMS (database management system), MySQL is used by many organizations for managing a variety of types and sizes of databases. MySQL Workbench acts as an integrated development environment allowing users to work with relational databases using a visual user interface rather than the command line. Hands-on activities include using the Modeling and Design Tool to draw a database design diagram, generating the database from that diagram, and then using MySQL Workbench features to load data into the database tables. You will also find an optional Challenge Task and an optional Capstone task for extra practice. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### 4HAsVJFYEeyw7BYMBSyA Data using tidyr in R

As data enthusiasts and professionals, our work often requires dealing with data in different forms. In particular, messy data can be a big challenge because the quality of your analysis largely depends on the quality of the data. This project-based course, "Tidy Messy Data using tidyr in R," is intended for beginner and intermediate R users with related experiences who are willing to advance their knowledge and skills. In this course, you will learn practical ways for data cleaning, reshaping, and transformation using R. You will learn how to use different tidyr functions like `pivot_longer()`, `pivot_wider()`, `separate_rows()`, `separate()`, and others to achieve the tidy data principles. By the end of this 2-hour-long project, you will get hands-on massaging data to put in the proper format. By extension, you will learn to create plots using `ggplot()`. This project-based course is a beginner to an intermediate-level course in R. Therefore, to get the most out of this project, it is essential to have a basic understanding of using R. Specifically, you should be able to load data into R and understand how the pipe function works. It will be helpful to complete my previous project titled "Data Manipulation with dplyr in R."

### 4q1YCc97Eeux0AqRE Data Engineering Capstone Project

In this course you will apply a variety of data engineering skills and techniques you have learned as part of the previous courses in the IBM Data Engineering Professional Certificate. You will assume the role of a Junior Data Engineer who has recently joined the organization and be presented with a real-world use case that requires a data engineering solution.

### 5HfjTigyEeuowAFn5f Transforming Data in R

In this 1-hour long project-based course, you will learn how to pivot data into wide and long format, split and combine cells and columns, handling missing values, select groups of observations and variables, and join data from different tables. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## 5Xx3BZzNEeu59Rk1bTUs67 The IFE-EFE Matrix for Strategic Analysis

In this 1-hour long project-based course, you will be able to analyze your organization and identify your competitive advantage with the Internal Factor Evaluation-External Factor Evaluation (IFE-EFE) matrix. IFE-EFE matrix is strategic management tools used for input stage of strategy formulation. The IFE is focused on the internal dimension of the organization by looking at the strengths and weaknesses. While the EFE is concerned with the external factors by focusing on the opportunities and threats the organization is exposed to. The IFE-EFE matrix is created by assigning weight to each of the factors based on their perceived impact. Then the factors are ranked based on the company performance on each. The weighted score is determined by multiplying the weight by the ranks. Finally, the information on the overall scores of the IFE- EFE would reveal if the company meets the threshold to survive the competitiveness of the industry. To demonstrate the application of the IFE-EFE matrix, we will use a spreadsheet to analyze a division of our energy services company together. The example of the case study would empower you to use the model to analyze your company or any other company of your choice. The project is for business leaders and entrepreneurs who want have a deep insight on how their internal and external factors determines their competitiveness. Also, for strategist who are interested in helping organization in making informed strategic decisions. At the end of the project, you will be able to use the IFE-EFE matrix to create a competitive advantage

## 5fpST3uLEeu75QRf0mDM Science with R

Much of the world's data resides in databases. SQL (or Structured Query Language) is a powerful language which is used for communicating with and extracting data from databases. A working knowledge of databases and SQL is a must if you want to become a data scientist. The purpose of this course is to introduce relational database concepts and help you learn and apply foundational knowledge of the SQL and R languages. It is also intended to get you started with performing SQL access in a data science environment. The emphasis in this course is on hands-on and practical learning. As such, you will work with real databases, real data science tools, and real-world datasets. You will create a database instance in the cloud. Through a series of hands-on labs, you will practice building and running SQL queries. You will also learn how to access databases from Jupyter notebooks using SQL and R. No prior knowledge of databases, SQL, R, or programming is required. Anyone can audit this course at no charge. If you choose to take this course and earn the Coursera course certificate, you can also earn an IBM digital badge upon successful completion of the course.

## 609dhhsLEeyf46 Creating a Budget with Microsoft Excel

By the end of this project, you will learn how to create a budget template in an Excel Spreadsheet by using a free version of Microsoft Office Excel. Excel is a spreadsheet that is similar in layout as accounting spreadsheets. It consists of individual cells that can be used to build functions, formulas, tables, and graphs that easily organize and analyze large amounts of information and data. While a budget helps you stay within estimated

costs and expenses for either a business or a family. We will learn to create a budget both automatically and manually, step by step. By utilizing Microsoft Excel you will reduce the burden of budgeting and see increase in accuracy. It will allow you to scale budgeting and to make record keeping and tracking of expenditures easier. We will also use basic graphing for presenting budget tracking. You do not need to be an advance user of Microsoft Excel as we will show you how to use templates that are provided in the program and simple formulas to create a budget for any reason.

## **62RUvsdDEeyyBk3-Basics**

### **TLTIw**

React is a powerful JavaScript library that you can use to build user interfaces for web and mobile applications (apps). In this course, you will explore the fundamental concepts that underpin the React library and learn the basic skills required to build a simple, fast, and scalable app. By the end of this course, you will be able to:

- Use reusable components to render views where data changes over time
- Create more scalable and maintainable websites and apps
- Use props to pass data between components
- Create dynamic and interactive web pages and apps
- Use forms to allow users to interact with the web page
- Build an application in React

You'll gain experience with the following tools and software:

- React.js
- JSX
- React
- HTML, CSS and JavaScript
- VSCode

You will be able to leverage the potential of this course to develop new skills, improve productivity, act effectively with data and boost your career. This is a beginner course for learners who would like to prepare themselves for a career in mobile development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to get started with coding.

## **6BWY3McrEey3GndQBhYpaCapstone**

This course gives you the opportunity to demonstrate the skills you have gained throughout the Android Developer Professional Certificate program. You'll do this by developing an Android app to order food from the Little Lemon restaurant. In other words, you'll create a solution to a real-world problem. At this point in the program, you've gained all the skills you need to successfully complete this project. But you might need to refresh your memory when it comes to the previous courses in the program. For that reason, each module in this course will take you through a brief recap of relevant content from previous courses in the program. And, don't worry, there will be links too so you can review content in more detail if necessary. In this way, you will be guided through the process of building the Little Lemon food ordering app which allows you to show off your Android development skills. By the end of the course, you will be able to:

- Set up a Jetpack Compose application
- Commit a project to a Git repository
- Plan the UI and UX of an application
- Set up a navigation hierarchy between app screens
- Create a user onboarding flow
- Develop a food menu user interface

On completion of the Capstone Project, you'll have an interactive mobile application that you can share with recruiters and impress potential employers with. This is an advanced course, intended for learners with a background in Android app development. And, it always helps to have a can-do attitude!

## 6CDZRqbPEeu3E4M4C0B0 In Software Development Process

This course is geared towards anyone interested in learning about IBM, COBOL, mainframe computing, and the Software Development Lifecycle (SDLC) and increasing their knowledge and hands on experience with core concepts and technologies including life cycle and systems analysis concepts, design and structured coding, and a wide variety of topics designed to provide relevant, requisite working knowledge and practical experience.

## 6laU8w28Ee2k2RkmdB1QoQ Of Career Navigating and Coaching

This course is for those who are passionate about helping people find jobs aligned with their skills and interests so they can earn a living through fulfilling work. This first course in the Career Coach and Navigator Professional Certificate will provide foundational knowledge of the Career Navigator and Coach roles, and introduce relationship management and human-centered coaching and navigating. By the end of the course, you will be able to: 1. Explain the foundational concepts of Career Coaching and Navigating. 2. Familiarize clients with the Career Coaching and Navigation experience. 3. Discover career possibilities for Career Navigators and Career Coaches 4. Describe common Career Development theories, models, and tools. 5. Summarize Coaching Agreements and Career Service Plans. 6. Identify professional and ethical standards. 7. Describe human-centered approaches to Career Coaching and Navigating. To be successful in this course, no prior experience with career coaching or navigation is required. You just need a passion to help people, along with basic computer skills (some knowledge of word processing, spreadsheets, presentations and email).

## 6UJpcPh\_EeqdDRRg4D Leadership: Developing Strategic Gap Analysis in Miro

By the end of this guided project, you will be fluent in identifying, and mapping variables for Gap Analysis using a hands-on example. This will enable you to map business states from the AS IS to the TO BE state which is important in for preparing and managing change in professional and personal life. Change happens all the time and in being able to identify factors involved in change and preparing to manage change you increase your chances for success . This analysis will help you if you are in: + Strategy development + Program Management + Project Management + Business Process Re-Engineering + Product Development + Organisational Development And much more. On a personal level this analysis can help you to map where you are and where you want to be for example: + Competing in sports + Having a professional goal + Developing a good habit Furthermore, this guided project is designed to engage and harness your visionary and exploratory abilities. You will use proven models in change management with Miro to identify the gaps in products/services, and further equip you with the knowledge to utilise the learned concepts, methodologies, and tools to prepare for change in various settings.

## 6XfqXHyaEeu3Analyze Sales Data with LibreOffice Base Queries

By the end of this project, you will have developed LibreOffice Base queries that provide data for use in sales analysis. An organization that sells products or services finds it

useful to know which products are selling, whether they are priced appropriately, and which customers are purchasing them. Providing that kind of data gives the organization better targets for fine tuning its product mix and customer base. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **6YU51HkEeuV Python Project for Data Science**

This mini-course is intended for you to demonstrate foundational Python skills for working with data. This course primarily involves completing a project in which you will assume the role of a Data Scientist or a Data Analyst and be provided with a real-world data set and a real-world inspired scenario to identify patterns and trends. You will perform specific data science and data analytics tasks such as extracting data, web scraping, visualizing data and creating a dashboard. This project will showcase your proficiency with Python and using libraries such as Pandas and Beautiful Soup within a Jupyter Notebook. Upon completion you will have an impressive project to add to your job portfolio. PRE-REQUISITE: **\*\*Python for Data Science, AI and Development\*\*** course from IBM is a pre-requisite for this project course. Please ensure that before taking this course you have either completed the Python for Data Science, AI and Development course from IBM or have equivalent proficiency in working with Python and data. NOTE: This course is not intended to teach you Python and does not have too much instructional content. It is intended for you to apply prior Python knowledge.

### **6gFvP03FEeqFP Python Penetration Testing, Incident Response and Forensics**

This course gives you the background needed to gain Cybersecurity skills as part of the Cybersecurity Security Analyst Professional Certificate program. You will learn about the different phases of penetration testing, how to gather data for your penetration test and popular penetration testing tools. Furthermore, you will learn the phases of an incident response, important documentation to collect, and the components of an incident response policy and team. Finally, you will learn key steps in the forensic process and important data to collect. This course also gives you a first look at scripting and the importance to a system analyst. This course is intended for anyone who wants to gain a basic understanding of Cybersecurity or as the fifth course in a series of courses to acquire the skills to work in the Cybersecurity field as a Cybersecurity Analyst. The completion of this course also makes you eligible to earn the Penetration Testing, Incident Response and Forensics IBM digital badge. More information about the badge can be found <https://www.youracclaim.com/org/ibm/badge/penetration-testing-incident-response-and-forensics>. In this course you will learn to: • Describe penetration testing tools and the benefits to an organization • Describe a deep dive into incident response techniques and tools • Describe digital forensics and digital evidence. • Discuss the power of scripting.

### **6tfY45bqEeuFP Data Science with R - Capstone Project**

In this capstone course, you will apply various data science skills and techniques that you have learned as part of the previous courses in the IBM Data Science with R

Specialization or IBM Data Analytics with Excel and R Professional Certificate. For this project, you will assume the role of a Data Scientist who has recently joined an organization and be presented with a challenge that requires data collection, analysis, basic hypothesis testing, visualization, and modeling to be performed on real-world datasets. You will collect and understand data from multiple sources, conduct data wrangling and preparation with Tidyverse, perform exploratory data analysis with SQL, Tidyverse and ggplot2, model data with linear regression, create charts and plots to visualize the data, and build an interactive dashboard. The project will culminate with a presentation of your data analysis report, with an executive summary for the various stakeholders in the organization.

### **6YRsdgAGEe2Cp0415sBq Beginners: Introduction to Spreadsheets**

This 1-hour, project-based course is an introduction to spreadsheets. We'll be using Excel on the Web in this project, which is the free spreadsheet program offered by Microsoft. However, all of the concepts that you will learn in this project will be applicable to other spreadsheet programs, such as LibreOffice Calc and Google Sheets. We will cover the following concepts in a hands-on manner: - Basic data entry, formatting and calculations - Relative and absolute cell references - Formulae and basic functions: sum, average, min, max - Conditional formatting Please Note: If you don't have a free Microsoft account, you will need to create one to be able to complete the content.

### **70DCZBoqEeyZ9B1sL760Q Data Analytics**

This course equips you with a practical understanding and a framework to guide the execution of basic analytics tasks such as pulling, cleaning, manipulating and analyzing data by introducing you to the OSEMN cycle for analytics projects. You'll learn to perform data analytics tasks using spreadsheet and SQL queries. You will also be introduced to using the Python programming language to manipulate datasets as an alternative to spreadsheets. You will learn foundational programming concepts and how they apply to marketing. You will also learn how to use Tableau to create data visualizations and dashboards. By the end of this course, you will be able to:

- State business goals, KPIs and associated metrics
- Apply a Data Analysis Process: OSEMN
- Identify and define the relevant data to be collected for marketing
- Compare and contrast the different formats and use cases of different kinds of data
- Identify gaps in data collected and describe the strengths and weaknesses
- Demonstrate proficiency in Python with variables, control flow, loops, and basic data structures
- Sort, query and structure data in spreadsheets and with Python libraries
- Write basic SQL statements to select, group and filter data
- Visualize data patterns and trends with spreadsheets
- Utilize Tableau to visualize data patterns and trends

This course is designed for people who want to learn the basics of data analytics including using spreadsheets and Python to sort and structure data and using Tableau to visualize data patterns. Learners don't need marketing or data analysis experience, but should have basic internet navigation skills and be eager to participate. Learners also need access to a computer with strong internet connection. Ideally learners have already completed course 1 (Marketing Analytics Foundation) in this program.

## 7sBicIFIEetjQ5tpe0VtA Support Fundamentals

This course is the first of a series that aims to prepare you for a role as an entry-level IT Support Specialist. In this course, you'll be introduced to the world of Information Technology, or IT. You'll learn about the different facets of Information Technology, like computer hardware, the Internet, computer software, troubleshooting, and customer service. This course covers a wide variety of topics in IT that are designed to give you an overview of what's to come in this certificate program. By the end of this course, you'll be able to: # understand how the binary system works # assemble a computer from scratch # choose and install an operating system on a computer # understand what the Internet is, how it works, and the impact it has in the modern world # learn how applications are created and how they work under the hood of a computer # utilize common problem-solving methodologies and soft skills in an Information Technology setting

## 873t- Technical Support Case Studies and Capstone sJ3EeyZlw5yhMZTYQ

This course allows you to show what you've learned in the previous IT Technical Support professional certification courses and apply that knowledge to realistic situations. The IT Technical Support Capstone leads you through a series of technical support case studies that require hands-on work to resolve. You will practice analyzing user help requests and troubleshooting various issues. You'll demonstrate your knowledge of hardware, software, networking, security, and cloud computing. You'll also demonstrate your understanding of escalation, levels of support, ticketing systems, and other support tools and systems. And along the way, you'll show what you've learned about the essential communication and customer service skills for effective technical support. By the end of the course, you will better understand how to use your technical support skills in everyday professional settings. You'll also be prepared to take the CompTIA ITF+ exam for certification.

## 8NStRqhJEeqpBQ5fB0ePQ First React Website

In this 1-hour long project-based course, you will gain hands-on experience with one of the hottest web development framework, React. If you have some experience with HTML, CSS, JavaScript and want to start developing with React, this course is for you! By the end of this course You will understand the fundamental of React and be able to create and build a website with React with ease.

## 8UjeMk- Machine Learning with Python mEeit4g4GsxE4dg

Get ready to dive into the world of Machine Learning (ML) by using Python! This course is for you whether you want to advance your Data Science career or get started in Machine Learning and Deep Learning. This course will begin with a gentle introduction to Machine Learning and what it is, with topics like supervised vs unsupervised learning, linear and non-linear regression, simple regression and more. You will then dive into

classification techniques using different classification algorithms, namely K-Nearest Neighbors (KNN), decision trees, and Logistic Regression. You'll also learn about the importance and different types of clustering such as k-means, hierarchical clustering, and DBSCAN. With all the many concepts you will learn, a big emphasis will be placed on hands-on learning. You will work with Python libraries like SciPy and scikit-learn and apply your knowledge through labs. In the final project you will demonstrate your skills by building, evaluating and comparing several Machine Learning models using different algorithms. By the end of this course, you will have job ready skills to add to your resume and a certificate in machine learning to prove your competency.

### 96it3oOXEeyZpA5G6e0Cf0a **Digital Marketing Campaign Dashboards in Tableau**

How we consume data is often just as important as the data itself. If data remains in columns and rows and is a matrix of numbers, it will continue to be mysterious, confusing, and misunderstood. One of the most powerful ways that data can be easily understood is by making a dashboard. Tableau dashboards are easy to create, interactive, and highly customizable. In this video, learners will learn how to create a digital marketing dashboard. Along the way, they will learn the Tableau techniques that are easily applicable to business spaces outside of digital marketing. Learners will create a variety of graphs including dual-axis line graphs, geovisualizations, and word maps. At the conclusion, they will learn how to combine all of these charts into a dashboard. After this course, learners will have highly sought-after data visualization skills and insights on how to best display data.

### 9ENLgCcpEeyyD5kK **Database Clients**

#### TLTIw

Explore how to write database driven applications in Python by creating various types of clients that connect to MySQL databases using Python code and Python-related MySQL features and tools. By the end of this course, you'll be able to: - Utilize Python code to create, populate and manipulate MySQL databases and tables - Access advanced functionality in MySQL using custom built Python clients - Develop working familiarity with advanced topics in MySQL - Apply the principles of advanced MySQL topics to problem solving using Python - Develop a working knowledge of the methods by which a MySQL database connects to the web via a Django API - Create a useful Python application capable of administration of a MySQL database You'll gain experience with the following tools and software: - Python code - Python-related MySQL features and tools - Django REST framework - \_meta API To take this course, you must have completed the previous course Advanced MySQL topics. You must also be eager to continue your journey with coding.

### 9QacvQxYEe2kZKkn3PL0u0 **Data in iOS**

This course introduces you to the core principles of working with data in iOS. You will delve deeper into the processes and concepts behind APIs, explore data formats that allow you to transfer data between servers and devices and discover how to work with

data in Swift using Core Data. By the end of this course, you'll be able to: -Demonstrate a working knowledge of how Swift applications communicate over the web. -Apply asynchronous programming techniques using Swift. -Utilize a variety of methods to take advantage of the Core Data package in a Swift application. This course is ideal for intermediate learners who would like to prepare themselves for a career in iOS development. To succeed in this course, you should have an advanced understanding of Swift programming and a functional knowledge of APIs.

### **9eFPnRkaEeuL0u5001P1Q Support digital transformation with HubSpot**

In this 1-hour long project-based course, you will learn how to identify the concept of business digital transformation, as well as the different types of business digitization, how to determine the role of customer support in your company and identify the customer support processes, how define Customer Relationship Management (CRM) and interpret the importance of using it in your business context and how to customize your own CRM using the HubSpot CRM tool. It will also give you the know-how of evaluating the alignment between your customer support digital transformation and your existing business strategy. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **9paKlrDIEeqPAQ6DyJMeAin Management**

This course equips you with critical content creation and management skills. You'll learn how to create effective social media posts and how to create a strong brand to help you build a social media presence. You'll also learn how to establish an ongoing process to manage your content. This includes setting up a content calendar, managing and moderating your posts, analyzing data for insights and iteration, and how to increase post effectiveness. You will end the course with real-world application of your skills through a content management project. By the end of this course, you will be able to: • Establish and manage a social media presence • Create a Facebook business page and an Instagram account for business • Understand how and why to create content for social media • Create a brand, tone, and voice for a social media presence • Manage a content calendar for your social media presence • Evaluate the performance of your content on social media and to iterate and optimize the performance • Create a content calendar for your social media presence • Manage social media content using real world data This course is intended for people who want to learn how to create and manage a business presence on social media, including creating content, interacting and engaging with customers on social media and evaluating the results of different posts. Learners don't need marketing experience, but they have basic internet navigation skills and are eager to participate and connect in social media. Having a Facebook or Instagram account helps and ideally learners already completed course 1 (Introduction to Social Media Marketing) in this program.

## **Statistical Data Visualization 101**

In this guided project, we will explore plotly express to visualize statistical plots such as box plots, histograms, heatmaps, density maps, contour plots, and violin plots. Plotly express is a super powerful Python package that empowers anyone to create, manipulate and render graphical figures. This crash course is super practical and directly applicable to many industries such as banking, finance and tech industries. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## **Marketing Analytics Foundation**

This course takes a deep dive into the statistical foundation upon which Marketing Analytics is built. The first part of this course is all about getting a thorough understanding of a dataset and gaining insight into what the data actually means. The second part of this course goes into sampling and how to ask specific questions about your data. Finally, the third part is about answering those questions with analyses. Many of the mistakes made by Marketing Analysts today are caused by not understanding the concepts behind the analytics they run, which causes them to run the wrong test or misinterpret the results. This course is specifically designed to give you the background you need to understand what you are doing and why you are doing it on a practical level. By the end of this course you will be able to:

- Understand the concept of dependent and independent variables
- Identify variables to test
- Understand the Null Hypothesis, P-Values, and their role in testing hypotheses
- Formulate a hypothesis and align hypotheses with business goals
- Identify actions based on hypothesis validation/invalidation
- Explain Descriptive Statistics (mean, median, standard deviation, distribution) and their use cases
- Understand basic concepts from Inferential Statistics
- Explain the different levels of analytics (descriptive, predictive, prescriptive) in the context of marketing
- Create basic statistical models for regression using data
- Create time-series forecasts using historical data and basic statistical models
- Understand the basic assumptions, use cases, and limitations of Linear Regression
- Fit a linear regression model to a dataset and interpret the output using Tableau and statsmodels
- Explain the difference between linear and multivariate regression
- Run a segmentation (cluster) analysis
- Describe the difference between observational methods and experiments

This course is designed for people who want to learn the basics of descriptive and inferential statistics and analytics in marketing. Learners don't need marketing or data analysis experience, but should have basic internet navigation skills and be eager to participate. Ideally learners have already completed course 1 (Marketing Analytics Foundation) and course 2 (Introduction to Data Analytics) in this program.

## **Manage Your Versions with Git (Part II)**

This 1.5-hour project-based course is the second part of "Manage Your Versions with Git". In this course, you will learn about branching, merging and remote repositories. At the end of this class, you will be able to collaborate with other developers all over the world using Git. No specific coding experience is required but completion of Part I of

this course is strongly recommended. Basic software development experience would be highly beneficial.

### **BEJQU3kbEeqajmVdQ15fm to Social Media Marketing**

This course lays the foundation of social media marketing. You'll learn what social media marketing entails, including the history and the different social media channels that exist. You'll learn how to select a social media channel that fits your needs, set goals and success metrics, and determine who your target audience is. By the end of this course, you will be able to:

- Understand the landscape of traditional, digital, and social media marketing
- Understand how to become certified as a Digital Marketing Associate
- Understand the major social media platforms, how they function, and what role they play in marketing
- Create SMART goals and identify KPIs
- Define your target audience and their customer journey
- Choose the right social media platforms and learn how to create social media policies

Whatever level of knowledge you start with, this course will help you build a solid foundation for social media marketing and gain applicable skills that will allow you to make your social media marketing efforts more successful and noticeable. Learners don't need marketing experience, but should have basic internet navigation skills and be eager to participate and connect in social media. Learners must have a Facebook account and an Instagram account helps.

### **B\_rci897EeufchLaGz6ZQ Introduction to Linux Commands and Shell Scripting**

This course provides a practical introduction to Linux and commonly used Linux / UNIX shell commands. It teaches you the basics of Bash shell scripting to automate a variety of tasks. The course includes both video-based lectures as well as hands-on labs to practice and apply what you learn. You will have no-charge access to a virtual Linux server that you can access through your web browser, so you don't need to download and install anything to perform the labs. You will learn how to interact with the Linux Terminal, execute commands, navigate directories, edit files, as well as install and update software. You will work with general purpose commands like `id`, `date`, `uname`, `ps`, `top`, `echo`, `man`; directory management commands such as `pwd`, `cd`, `mkdir`, `rmdir`, `find`, `df`; file management commands like `cat`, `wget`, `more`, `head`, `tail`, `cp`, `mv`, `touch`, `tar`, `zip`, `unzip`; access control command `chmod`; text processing commands - `wc`, `grep`, `tr`; as well as networking commands - `hostname`, `ping`, `ifconfig` and `curl`. You will create simple to more advanced shell scripts that involve Metacharacters, Quoting, Variables, Command substitution, I/O Redirection, Pipes and Filters, and Command line arguments. You will also schedule cron jobs using `crontab`. This course is ideal for data engineers, data scientists, software developers, DevOps professionals, and cloud practitioners who want to get familiar with frequently used commands on Linux, MacOS and other Unix-like operating systems as well as get started with creating shell scripts.

### **BrizVfcEemQ3Dwsc0Aty Roles, Processes and Operating System Security**

This course gives you the background needed to understand basic Cybersecurity around people, process and technology. You will learn:

- # Understand the key cybersecurity roles within an Organization.
- # List key cybersecurity processes and an example of each

process. # Describe the architecture, file systems, and basic commands for multiple operating systems including Windows, Mac/OS, Linux and Mobile. # Understand the concept of Virtualization as it relates to cybersecurity Finally, you will begin to learn about organizations and resources to further research cybersecurity issues in the Modern era. This course is intended for anyone who wants to gain a basic understanding of Cybersecurity or as the second course in a series of courses to acquire the skills to work in the Cybersecurity field as a Jr Cybersecurity Analyst. The completion of this course also makes you eligible to earn the Cybersecurity Roles, Processes and Operating System Security IBM digital badge. More information about the badge can be found here: <https://www.youracclaim.com/org/ibm/badge/cybersecurity-roles-processes-operating-system-security>

### **C-05Q- Introduction to Cost Accounting** **IWEeqVtBKLTcFPSw**

By the end of the project, you will be able to use both absorption costing and activity-based costing to determine the cost of a product your company is making. This will allow you to determine the pricing of your product. This is directly relevant for management accountants, performance managers, marketers, and owners of a business. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **C42wy\_wREeqDre3ten Your First NoSQL Database with MongoDB and Compass** **yTw**

In this Guided Project you will create a MongoDB database and collection to store blog posts, and optimize it using indexes, while having an overview of some of the basic commands, in order to learn the basics of NoSQL document databases structure, the MongoDB shell and the usage of the powerful MongoDB Compass GUI to manage, inspect and optimize a MongoDB database. NoSQL is an alternative to traditional relational databases. NoSQL databases sacrifice some relational databases characteristics, such as a well-defined structure and strict relations between entities, in order to achieve better and easier scaling and replication, to handle large quantities of data, while being more generally flexible, cheaper and easier to manage. Instead of using tables, rows and columns, NoSQL document databases such as MongoDB use collections, documents and fields, represented with the well known JSON format. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **C4X-86fMEeulrPKstB The Art of Digital Marketing with Canva**

By the end of this project, you will have everything you need to begin marketing your business with Canva. You will have learned how to create your own business logo, business cards, and an eye-catching business launch ad with a call to action. You will have everything you need to unveil your brand to the public with confidence! This process will allow you to tap into your creative side and pick the perfect aesthetics to

appeal to your target market and share your brand vision with the world. This is a great tool to use if you are planning to start your own business or want to refresh your current brand image. Note: This course works best for learners who are based in the North American region. We're currently working on providing the same experience in other regions.

### **CB\_oYF20Eey4Gey4RzdrzdlMwng with Bash: Basics**

In this project, you will learn how to use Bash for creating basic shell scripts. After completing the 1-hour hands-on guided project, you'll know how to automatically rename a collection of files, read the contents of a file line by line and use all basic constructs of Bash. Note: It's recommended that you have some experience with the command line before starting this project. Consider looking into the project 'Practical introduction to the Command Line' first - <https://www.coursera.org/projects/practical-introduction-to-the-command-line>.

### **CK7WEy4Gey4RzdrzdlMwng Modify Records with COBOL**

In this project you will learn to process data records in a sequential file using COBOL. You will code, compile, and run programs that add new records to an existing file and modify individual data values on existing file records. Your hands-on practice will take place in the PC-based OpenCobolIDE application.

### **CKfOGM95Eey4RzdrzdlMwng Programming Fundamentals in Swift KWeWQ**

This course is ideal for beginners eager to learn the fundamental concepts that underpin the Swift programming language. Explore the basic programming concepts and data structures that are core to any language, while discovering the unique aspects that make Swift as versatile as it is today. In this course, you will receive hands-on practice utilizing these concepts. More specifically, you will learn how to use constants and variables with different data types and explore how to sort and store information in collection types such as arrays, tuples and dictionaries. Finally, you will discover how to make your code reusable and more expressive by using functions and closures. By the end of this course, you will be able to:

- Demonstrate a working knowledge of general programming principles
- Prepare your computer system for Swift programming
- Show understanding of Swift syntax and how to control the flow of code
- Demonstrate knowledge of how to declare, use and modify constants and variables
- Differentiate between the different types of operators and their functions
- Demonstrate how to create simple control flow patterns and call functions using Swift

This is a beginner course for learners who would like to prepare themselves for a career in iOS development. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.

## **CQJC9IPUEeqvCvzHSMobWFirst Python Program From UST**

Welcome to this Guided Project on Creating Your First Python Program, From UST. For more than 20 years, UST has worked side by side with the world’s best companies to make a real impact through transformation. Powered by technology, inspired by people and led by their purpose, they partner with clients from design to operation. With this Guided Project from UST, you can quickly build in-demand job skills and expand your career opportunities in the Computer Science field by learning the foundational elements of the Python programming language and its basic syntax. Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis. Python is a general purpose language, meaning it can be used to create a variety of different programs and isn’t specialized for any specific problems. This versatility, along with its beginner-friendliness, has made it one of the most-used programming languages today. Through hands-on, practical experience, you will be guided through concepts that Python Programmers use every day to perform their job duties, like using the Terminal and a Text Editor. Together, we will explore how to use variables, create functions, lists and conditional statements, as well as utilize For and While loops. You will then apply the concepts to create your first command line application which will manage a To-Do List. This project is great for learners who are looking to get started with Python programming, and do not have any prior programming experience. By the end of this Guided Project, you should feel more confident about working with the Python language, understanding what it is used for, and have confirmed your skills by creating your own to-do list, which can be used for showing an employer or making your routine daily tasks more efficient through automation. Ready to become a Programmer? Start learning Python today!

## **CZQSSVISEuqDpTm88QManagement in Salesforce**

The third course in the Salesforce Sales Operations Professional Certificate, Opportunity Management in Salesforce, is for anyone who is curious about entry level sales roles that require foundational skills in Salesforce, the sales operations specialist role specifically, and how to use tools in Salesforce to manage opportunities and close sales deals in a real world business setting. This third course will give you a foundational understanding of how to help sales teams optimize the opportunity management process. Specifically, this course shows how a sales operations specialist would support account executives and empower them to progress opportunities through a sales pipeline and close sales deals as effectively and efficiently as possible. This will require the use of new tools in Salesforce, including products, price books, quotes, contracts, and orders. Learning how to leverage these aspect of Salesforce are crucial skills for anyone interested in entry level sales jobs. For this course, it is recommended (but not required) that you have some background knowledge of sales and CRM, as well as an understanding of the basics of Salesforce platform navigation. If you're a total beginner with these concepts, you can still be successful in this course — however, it might require some additional work on your part. By enrolling in this course, you are taking the next step to kickstarting your career in Salesforce. Congratulations on continuing this exciting journey!

## CuJ2PscqEeyyWk3 Advanced Data Modeling

### TLTIw

Develop a working knowledge and familiarity with advanced database concepts such as usage, modeling, automation, storage, optimization and administration. To take this course, you must have completed the previous Database courses. You must also be eager to continue your journey with coding. The Professional Certificates create opportunities so that anyone regardless of education, background or experience can learn high-quality skills to land a high-growth career—no degree or experience required to get started. By the end of this course, you'll be able to:

- Deploy basic data modeling skills and navigate modern storage options for a data warehouse
- Apply planning and execution of ETL style database engineering by building upon existing MySQL skills
- Develop a working knowledge of the different aspects of managing a database including administration of database operations and concerns, alongside processes and solutions for monitoring, reporting and debugging
- Demonstrate data modeling skills within a real-world project environment

You'll gain experience with the following tools and software:

- Workbench data modeling software
- Syntaxes used to interact with a data warehouse
- Extract, transform and loading (ETL) techniques and methods
- MySQL data warehouse administration
- Data warehouse monitoring and reporting tools
- Database debugging and testing tools
- Data modeling tools

## CvxnisdEEeyduA6h8Xv React

Learn how to use more advanced React concepts and features, become proficient in JSX, and confidently test your applications. You'll examine different types of React components and learn various characteristics and when to use them. You'll dig into more advanced hooks and create your own. You'll look into building forms with React. You'll explore component composition and new patterns, such as Higher Order Components and Render Props. You'll create a web application that consumes API data and get familiar with the most commonly used React framework integrations, tools, and testing techniques. By the end of this course, you will be able to:

- Render lists and form components efficiently in React.
- Lift shared state up when several components need the updated data.
- Leverage React Context to share global state for a tree of components.
- Fetch data from a remote server.
- Use advanced hooks in React, and put them to use within your application.
- Build your own custom hooks.
- Understand JSX in depth.
- Embrace component composition techniques
- Use advanced patterns to encapsulate common behavior via Higher Order Components and Render Props.
- Test your React components.
- Build a portfolio using React.

You'll gain experience with the following tools and software:

- React.js
- JSX
- React
- HTML, CSS, and JavaScript
- VSCode

You will be able to leverage the potential of this course to develop new skills, improve productivity, act effectively with data and boost your career. To take this course, you should understand the basics of React, HTML, CSS, and JavaScript. Additionally, it always helps to have a can-do attitude!

### **DBu4AgarEey5zDmgBasiQ Formulas and Functions in Microsoft Excel**

Have you started using spreadsheets like Excel and want to learn how to write formulas and functions to perform simple data analysis? In this project, you will learn about the general format for writing formulas and functions in Excel to perform analysis on the sales data from a sample company. In this analysis, you will calculate total sums of profits, you will learn how to use functions to analyze the popularity of the items sold and you will also learn how to calculate averages and percentages of monthly profits. Throughout the project, you will work through some examples that will show you how to apply the formulas and functions you have learned.

### **DEJGgzW3EeyTBM4769PLQ/UX Portfolio with GitHub**

Learners will create a portfolio showcasing their UI/UX projects and deploy it to GitHub. Creating a strong portfolio showcases not only their skills as a designer, but also their perseverance to learn some new skills outside the typical purview of a designer (in this case, coding languages HTML and CSS, and Microsoft's Visual Studio Code).

### **DJYYIBlyEeu1xg7pDtdyQ Data into R**

In this 1-hour long project-based course, you will learn how to read all sorts of data and import them into R, including CSV files, Excel files, data from other statistical software, the web and from relational databases. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **DRsED2OPEeyPthKareWEAQ Transform, and Load Data using Power BI**

Usually, tidy data is a mirage in a real-world setting. Additionally, before quality analysis can be done, data need to be in a proper format. This project-based course, "Prepare, Clean, Transform, and Load Data using Power BI" is for beginner and intermediate Power BI users willing to advance their knowledge and skills. In this course, you will learn practical ways for data cleaning and transformation using Power BI. We will talk about different data cleaning and transformation tasks like splitting, renaming, adding, removing columns. By the end of this 2-hour-long project, you will change data types, merge and append data sets. By extension, you will learn how to import data from the web and unpivot data. This project-based course is a beginner to an intermediate-level course in Power BI. Therefore, to get the most of this project, it is essential to have a basic understanding of using a computer before you take this project.

### **DbzMzp0yEeuXasf1nMK Accounting**

In this second course, you will dive deeper into the world of bookkeeping and focus on accounting for assets. If you are familiar with bookkeeping basics, such as double entry accounting, you are ready for this course. You will gain an understanding of common asset types, learn how to account for inventory, calculate cost of goods sold, and work with Property, Plant, and Equipment (PPandE). Upon completing this course, you will use your new knowledge of assets to record transactions and produce financial statements

for increasingly complex business situations. By the end of this course, you will be able to: -Summarize the common types of assets a business may have -Describe the importance of control over inventory -Outline how depreciation expense is reported on an income statement -Illustrate how transactions can be recorded in terms of the resulting change in the elements of the accounting equation. Course 1 Bookkeeper Basics, or the equivalent, is a recommended prerequisite for this course.

### **Dhb0X03GEeqCyber Threat Intelligence**

This course gives you the background needed to gain Cybersecurity skills as part of the Cybersecurity Security Analyst Professional Certificate program. You will understand network defensive tactics, define network access control and use network monitoring tools. You will understand data protection risks and explore mobile endpoint protection. Finally you will recognize various scanning technologies, application security vulnerabilities and threat intelligence platforms. This course also gives you hands on access to cybersecurity tools important to a system analyst. This course is intended for anyone who wants to gain a basic understanding of Cybersecurity or as the sixth course in a series of courses to acquire the skills to work in the Cybersecurity field as a Cybersecurity Analyst. The completion of this course also makes you eligible to earn the Cyber Threat Intelligence IBM digital badge. More information about the badge can be found <https://www.youracclaim.com/org/ibm/badge/cyber-threat-intelligence>. In this course, you will learn to:

- Describe examples of network defensive tactics.
- Discuss data loss prevention and endpoint protection concepts and tools.
- Explore a data loss prevention tool and learn how to classify data in your database environment.
- Describe security vulnerability scanning technologies and tools.
- Recognize application security threats and common vulnerabilities.
- Identify the key concepts around threat intelligence.
- Explore a SIEM product and review suspicious alerts and how to take action.

### **DzftLkPkEeuyQwite011wi Reservation Application with Kotlin**

In this 1.5 hours project-based course, you will complete and improve a mini airline reservation application and learn more advanced concepts of Kotlin such as higher order functions, lambda expressions, infix notation, Java interoperability, and many more. At the end of the class you will have a deepened understanding of Kotlin.

### **EJTNHybnEuhDACompMXC Customer Problem Statement in Miro**

By the end of this project, you will be able to create an accurate customer problem statement that diagrams the problem that your brand or product will solve for the customer. The power of creating a customer problem statement is that it becomes business intelligence that can maximize business opportunities by solving user experience problems. It does this by expanding upon the knowledge of the customer's user experience by empathizing with the customer and the challenges or needs they must meet as a part of their normal life journey. In your project you will understand the benefits and use cases for customer problem statements while developing your own customer problem statement geared toward solving user experience or UX problems. To do this, you will gain hands-on experience applying design thinking, user experience

knowledge, and context from the customer journey to build a visualization of a customer problem statement in the Miro online visual collaboration platform for teamwork. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **Big Data with Spark and Hadoop**

Bernard Marr defines Big Data as the digital trace that we are generating in this digital era. In this course, you will learn about the characteristics of Big Data and its application in Big Data Analytics. You will gain an understanding about the features, benefits, limitations, and applications of some of the Big Data processing tools. You'll explore how Hadoop and Hive help leverage the benefits of Big Data while overcoming some of the challenges it poses. Hadoop is an open-source framework that allows for the distributed processing of large data sets across clusters of computers using simple programming models. Hive, a data warehouse software, provides an SQL-like interface to efficiently query and manipulate large data sets residing in various databases and file systems that integrate with Hadoop. Apache Spark is an open-source processing engine that provides users new ways to store and make use of big data. It is an open-source processing engine built around speed, ease of use, and analytics. In this course, you will discover how to leverage Spark to deliver reliable insights. The course provides an overview of the platform, going into the different components that make up Apache Spark. In this course, you will also learn about Resilient Distributed Datasets, or RDDs, that enable parallel processing across the nodes of a Spark cluster.

### **Version Control**

Learn how modern software developers collaborate across the world without messing up each other's code. You will look at the different version control systems and how to create an effective software development workflow. You will be introduced to some of the most commonly used Linux commands that you can use to work with files on your hard drive and create powerful workflows that will automate your work, saving you time and effort. Finally, you will see how Git can be used in software development projects to manage team files. And you will create a repository that can manage code revisions.

### **Getting Started with Linux Terminal**

In this 1-hour long project-based course, you will learn how to use simple commands to create and manipulate files and folders, perform multiple complex tasks using one simple command, use the superuser to perform high privilege operations.

### **Serverless Functions in a Real-World Scenario**

Serverless computing and Microservices development have become a robust technology and methodology to decoupling monolithic and legacy systems, creating new services, and increasing digital transformation and innovation. In this project, you will learn how to develop some Serverless Microservices using Microsoft Azure Functions that are part

of the Microsoft Cloud Platform in a Real-World Scenario example. Once you're done with this project, you will be able to develop Azure Functions using Visual Studio Code and deploy them to Azure Cloud and create some HTML pages to be the front-end that will call and use the microservices functions, just with a few steps.

#### **F4qvasYvEeyfS6BRg7c Started with Microsoft Excel**

In this project, you will learn everything basic about Microsoft Excel. This program is wonderful to work with numbers, analytics, tables and create inventories. It is a program that facilitates our work to keep everything in order. You can find information about each section that we have and cover the essential tools of this program. You will be completing different tasks to understand and use the Microsoft Excel tool. Excel contains many non-visible tools that we will discuss along with this project. You can know several formula options that are available. Learn how to accommodate these forms to your liking, with visibility is perceptible and attractive. We will talk about numbers, organization, colors, and letters. We will organize the letters even in different directions to get ideas to organize the content. Excel creates calendars of organization, inventories, daily, weekly, or monthly expenses, and much more. When this program was first known, it was more for people who worked with analysis in the positions they handled. Today, many people, from students to teachers to content creators to science analytics, all use this application. For that reason, knowing this tool and all the options that you can offer to facilitate you in personal or professional life will help you continue climbing in the world.

#### **F0u5AXslEeynS6BRg7c Assess for Success: Marketing Analytics and Measurement**

Assess for Success: Marketing Analytics and Measurement is the fifth of seven courses in the Google Digital Marketing and E-commerce Certificate. This course explores marketing analytics practices and tools. Digital marketing and e-commerce professionals are expected to analyze data from various sources (such as web pages, digital marketing channels, and e-commerce sites) and use them to gain customer insights. You'll create media plans and set performance goals. You'll learn how to measure, manage, and analyze data from marketing campaigns using Google Analytics, Google Ads, and similar tools. Then, learn how to adjust a marketing budget according to insights extracted from key metrics. You'll use A/B test results to optimize a campaign and identify metrics that define a campaign's success. You will be able to analyze and visualize data and insights in spreadsheets and prepare presentations to share campaign progress or results with stakeholders. Google employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks, while showing you some of the best tools and resources used on the job. Learners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary. By the end of this course, you will be able to do the following: - Plan and allocate the spending of marketing budgets - Describe the unique role of performance goals and key performance indicators (KPIs) in marketing campaigns - Describe how tools like Google Analytics and Google Ads are used to measure website and ad campaign performance - Describe how to determine the return on investment (ROI) or

return on ad spend (ROAS) of a marketing project - Prepare, conduct, and analyze the results from an A/B test to optimize a marketing campaign - Apply spreadsheet features like sorting, filtering, and pivot tables to prepare data to be shared - Create charts in spreadsheets for visualization of metrics

### **3016 Database Structures and Management with MySQL**

Develop a working knowledge of the MySQL database management system (DBMS). Gain DBMS skills such as data creation, querying and manipulation. You'll gain further experience with SQL statements, clauses and data types. By the end of this course, you'll be able to: - Utilize the MySQL DBMS to build and modify relational databases with SQL - Add records to a MySQL database - Perform intricate queries on database records with filters and groupings - Create simple joins and unions within a database - Create relationships between tables using primary and foreign keys - Demonstrate the ability to complete a database normalization project You'll gain experience with the following tools and software: - MySQL DBMS - Joins and Unions - SQL statements, clauses and data types - Primary and foreign keys - Database normalization

### **63608 How to Create and Manage a Project Dashboard with Wrike**

In this 2.5-hour long project-based course, you will learn how to create and manage custom dashboards in Wrike to plan, execute and track both your personal work, team actions and multiple projects. You will use system and custom widgets, and create widgets directly from your tasks filtered list views.

### **3016 Sales Reporting with HubSpot**

In this course, you will use your business data and identify key metrics in order to report on sales with HubSpot's dashboards. First, you will learn how to operate a data-driven business and how to audit, clean, and organize your data within HubSpot's CRM. You will then learn to identify the key metrics used to analyze your data on sales and customer service success, within the stages of the Inbound Methodology. This will cover types of testing, using the Sales Hub tools, and reporting in each stage of the methodology. Next, you will walk through the steps to create a visually compelling custom report in HubSpot's dashboards, including learning the best practices for data visualization. Finally, the course will culminate in a project that asks you to apply your skills in reporting data on the dashboard. By the end of this course you will be able to: • Set data-driven goals for a business • Clean and organize your data in HubSpot • Create custom contact properties in HubSpot • Identify ways in which data can help improve the attraction of customers • Identify key metrics for sales effectiveness analysis • Analyze sales content • Explain the importance and the steps involved in forecasting using sales hub • Identify key customer service success metrics • Evaluate customer service success • Create a custom report in HubSpot • Describe data visualization best practices • Create a visually compelling dashboard in HubSpot • Demonstrate the use of data in reporting and dashboards Regardless of your current experience, this course will instruct you on how to create a data-driven business and report on your sales efforts within the HubSpot dashboard. This course is intended for anyone interested in jumpstarting their career

in sales - whether you're changing careers and looking for an entry-level role, or want to hone your skills in your current role as a sales representative. It does not require any background knowledge or experience to get started. Throughout the course, you will complete exercises that ask you to apply the skills you have learned in a practical way, such as creating a custom contact property, reporting on each stage in customer relationship, and creating a visually compelling dashboard in HubSpot. You will compile your work and submit it as a project at the end of the course.

## **GDQMSxDWEeDatabases and SQL for Data Science with Python**

### **A\_g**

Working knowledge of SQL (or Structured Query Language) is a must for data professionals like Data Scientists, Data Analysts and Data Engineers. Much of the world's data resides in databases. SQL is a powerful language used for communicating with and extracting data from databases. In this course you will learn SQL inside out - from the very basics of Select statements to advanced concepts like JOINS. You will: - write foundational SQL statements like: SELECT, INSERT, UPDATE, and DELETE - filter result sets, use WHERE, COUNT, DISTINCT, and LIMIT clauses - differentiate between DML and DDL - CREATE, ALTER, DROP and load tables - use string patterns and ranges; ORDER and GROUP result sets, and built-in database functions - build sub-queries and query data from multiple tables - access databases as a data scientist using Jupyter notebooks with SQL and Python - work with advanced concepts like Stored Procedures, Views, ACID Transactions, Inner and Outer JOINS Through hands-on labs and projects, you will practice building SQL queries, work with real databases on the Cloud, and use real data science tools. In the final project you'll analyze multiple real-world datasets to demonstrate your skills.

## **GGIYeNHJEeq7507kpeZiwoContainers w/ Docker, Kubernetes and OpenShift**

With a median salary of \$137,000, developers with container skills are in demand. More than 70 percent of Fortune 100 companies are running containerized applications. But why? Using containerization, organizations can move applications quickly and seamlessly among desktop, on-premises, and cloud platforms. In this course designed for beginners, learn how to build cloud native applications using current containerization tools and technologies such as containers, Docker, container registries, Kubernetes, OpenShift, and Istio. Also learn how to deploy and scale your applications in any public, private, or hybrid cloud. Each week, you will apply what you learn in hands-on, browser-based labs. By the end of the course, you'll be able to build a container image, then deploy and scale your container on the cloud using OpenShift. If you understand basic cloud and programming concepts, and your career path includes roles such as cloud developer, cloud architect, cloud system engineer, DevOps engineer, and cloud networking specialist, this course is for you! Take the next step in your cloud career by learning more about containers!

### **Learn Object-Oriented Programming with Kotlin**

In this 1.5 hours class, you will learn the four pillars of object-oriented programming and apply it by completing an Android space simulation application using Kotlin. At the end of the class, you will understand the basic principles of object-oriented programming and have a skeleton application that you can modify into a game of other uses. Note: A free Appetize.io account is required to run the application in an Android emulator.

### **Reports, Dashboards, and Customer Success in Salesforce MFQ**

The fourth course in the Salesforce Sales Operations Professional Certificate — Reports, Dashboards, and Customer Success in Salesforce — is for anyone who is curious about entry level sales roles that require foundational skills in Salesforce, the sales operations specialist role specifically, how to use tools in Salesforce to improve customer service at a business, how to leverage data in Salesforce to improve the overall performance of a sales team, and the path to becoming a Salesforce administrator. This fourth course goes into more depth on how a sales operations specialist would use Salesforce Service Cloud to support a variety of different customer service needs. You will learn the basics of effective customer support, and you will leverage a variety of new tools available in the Salesforce Service Cloud to effectively manage customer relationships. This course also goes into more depth on how a sales ops specialist would use Salesforce Reports and Dashboards to support a variety of needs from a sales team manager to track, improve, and forecast the overall performance of a sales team. You will learn how to use filters to produce custom reports in Salesforce, and then discover how to visualize that data effectively through the use of charts and dashboards. For this course, it is recommended (but not required) that you have some background knowledge of sales and CRM, as well as an understanding of the basics of Salesforce platform navigation. If you're a total beginner with these concepts, you can still be successful in this course — however, it might require some additional work on your part. By enrolling in this course, you are taking the next step to kickstarting your career in Salesforce. Congratulations on continuing this exciting journey!

### **Enhance Organizational Communications with Slack FzBEeqWQAqxI4483Q**

By the end of this project, you will learn how to enhance organizational communications with Slack, the business communications platform. To complete this project, you will create your own workspace, add public and private channels, and develop a collaborative environment. To support your new digital environment, you'll invite others to your Slack workspace and bring their contributions into unique channels for work projects, planning, brainstorming, problem-solving, and information-sharing. You will also amp up the effectiveness of workspace communications by using channel and individual tags to loop others in on relevant information. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## Containerize a full-stack NodeJS application in Docker

In this 1-hour long project-based course on Intermediate Docker: Containerize a full-stack NodeJS application in Docker and deploy to remote server, you will get to use Docker to stitch together a real full stack NodeJS application in a multi-container architecture. By the end of this course, you will have built a simple blog page, which is a working full-stack application using the MVC (model view controller) framework in NodeJS persisting to a MongoDB database across separate containers and living on one single Docker provided network. You will learn how to stitch all of these services together using Dockerfile and docker-compose files, and get it configured in a remote machine in the cloud, just like if you wanted to run the application from anywhere in the world! Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## Assessments, Skill Analysis and Planning

You have begun your journey toward becoming a Career Coach or Navigator because you are passionate about helping people earn a good living and find fulfilling work. Now continue that journey in this second course in the Career Coach and Navigator Professional Certificate. This course will equip you with the skills and knowledge to recruit people, complete the intake process, assess a person's skills, and work with the person to create an action plan. By the end of the course, you will be able to:

1. Assist people in career exploration and development.
2. Help people identify personal interests that map to career goals and career possibilities.
3. Inform people of the programs, services, and resources available to them.
4. Identify barriers to employment.
5. Assist people in planning career moves and developing essential skills to help them be successful in the workforce.
6. Guide people towards sustainable career paths.
7. Assist people who desire to pursue a career, make a career change, or work towards career advancement.

To be successful in this course, no prior experience with career coaching or navigation is required; but we recommend completing the first course in the program so you can build on the knowledge and skills from that course here.

## Android App with Kotlin

In this 1.5 hours class, you will learn one of the newest programming languages Kotlin and how to make Android apps by creating a game that runs on Android devices from scratch. At the end of the class, you will understand the basics of android application development and the fundamentals of Kotlin. Note: A free account on Appetize.io is required.

## Leads: Interact with Customers Online

From Likes to Leads: Interact with Customers Online is the third of seven courses in the Google Digital Marketing and E-commerce Certificate. This course will help you develop social media marketing strategies. Social media is a key digital marketing channel for many businesses because of the large number of people who use social platforms to socialize, interact with businesses, and share content. No digital marketing strategy is

complete without an online brand presence where customers can engage with a brand. In this course you'll explore social media platforms and identify which platform is the most appropriate for specific business needs. You'll learn how to create content for social media using graphic design principles for marketers and learn how to manage a social media presence. In addition you'll set goals and success metrics for social media ads. Google employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job. Learners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary. By the end of this course, you will be able to do the following: - Identify the five core pillars of social media marketing: strategy, planning and publishing, listening and engagement, analytics and reporting, and advertising - Determine how to choose social media platforms for a campaign - Understand how to boost engagement on social media - Learn how to write, design, and repurpose engaging content for social media - Recognize how to use the data gathered from social media analytics as a decision-making tool - Learn best practices for presenting a social media report - Achieve specific marketing goals through the use of paid social media

### **UbyONJEqzARIG Project: Creating User Stories with Value in Taiga**

This guided project was developed to engage and harness your visionary and exploratory abilities. During this course, you will use input from previous phases of project development. Together we will identify, map, and analyse User Stories which are the components that make up the themes of the customer experience with the product and service. This is an important step for individuals or companies wanting to map value for customer to product features in new products or services; also, for enhancing their existing offerings. By the end of this guided project, you will be fluent in identifying and creating User Stories for agile projects. We will discuss directions for the next phase of the project development; furthermore, the learned concepts and tools will help you generate solutions for use as part of your project management solutions and in presentations to various stakeholders.

### **ljS5OwJyEeuAAgB0c1hw How to Manage Linux Applications**

In this 1-hour long project-based course, you will learn how to Print, manage and kill Linux processes using the terminal, Use job control to postpone the execution of jobs and regain it, and automate the specific script at a specific time using crontab. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **InHGAK7oEeyiq0p1eM0w Docker Registry**

If you need more control over the location and distribution of your Docker images, you should consider hosting your own registry locally using Docker Registry. In this project, you will run and manage a local Docker Registry using the Command Line Interface (CLI). You will also reflect on situations when using a Docker Registry on a local



## **JLMgXyVGEeyYGO,StattdYwith Adobe Illustrator**

In this project, you will learn how to start using Adobe Illustrator. Adobe Illustrator is a vector-based design program in which you can design anything from logos, symbols, icons, patterns, compositions for posters, web, social media, and any other marketing material you want to create. You will know the main software tools and their uses to be able to create different arts for marketing purposes. Knowing the basics of graphic design is a great added value to any professional today. You can extend your opportunities in the professional world with the right tools. Today we will be creating a simple logo using the key tools in Adobe Illustrator and you will be able to customize yours. If you are a creative person and with a lot of desire to do things out of the box this is the pro. With the tools that you will learn today you will be able to create any art, get excited!

## **K6- Data Analytics Methods for Marketing**

### **GOi36EeyNShJufRq5Zw**

This course explores common analytics methods used by marketers. You'll learn how to define a target audience using segmentation with K-means clustering. You'll also explore how linear regression can help marketers plan and forecast. You'll learn to evaluate the effectiveness of advertising using experiments as well as observational methods and you'll explore methods to optimize your marketing mix; marketing mix modeling and attribution. Finally, you'll learn to evaluate sales funnel shapes, visualize and optimize them. By the end of this course you will be able to:

- Describe when analytics is most commonly used in marketing
- Understand your audience using analytics and variable descriptions
- Segment a population into different audiences using cluster analysis
- Use historical data to plan your marketing across different channels
- Use linear regression to forecast marketing outcomes
- Describe marketing mix modeling
- Describe attribution modeling
- Apply different attribution models
- Evaluate advertising effectiveness and describe the shortcomings
- Describe the use of experiments to evaluate advertising effectiveness
- Explain how A/B testing works and how you can use it to optimize ads
- Evaluate results of an experiment and assess the strength of the experiment
- Evaluate and optimize your sales funnel

This course is for people who want to learn how to plan and forecast marketing efforts as well as evaluate marketing methods and sales funnels for optimization. Learners don't need marketing or data analysis experience, but should have basic internet navigation skills and be eager to participate. Ideally learners have already completed course 1 (Marketing Analytics Foundation), course 2 (Introduction to Data Analytics), and course 3 (Statistics for Marketing) in this program.

## **KIM9kabQEeuvBRMVC82DC Software Development Practices**

This course is aimed at anybody interested in COBOL or software development. In this course, you will be introduced to core practices, systems, and methodologies associated with IBM COBOL software development. You will learn about COBOL as a self-documenting language. You will review working with existing coding. This course also covers quality assurance (QA), technical support and project management.

## KYd9Lr9AEeyUKgM Rgn CSS in depth

In this course, you'll use software development tools like HTML to build attractive web pages that work well—and you'll use structured semantic data to control how websites appear to the end user. You will then dive deeper into CSS by applying increasingly specific styling to various elements. You'll learn to use Bootstrap's grid system to create layouts and work with components and themes. Finally, you'll explore debugging and learn how it can be utilized to banish common front-end errors. By the end of this course you will be able to:

- Create a simple form with a responsive layout using HTML5 and CSS
- Create a responsive layout using CSS
- Create a UI using Bootstrap
- Implement debugging tools

This is a beginner course for learners who would like to prepare themselves for a career in front-end development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to get started with coding.

## KeDOWffmEeyjto068i7k1Bw to Back-End Development

Welcome to Introduction to Back-End Development, the first course in the Meta Back-End Developer program. This course is a good place to start if you want to become a web developer. You will learn about the day-to-day responsibilities of a web developer and get a general understanding of the core and underlying technologies that power the internet. You will learn how front-end developers create websites and applications that work well and are easy to maintain. You'll be introduced to the core web development technologies like HTML and CSS and get opportunities to practice using them. You will also be introduced to modern UI frameworks such as Bootstrap and React that make it easy to create interactive user experiences. By the end of the course, you will be able to:

- Describe the front-end developer role
- Explain the core and underlying technologies that power the internet
- Use HTML to create a simple webpage
- Use CSS to control the appearance of a simple webpage
- Explain what React is
- Describe the applications and characteristics of the most popular UI frameworks

For the final project in this course, you will create and edit a webpage using HTML and the Bootstrap CSS framework. Using a responsive layout grid, you will construct a responsive webpage containing text and images that looks great on any size screen. This is a beginner course intended for learners eager to learn the fundamentals of web development. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.

## KqaBPgHKEe2BBKieDf Statutory Compliance and Taxation

This course is for those interested in starting a career in bookkeeping. The course builds on the knowledge and skills covered in the first two courses in this professional certificate to dive deeper into concepts related to taxation. You will apply those concepts in scenarios using the TallyPrime software. The course includes several real-life business scenarios, charts, images, observations, solved illustrations, and practice scenarios on TallyPrime. By the end of the course, you will be able to:

- Apply the concept of goods and services tax (GST)
- Configure tax deducted at source (TDS)
- Manage business data
- Manage data across companies

No prior experience in bookkeeping is required.

To be successful in this course, you should have completed the first two courses in this program, Fundamentals of Accounting and Reporting (course 1) and Principles of Accounts Payable and Receivable Management (course 2), or have the equivalent skills and knowledge.

### **Introduction to Agile Development and Scrum**

After successfully completing this course, you will be able to embrace the Agile concepts of adaptive planning, iterative development, and continuous improvement - resulting in early deliveries and value to customers. This course will benefit anyone who wants to get started with working the Agile way. It is particularly suitable for IT practitioners such as software developers, development managers, project managers, product managers, and executives. You will learn to apply Agile practices derived from lean manufacturing concepts, like test-driven development. Learn how a scrum team functions. Learn how to write good user stories and track your team's progress using a kanban board. Create and refine a product backlog collaboratively with the team and the customer, in a flexible and blameless culture. This approach will lead you to higher levels of efficiency, with the ability to plan and execute sprints with your development team, measuring success with actionable metrics. This course is about more than facts and processes. It is about working collaboratively on a self-organizing team, coached by a scrum master, and building what is needed, rather than simply following a plan. Developed and taught by an experienced Agile practitioner, the course includes hands-on practice through realistic scenario-based labs using GitHub and ZenHub.

### **Basic Network Security Analysis**

In this 1-hour 30-minutes long project-based course, you will learn how to use Wireshark to capture the Network Traffic you need and analyze it securely. You will have a better understanding of encrypted and unencrypted traffic and how to differentiate between them. You will dig deeply into unencrypted protocols such as RADIUS, HTTP, DNS and Telnet by generating the Traffic of each of them and capturing it yourself. Also you will generate, capture and look into secure and encrypted protocols such as HTTPS and SSH. Additionally, you will learn how to capture HTTPS Traffic and decrypt them by using a pre-master secret key. Note: This project works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **Developer Capstone**

The Capstone project enables you to demonstrate multiple skills from the Certificate by solving an authentic real-world problem. Each module includes a brief recap of, and links to, content that you have covered in previous courses in this program. This course will test your knowledge and understanding, and provide you with a platform to show off your new abilities in front-end web development using React. During this course, you will be guided through the process of building an app, combining all the skills and technologies you've learned throughout this program to solve the problem at hand. On completion of the Capstone project, you'll have a job-ready portfolio that you

can show to recruiters, demonstrate during interviews and impress potential employers. To complete this course, you will need front-end developer experience. Additionally, it always helps to have a can-do attitude!

### **LzaY2nSyEeuflGtXStAnw with User Experience (UX) Design in Miro**

By the end of this project, you will be able to design and visualize an end-to-end user experience. To do this you will gain hands-on experience exercising empathy to accurately document the stages, actions, emotions, and thoughts of the user while assessing opportunities and overall qualities of the customer experience in the Miro online visual collaboration platform for teamwork. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **MBqC4XJLEeysSRdMOWsBw the Inbox: Email Marketing**

Think Outside the Inbox: Email Marketing is the fourth of seven courses in the Google Digital Marketing and E-commerce Certificate. This course will explore how to execute a successful email marketing campaign. Email marketing is one of the oldest and most proven digital marketing channels, and it is an essential component of an overall digital marketing strategy. Email is a primary channel for many businesses in reaching existing customers, encouraging interaction with the business, driving purchases, and building loyalty. In this course, you'll explore email marketing and cover topics like: creating an email marketing strategy, executing email campaigns, and measuring the results of those campaigns. You'll also learn how to use mailing lists and utilize automation and workflows. Google employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job. Learners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary. By the end of this course, you will be able to do the following: - Write effective preview text and subject lines using best practices - Create email marketing automation and workflows - Build and maintain email lists - Write effective email copy - Conduct contact management and list segmentation - Employ best practices to handle personally identifiable information, or PII, and user data safely - Measure and analyze email campaign results

### **MGyZ3R4HEeuWw7L8i00iQo Web Development with HTML, CSS, JavaScript**

Want to take the first steps to become a Web Developer? This course will help you discover the languages, frameworks, and tools that you will need to create interactive and engaging websites right from the beginning. You will begin by learning about the roles of front-end, back-end, and full-stack developers and how they work together on development projects. Through this, you will also become familiar with the terminology and skills needed in your career as a web developer. Next, you will explore the languages needed for developing websites or applications. You will gain a thorough understanding of HTML and CSS and learn how a combination of both technologies can

help developers create the structure and style of their websites. Finally, you will learn how JavaScript can make your webpages dynamic with features that include interactive forms, dynamic content modification, and sophisticated menu systems.

### **Understanding the Enterprise Systems Environment**

Understanding the Enterprise Systems Environment is the second course in the SAP Technology Consultant Professional Certificate program. The course builds your understanding of the digital landscape. You'll explore business processes and organizational alignment. You'll get an overview of how systems are designed and developed, and consider architecture, infrastructure, application development, data science, cloud, privacy, and security. You'll build your understanding of the SAP platform and consider key development and deployment models covering Advanced Business Application Programming (ABAP), Java, SAP API, and SAP Fiori. Plus, you'll explore gap analysis using SAP RISE and Activate and become familiar with SAP cloud strategy, architecture, and tools. By the end of this course, you will be able to: Describe how digital transformation can impact a customer's organization, business processes and tools (people/process/tools). Identify the key elements of system design and development and how they relate to specific IT requirements. Identify different computing models (e.g. Compute Network Storage, OnPrem, Cloud etc) and architectures (e.g. Native, Hybrid, Multi-Cloud). Explain the key elements of the SAP platform and environment. Describe key Application, Development and Programming models. Explain the key elements of the SAP Cloud Strategy. Understand the key questions to keep in mind when faced with a specific request from a prospective client.

### **Finding, Sorting, and Filtering Data in Microsoft Excel**

In this project you will learn to use the searching, sorting, and filtering features of Microsoft Excel. Using the free version of Office 365's Excel for the web, you will manipulate spreadsheet data to make it more useful for effective business decision-making. Using a filter, you'll isolate just the data needed. You can then sort it into a logical sequence that can turn data into the information needed for effective decision making.

### **Sales Enablement**

This course lays out the skills and knowledge necessary to develop a marketing-driven sales enablement strategy, for beginners or those looking to hone their skills. You'll learn the basics of sales enablement, and how to align your marketing and sales team under the same strategy and goals. You'll learn ways to make the connection with your buyers and use content as an effective sales tool. The course will teach you about automation tools to use in your sales enablement strategy and about how to enable continued customer success after a sale. By the end of this course you will be able to: • Describe what sales enablement is and why it's important • Create a vision and goal that can motivate and align sales and marketing teams • Develop a lead qualification framework • Create an

SLA • Plan and run effective ‘smarketing’ meetings • Identify your target audience • Develop a buyer persona • Use the jobs-to-be-done framework to understand your buyer • Create a hero statement to connect with your buyer • Develop a content strategy to increase your sales team efficiency and velocity • Plan a company-wide content creation initiative • Write impactful content • Enable ongoing customer success • Identify technology needs for sales enablement • Develop your technology strategy for sales enablement This course will help you build a solid foundation for developing a sales enablement strategy and working effectively with your sales and marketing teams. The course is intended for anyone interested in jumpstarting their career in sales - whether you’re changing careers and looking for an entry-level role, or want to hone your skills in your current role as a sales representative. It does not require any background knowledge or experience to get started. Throughout the course, you will complete exercises that allow you to apply the skills you have learned in a practical way, such as evaluating a lead qualification framework, planning a “smarketing” meeting, creating a buyer persona, and writing an email to potential customers. You will compile your work and submit it as a project at the end of the course.

### **NR192WEeqPZKXGAB: Data Visualizations and Dashboards with Excel and Cognos**

Learn how to create data visualizations and dashboards using spreadsheets and analytics tools. This course covers some of the first steps for telling a compelling story with your data using various types of charts and graphs. You'll learn the basics of visualizing data with Excel and IBM Cognos Analytics without having to write any code. You'll start by creating simple charts in Excel such as line, pie and bar charts. You will then create more advanced visualizations with Treemaps, Scatter Charts, Histograms, Filled Map Charts, and Sparklines. Next you'll also work with the Excel PivotChart feature as well as assemble several visualizations in an Excel dashboard. This course also teaches you how to use business intelligence (BI) tools like Cognos Analytics to create interactive dashboards. By the end of the course you will have an appreciation for the key role that data visualizations play in communicating your data analysis findings, and the ability to effectively create them. Throughout this course there will be numerous hands-on labs to help you develop practical experience for working with Excel and Cognos. There is also a final project in which you'll create a set of data visualizations and an interactive dashboard to add to your portfolio, which you can share with peers, professional communities or prospective employers.

### **NSG100WEeqDY42X1P: Creating an interactive wireframe in Mockplus**

In this 2-hour long project-based course, you will learn how to create an interactive wireframe for a social book reading app with Mockplus, drafting an interaction flowchart in connect mode, drawing the wireframe with multiple components, adding interactive elements, grouping, ordering and aligning the components on screen with the aid of grids and guides, and finally previewing and testing.

### **O-9W2rS2EeqdMjz25Fy and Optimize Social Media Marketing Campaigns**

This course provides you with the skills to optimize your social media marketing efforts. Learn to evaluate and interpret the results of your advertising campaigns. Learn how to assess advertising effectiveness through lift studies and optimize your campaigns with split testing. Understand how advertising effectiveness is measured across platforms and devices, learn how to evaluate the ROI of your marketing, and master how to communicate your social media marketing results to others in the company. By the end of this course, you will be able to:

- Analyze dashboards and evaluate ROI from your social media marketing efforts
- Understand different techniques used to optimize marketing campaigns, such as attribution and marketing mix models
- Implement an A/B test to optimize your campaign
- Present and communicate the results of your campaign to a team

This course is for people who want to learn how to analyze their campaign marketing results, optimize their campaigns, and effectively communicate findings to their teams. Learners don't need marketing experience but should have basic internet navigation skills and be eager to participate and connect on social media. Having a Facebook or Instagram account helps, and ideally, learners have already completed the four previous courses in this program. This course will be followed by the Meta Social Media Marketing Capstone course, the final course of this certification, in which learners will take the Digital Marketing Associate Certification Exam and complete a Capstone project to receive their Meta Social Media Marketing Professional Certificate.

### **O3t- Advanced Relational Database and SQL**

In this 1-hour long project-based course, you will gain hands-on experience and learn about advanced SQL topics such as stored procedures, triggers, functions, common table expressions and recursion. If you have intermediate level of experience with SQL and want to learn more, this course is for you! Note: This is an advanced level course. Taking my course "Introduction to Relational Database and SQL" and "Intermediate Relational Database and SQL" before taking this course is highly recommended. Especially if you do not have any previous experience with relational database and SQL.

### **OF6XosxhEey2Dn162isQC Engineer Capstone**

In this course you'll complete a capstone project in which you'll create a database and client for Little Lemon restaurant. To complete this course, you will need database engineering experience. The Capstone project enables you to demonstrate multiple skills from the Certificate by solving an authentic real-world problem. Each module includes a brief recap of, and links to, content that you have covered in previous courses in this program. In this course, you will demonstrate your new skillset by designing and composing a database solution, combining all the skills and technologies you've learned throughout this program to solve the problem at hand. By the end of this course, you'll have proven your ability to:

- Set up a database project,
- Add sales reports,
- Create a table booking system,
- Work with data analytics and visualization,
- And create a database client.

You'll also demonstrate your ability with the following tools and software:

- Git,
- MySQL Workbench,
- Tableau,
- And Python.

## OFF7o\_8IEee1YD Data Science Methodology

If there is a shortcut to becoming a Data Scientist, then learning to think and work like a successful Data Scientist is it. Most of the established data scientists follow a similar methodology for solving Data Science problems. In this course you will learn and then apply this methodology that can be used to tackle any Data Science scenario. The purpose of this course is to share a methodology that can be used within data science, to ensure that the data used in problem solving is relevant and properly manipulated to address the question at hand. Accordingly, in this course, you will learn:

- The major steps involved in practicing data science - Forming a business/research problem, collecting, preparing and analyzing data, building a model, deploying a model and understanding the importance of feedback
- Apply the 6 stages of the CRISP-DM methodology, the most popular methodology for Data Science and Data Mining problems
- How data scientists think! To apply the methodology, you will work on a real-world inspired scenario and work with Jupyter Notebooks using Python to develop hands-on experience.

## OG6ezsdEEey3BjqCPls7D6UX/UI Design

Learn the fundamentals of User Experience (UX) research and design. Become immersed in the UX process of identifying problems and iterating and testing designs to find appropriate solutions. You'll learn how to empathize with users through best-practice research approaches, and create common UX artifacts such as user personas. And you'll use UX insights to make appropriate design decisions. By utilizing the User Interface (UI) design process, you will be able to create wireframes for features in Figma, and turn them into Minimum Viable Product (MVP) style prototypes from your mockups. You'll also learn the core principles of design such as hierarchy and the use of grids. By the end of this course you will be able to:

- Design digital products that create value and solve a user's problems in meaningful ways.
- Recognize what constitutes successful UX UI and evaluate existing interfaces for design consistency and quality.
- #Identify best practice interaction design methods and evaluate and improve your own and others' designs.
- #Create, share and test your UX UI designs following best practice guidelines.

This is a beginner course for learners who would like to prepare themselves for a career in UX UI development. To succeed in this course, you do not need prior development experience, only basic internet navigation skills and an eagerness to learn.

## ORAIITLTeizlBbQ Visualization with Python

One of the most important skills of successful data scientists and data analysts is the ability to tell a compelling story by visualizing data and findings in an approachable and stimulating way. In this course you will learn many ways to effectively visualize both small and large-scale data. You will be able to take data that at first glance has little meaning and present that data in a form that conveys insights. This course will teach you to work with many Data Visualization tools and techniques. You will learn to create various types of basic and advanced graphs and charts like: Waffle Charts, Area Plots, Histograms, Bar Charts, Pie Charts, Scatter Plots, Word Clouds, Choropleth Maps, and many more! You will also create interactive dashboards that allow even those without

any Data Science experience to better understand data, and make more effective and informed decisions. You will learn hands-on by completing numerous labs and a final project to practice and apply the many aspects and techniques of Data Visualization using Jupyter Notebooks and a Cloud-based IDE. You will use several data visualization libraries in Python, including Matplotlib, Seaborn, Folium, Plotly and Dash.

### **OVeCvNA\_Eeyi06AppCapstone**

In this capstone course, you'll demonstrate your proficiency in your new skill set by creating a native iOS app. At this point in the program, you've gained all the skills you need to successfully complete this project. But you might need to refresh your memory when it comes to the previous courses in the program. For that reason, each module in this course will take you through a brief recap of relevant content from previous courses in the program. And don't worry, there will be links too so you can review content in more detail if necessary. In this way, you will be guided through the process of building the Little Lemon app which allows you to show off your new development skills. This course is ideal for intermediate learners who would like to prepare themselves for a career in iOS development. On completion of the capstone project, you'll have an interactive mobile application that you can share with recruiters and impress potential employers with. To complete this course, you will need experience in iOS and a good understanding of the Swift programming language. Additionally, it always helps to have a can-do attitude! By the end of this course, you'll be able to:

- Build a native iOS mobile app
- Publish and sell it on the Apple Store

### **OYLpPrZYEuHCapStartw/HubSpot**

HubSpot is a system you can use to manage all of your contacts no matter what type of business you are in. You can use the free app to assist you in marketing and sales. The integrations to your email make the program easy to use. You can build your team and follow up on contacts easily. This hands on course will have you all set to go with your contacts right now! By the end of your time in this project you will have a Customer Relations Management system set up with HubSpot. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **P0ciGZT0EeyiH50ttr4NG to Networking and Storage**

Designed for beginners, this course is for anyone new to networking and storage. Kickstart an IT Support role or network technician role, or enhance your base knowledge for system administration. Videos, practice activities, and virtual hands-on labs will help you develop and apply the skills you need to diagnose and repair basic networking and storage issues so you can keep users connected. you'll learn about network types, topologies, and models, see how data travels across a network, and discover how protocols and standards enable all network activity. Then, you'll learn how to set up and configure devices and cables for both wired and wireless networks. And then you'll learn to diagnose and troubleshoot network connectivity issues and discover how to use command line utilities and network tools in Windows Settings. After that, you'll identify

different types of storage drives and discover the difference between short-term and long-term memory. Lastly, you'll find out the features of local, offsite, and cloud storage and when to use each. And you'll investigate file, block, and object storage and work out which cloud provider solutions work best for different networking scenarios.

## **P6EH- Introduction to Cloud Computing**

### **AfjEeqBYw5XkWz7vw**

This course introduces you to the core concepts of cloud computing. You gain the foundational knowledge required for understanding cloud computing from a business perspective as also for becoming a cloud practitioner. You understand the definition and essential characteristics of cloud computing, its history, the business case for cloud computing, and emerging technology usecases enabled by cloud. We introduce you to some of the prominent service providers of our times (e.g. AWS, Google, IBM, Microsoft, etc.) the services they offer, and look at some case studies of cloud computing across industry verticals. You learn about the various cloud service models (IaaS, PaaS, SaaS) and deployment models (Public, Private, Hybrid) and the key components of a cloud infrastructure (VMs, Networking, Storage - File, Block, Object, CDN). We also cover emergent cloud trends and practices including - Hybrid Multicloud, Microservices, Serverless, DevOps, Cloud Native and Application Modernization. And we go over the basics of cloud security, monitoring, and different job roles in the cloud industry. Even though this course does not require any prior cloud computing or programming experience, by the end of the course, you will have created your own account on IBM Cloud and gained some hands-on experience by provisioning a cloud service and working with it. This course is suitable for a large variety of audiences - whether you are an executive / manager / student who wants to become familiar with cloud computing terminology and concepts, or someone who wants foundational grounding in cloud computing to start a career in this field or become a cloud practitioner - such as a cloud engineer, developer, analyst, etc. The completion of this course also makes you eligible to earn the Cloud Computing Core IBM digital badge. More information about the badge can be found here: <https://www.youracclaim.com/org/ibm/badge/introduction-to-cloud-computing>

## **PJZh9X83Eeye-How to Set a Budget and Schedule for Your Facebook Ads**

### **gq2-VH5Q**

At the end of this project, you will be able to strategically use your budget and ads for your social media strategy on Facebook. This will allow you to attract your target audience. You will have learned to adjust your budget and advertisement to ensure reaching your goal. The goal to optimize your social media strategy with your budget and advertisement is to convince your customers of your products and to attract them to your products.

## PRc2KuuyEeyLR5bH70uv

React Native is an open-source framework for building cross-platform applications (apps) using React and the platform's native capabilities. In this course, you will move from the basics of React to a more advanced implementation using React Native. You'll review a wide range of different React components and ways of styling them. And you'll get to practice using different mobile methods of interactivity with React Native. Some of the basics skills you will learn include:

- Building a single-page React Native app and styling it using basic components
- Building large lists and configuring user inputs within a React Native app
- Using the Pressable component to build buttons and other clickable areas
- Setting up an app with React Navigation and moving between screens

You'll gain experience with the following tools and software:

- React
- React Native
- Front End development languages (HTML, CSS and JavaScript)
- JSX
- Code editing programs, such as Expo and Visual Studio Code

This course is for learners who would like to prepare themselves for a career in mobile development. To succeed in this course, you will need foundational knowledge of React basics, internet navigation skills and an eagerness to code.

## PdDHPHSIEeyRM6EtHf5ole: Build, Launch, and Manage E-commerce Stores

Make the Sale: Build, Launch, and Manage E-commerce Stores is the sixth of seven courses in the Google Digital Marketing and E-commerce Certificate. This course explores how businesses and individuals sell products online, including using popular platforms like Shopify. You'll go through the process of creating a mock e-commerce store. To do this, you'll build a Shopify store, add the necessary information, and create product listings. You'll explore how to reach customers online through e-commerce customer outreach methods like advertisements and campaigns. Google employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job. Learners who complete the seven courses in this program will be ready to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary. By the end of this course, you will be able to do the following:

- Understand essential e-commerce strategies and practices
- Explain how to conduct market research and product research
- Set up a mock e-commerce store using Shopify
- Use Google Ads to engage e-commerce customers
- Explain how trends and seasonality affect e-commerce businesses
- Use best practices to create an engaging customer experience online
- Describe the order fulfillment process through checkout, point of sale (POS), shipping, and delivery.
- Optimize a checkout flow for customers

## Pe7fmStoEeulA7rIN6b47F0 Cloud Development Capstone Project

In this project you will demonstrate the skills that you have mastered in cloud native application development. You will apply your new knowledge to a real-life challenge and use your expertise to develop a successful solution. The project provides you with an opportunity to solidify your full stack proficiency. As you design a dynamic user experience, you will work with GitHub actions to build, test, and deploy your application.

You will develop frontend pages, add user administration, build actions for database operations, create backend services, make connections with cloud native APIs, and launch CI/CD pipelines. You will boost your capabilities with cloud native services, JavaScript, Django, JSON, IBM Cloud Foundry, Python, and Kubernetes. Then you will devise a solution for managing the containerized deployment of your application. When you complete this project, you will have a working cloud native application showpiece that will impress potential employers.

### **Q1epK7S1EeqDFRuhawFrhls of Social Media Advertising**

This course takes a deep dive into paid advertising on social media. Learn how to start advertising on platforms like Facebook and Instagram by developing effective ads. Learn how to work with design teams by capturing the essence of your ad campaign in a creative brief, and understand how privacy policies may affect your ads. Complete the course with a project where you will produce a creative brief with assets you would deliver to a design team for your ad campaign. You'll also create your first social media ad. By the end of this course you will be able to:

- Determine why and when to invest in paid advertising on social media
- Understand the anatomy of a social media ad and how they differ from organic posts
- Evaluate on which platforms to run social media ad campaigns and what makes an ad effective
- Craft compelling and effective visuals and copy for social media ads
- Learn how to collaborate effectively with others through creative briefs
- Build foundational understanding for data, data-based advertising and privacy protection
- Build an ad directly from your Facebook Business Page and your Instagram Business Account
- Use Instagram Stories Ads effectively to connect with customers
- Write a creative brief and create a social media ad

This course is intended for people who want to learn how to create and manage ads on social media. Learners don't need marketing experience, but they have basic internet navigation skills and are eager to participate and connect in social media. Having a Facebook or Instagram account helps and ideally learners have already completed course 1 (Introduction to Social Media Marketing) and 2 (Social Media Management) in this program.

### **QdKmY5StEey\_CBe1lGaw1 Website with MailChimp**

In this 2.5 hours project you will create a complete website using MailChimp Website builder. You will create a website structure starting from the business goals, organize calls-to-action, create pages, arrange page sections, edit image and text content, connect content with links, preview for desktop and mobile, finally publish online. You will have the opportunity to create a website for your portfolio with full hands-on practice activities.

### **R-r2uwp- Start the UX Design Process: Empathize, Define, and Ideate Eeuf7w5EwYPThw**

Start the UX design process: Empathize, Define, Ideate is the second course in a certificate program that will equip you with the skills needed to apply to entry-level jobs in user experience (UX) design. In this course, you'll complete the first phases of the

design process for a project that you'll be able to include in your portfolio. You will learn how to empathize with users and understand their pain points, define user needs using problem statements, and come up with lots of ideas for solutions to those user problems. Current UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. No previous experience is necessary. By the end of this course, you will be able to:

- Empathize with users to understand their needs and pain points.
- Create empathy maps, personas, user stories, and user journey maps to understand user needs.
- Develop problem statements to define user needs.
- Generate ideas for possible solutions to user problems.
- Conduct competitive audits.
- Start designing a mobile app, a new project to include in your professional UX portfolio.

### **R8T6cD8QEeuPython Project for AI and Application Development**

This mini course is intended to apply basic Python skills for developing Artificial Intelligence (AI) enabled applications. In this hands-on project you will assume the role of a developer and perform tasks including:

- Develop functions and application logic
- Exchange data using Watson APIs
- Write unit tests, and
- Package the application for distribution.

You will demonstrate your foundational Python skills by employing different techniques to develop web applications and AI powered solutions. Upon completing this course, you will have added another project to your portfolio and gained the confidence to begin developing AI enabled applications using Python and Flask, Watson APIs, build and run unit tests, and package the application for distribution out in the real world. **PRE-REQUISITE: \*\*Python for Data Science, AI and Development\*\*** course from IBM is a pre-requisite for this project course. Please ensure that before taking this course you have either completed the Python for Data Science, AI and Development course from IBM or have equivalent proficiency in working with Python and data. **NOTE:** This course is not intended to teach you Python and does not have too much instructional content. It is intended for you to apply prior Python knowledge.

### **RRhnJTQqEeuDeveloping Applications with SQL, Databases, and Django**

The essentials of application development are accessing, processing, and presenting data. Data is stored in various databases, either on-premise or on the cloud, and developers will need to learn how to talk to them via programming languages. In this course, you will be introduced to some fundamental database concepts. You will learn the basics of SQL, a simple and powerful programming language for querying and managing data. And you will learn about cloud database fundamentals and get hands-on cloud database experiences. In addition to SQL, you will discover how Object-Relational Mapping (ORM) allows you to use Object-Oriented Programming (OOP) languages to work with databases. You will gain full-stack Django skills by creating a Django web app to persist, process, and present data. And you will learn about cloud app platform fundamentals and get hands-on experience deploying your Django web app on the cloud. **Course Learning Objectives:**

- Describe what is a database and how to model data
- Compose SQL queries to insert, select, update, delete data in a database
- Understand Object Relational Model

(ORM) - Employ Django to develop database-powered applications - Deploy your Django app on the cloud Prerequisites: - GitHub - HTML and CSS - Python

### **S9hQXitpEeuujD8O1s Capstone Project**

In this course you will apply your skills and knowledge acquired during previous courses in the PC to demonstrate your proficiency in DevOps practices by developing, testing, deploying, monitoring, and enhancing a secure microservices-based application on Cloud, over the course of several sprints, using a variety of Agile, Cloud Native, and CI/CD technologies and tools.

### **SCQyLYsNEeyUpp15a0U0Q Microsoft Azure Backup**

In this one hour long project, you will learn everything you need to know to start working with Azure backup. We will begin by setting up a Recovery Services Vault where Azure stores all the backup data and then we will create backup policies. In the latter part of the course, we will create a Free tier virtual machine and we will implement an entire virtual machine backup. By the end of this course, you will gain the ability to utilize the Azure cloud for all of your backup needs.

### **STdQqQnnEeyJ6s1E3D Data Analysis with Pandas**

In this structured series of hands-on guided projects, we will master the fundamentals of data analysis and manipulation with Pandas and Python. Pandas is a super powerful, fast, flexible and easy to use open-source data analysis and manipulation tool. This guided project is the first of a series of multiple guided projects (learning path) that is designed for anyone who wants to master data analysis with pandas. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **SWrM- Introduction to NoSQL Databases**

#### **IpYEeuMkArab-7zbw**

This course will provide you with technical hands-on knowledge of NoSQL databases and Database-as-a-Service (DaaS) offerings. With the advent of Big Data and agile development methodologies, NoSQL databases have gained a lot of relevance in the database landscape. Their main advantage is the ability to effectively handle scalability and flexibility issues raised by modern applications. You will start by learning the history and the basics of NoSQL databases and discover their key characteristics and benefits. You will learn about the four categories of NoSQL databases and how they differ from each other. You will explore the architecture and features of several different implementations of NoSQL databases, namely MongoDB, Cassandra, and IBM Cloudant. You will then get hands-on experience using those NoSQL databases to perform standard database management tasks, such as creating and replicating databases, loading and querying data, modifying database permissions, indexing and aggregating data, and sharding (or partitioning) data.

## ScwH6T14Eeu69 Operate a User Experience (UX) Onboarding Map in Miro PD8q4Q

By the end of this project, you will be able to generate a user experience onboarding map to visualize the complete entry process that a user has at the start of their relationship with a brand so that an organization can grow longevity by ensuring that they get off on the right foot with users. To do this you will gain hands-on experience exercising empathy to accurately document brand touchpoint, pain points, and gain points across the onboarding journey in the Miro online visual collaboration platform for teamwork. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## SnQ1v7XpEeyKwplwCpY vs Confirmatory data analysis using Python uw

This Guided Project, Exploratory and Confirmatory Data Analysis using python, is for those who want to learn about different methods of data analysis. In this 2-hour-long project-based course, you will understand and apply Exploratory Data Analysis, build different Data visualizations, apply different exploration techniques based on the data at hand and define and understand the concept of Confirmatory Data Analysis. This project is unique because you will learn how and where to start your data exploration. You will also learn how to implement different data visualizations using python and when to use them. To be successful in this project, you will need to be experienced in python programming language and working with jupyter notebook environment. Let's get started!

## So1rPaCBeyFBhgwtOZing with JavaScript

JavaScript is the programming language that powers the modern web. In this course, you will learn the basic concepts of web development with JavaScript. You will work with functions, objects, arrays, variables, data types, the HTML DOM, and much more. You will learn how to use JavaScript and discover interactive possibilities with modern JavaScript technologies. Finally, you will learn about the practice of testing code and how to write a unit test using Jest.

## SqFXVM96EeylXQZa the User Interface with SwiftUI KWeWQ

In this course learners will learn how to build meaningful and functional user interfaces for iOS using Swift and UI frameworks. By the end of this course, you'll be able to: - Utilize a range of different approaches for building UI with Swift -Build a basic UI with the Swift Interface Builder -Create and control UI views with the UIKit framework - Create simple applications with the UIKit framework -Build interfaces using the SwiftUI framework -Utilize lists and forms in SwiftUI in order to build frameworks -Organize UI with the use of containers -Create stylish UI using advanced views -Enhance views with the use of transformations, drawings and animations You'll gain experience with the following tools and software: -Swift UI framework -Interface building software

-UIKit application and view building features -Lists and forms -UI containers -UI transformation, drawing and animation tools To take this course, you should understand the basics of Swift and cross-platform development for mobile applications. Additionally, it always helps to have a can-do attitude!

### **Sz4wkmACEeuVMCOBOL Basics**

COBOL is a programming language that serves a wide range of businesses. Key aspects of COBOL are that it is scalable, mature, and self-documenting. In the Basics course you will learn about COBOL from its birth and through its evolution. You will have some basic lessons on handling numbers, symbols, editing, procedures, and the overall program structure. You'll even have the opportunity to create code of your own. Buckle up and join us on a ride through the world of COBOL, we can't wait to see you in class.

### **T7Z4BtGSEeqOBQdLthApp in Android Studio using Read-Write**

In this project you will build an Android app that creates text files in internal storage when needed, will write to those files, and will read from those files. The app will also interact with text files, images, strings, and a string array that are saved as resources in the project (can be accessed by reference throughout the app). This app will have a piece of text (from the strings file) asking the user to select the name of an author from a spinner (a type of drop down menu where the user selects from a set of options - from the strings file). There will be an image (ImageView) below the spinner which will change (from the drawable directory) to match whichever author the user selects. Beneath this will be a piece of text (TextView) with the name of a book and the year it was published (from the strings file) which will change to match the selected author. There will be another piece of text (TextView) which will contain an appropriate quote (read from the appropriate text file in a raw directory) from the named book Below this quote will be two buttons, one with "Read Review" on it, and the second with "Submit Review" on it. When the user clicks the "Read Review" button a TextView will appear containing a the previously submitted review (if one exists). The user will also be given the option to "Submit Review" which when clicked gives access to an input box (EditText) into which a review can be typed. When a "Submit" button is then clicked this review is written to a text file in internal storage (not resources) to a review file for that author. If the file does not exist then the app will create the file first, then write the review to it. When the user closes the app the program will remember the final choice made by the user in their previous visit. When launched the app will also read all information in the review files in internal storage and bring the reviews into the app for use. You will upload an APK of the app to a website called Appetize.io to test the app. Projects in Series 1: 1. Build a Simple App in Android Studio with Java 2. Build a Persistent Storage App in Android Studio 3. Build a Linear Layout App in Android Studio 4. Build a Relative Layout App in Android Studio 5. Build a Table Layout App in Android Studio Projects in Series 2: 1. Build an App in Android Studio using Resources 2. Build an App in Android Studio using Static Files 3. Build an App in Android Studio using Read - Write 4. Build an App in Android Studio using onTouch 5. Build an App in Android Studio using Activities

### **U2- Create Diagrams with Lucidchart**

In this guided project, you will learn how to create diagrams for Information Technologies. By the end of this project, you will be able to design and create diagrams and be familiar with the import, export, and collaboration features of Lucidchart to work with your IT team. (An account with Lucidchart is required. If you don't already have an account, please create one at lucidchart.com prior to starting the project.)

### **U3- Build Wireframes and Low-Fidelity Prototypes**

Build Wireframes and Low-Fidelity Prototypes is the third course in a certificate program that will equip you with the skills you need to apply to entry-level jobs in user experience (UX) design. In this course, you'll continue to design a mobile app for your professional UX portfolio. You'll start by creating storyboards and getting familiar with the basics of drawing. Then, you'll create paper wireframes and digital wireframes using the design tool Figma. You'll also create a paper prototype and a digital low-fidelity prototype in Figma. Current UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. By the end of this course, you will be able to:

- Develop a goal statement.
- Create two types of storyboards: big picture and close-up.
- Understand the difference between low-fidelity and high-fidelity design.
- Apply the basics of drawing.
- Apply the principles of information architecture to organize a mobile app.
- Create paper wireframes for a mobile app design.
- Develop digital wireframes in the design tool Figma.
- Build a paper prototype to add interactivity to designs.
- Design a low-fidelity prototype in Figma.
- Recognize implicit bias and deceptive patterns in design.
- Continue to design a mobile app to include in your professional portfolio.

To be successful in this course, you should complete the previous two courses in this certificate program, or have an ability to conduct user research to inform the creation of empathy maps, personas, user stories, user journey maps, problem statements, and value propositions. You will also need paper and a pen or pencil.

### **U3- Communicate UX Research with Empathy Maps in Miro**

By the end of this project, you will be able to leverage applied empathy to interpret User Experience research so that it can be effectively communicated within an empathy map visualization. To do this, you will gain hands-on experience applying design thinking, empathy, and context from User Experience research to create an empathy map in the Miro online visual collaboration platform for teamwork. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## **U7e\_Lgp- Conduct UX Research and Test Early Concepts** **EeubJBIM7h4jow**

Conduct UX Research and Test Early Concepts is the fourth course in a certificate program that will equip you with the skills you need to apply to entry-level jobs in user experience (UX) design. In this course, you will learn how to plan and conduct a usability study to gather feedback about designs. Then, you will modify your low-fidelity designs based on insights from your research. Current UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. By the end of this course, you will be able to:

- Plan a UX research study, including the project background, research goals, research questions, Key Performance Indicators, methodology, participants, and script.
- Explain the importance of respecting privacy and user data.
- Conduct a moderated and unmoderated usability study.
- Take notes during a usability study.
- Create affinity diagrams to group and analyze data.
- Synthesize observations from research and come up with insights.
- Develop persuasive presentation skills to share research insights.
- Modify low-fidelity designs based on research insights.
- Continue to design a mobile app to include in your professional portfolio.

To be successful in this course, you should complete the previous three courses in the certificate program. Or, you need to have an ability to conduct user research to inform the creation of empathy maps, personas, user stories, user journey maps, problem statements, and value propositions; as well as an ability to create wireframes and low-fidelity prototypes on paper and in Figma.

## **UK7yonsIEey1t6puzio87ArCC Guaranteed: Develop Customer Loyalty Online**

You made it! Satisfaction Guaranteed: Develop Customer Loyalty Online is the seventh and final course in the Google Digital Marketing and E-commerce Certificate. In this course, you'll explore strategies for building customer loyalty in e-commerce. You'll also explore specific tools to develop and maintain client relationships. At the end of the course you'll work through a scenario that demonstrates your ability to deliver a successful e-commerce strategy. Finally, you'll wrap up the course by building professional development skills. We encourage you to complete courses 1–6 before beginning this course because they provide the foundation necessary to complete the activities at the end of this course. Google employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job. Learners who complete the seven courses in this program will be prepared to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary. By the end of this course, you will be able to do the following:

- Identify common strategies for building customer loyalty in e-commerce
- Understand how to successfully manage client relationships and measure satisfaction
- Monitor an e-commerce store's performance
- Update an e-commerce store based on data
- Complete a portfolio scenario to prepare for job interviews
- Find, apply for, and

prepare for interviews and jobs - Put together a portfolio and/or resume to present to employers

### **Upeaa7enEequ7RkKio8670 Analytics for Business with H2O in R**

This is a hands-on, guided project on Predictive Analytics for Business with H2O in R. By the end of this project, you will be able apply machine learning and predictive analytics to solve a business problem, explain and describe automatic machine learning, perform automatic machine learning (AutoML) with H2O in R. We will take a data-driven approach to predict the success of bank telemarketing. H2O's AutoML automates the process of training and tuning a large selection of models, allowing the user to focus on other aspects of the data science and machine learning pipeline such as data pre-processing, feature engineering and model deployment. To successfully complete the project, we recommend that you have prior experience with programming in R, basic machine learning theory, and have trained ML models in R. We will not be exploring how any particular model works nor dive into the math behind them. Instead, we assume you have this foundational knowledge and want to learn to use H2O in R for predictive analytics. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **V7Ngg5\_BEeu7Kw5pdl7is6 Introduction to Shell Scripting for DevOps**

In this 1-hour long project-based course on Linux: Introduction to Shell Scripting for DevOps, you will be writing your own Bash/Shell scripts for scratch. You will be going through all of the key components that make up the bash script, from exit statuses, the test command, if/else statements, loops and file archiving. You will no longer be completely confused when looking at Bash scripts, and will have a working knowledge which allows you to start working with scripts yourself. This course is designed for any person working or who intends to work with Linux, from Linux system administrators to developers and DevOps practitioners. Or even if you are a student who is curious to get comfortable with Linux this course is for you also. This is an intermediate level course and is designed for an individual who has a beginner's knowledge of the Linux/Unix command line and Unix crud practices in computer science. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **VKqpDF\_mEey7Ageta7R1M6k Mockup in Figma**

This Guided Project "Create a Mockup in Figma" is for anyone who wants to learn to create their own mockup items. In this 1-hour long project-based course, you will learn to create t-shirt mockups on Figma. You will also learn to create a hair oil bottle mockup for a cosmetic business using the artboard studio mockup plugin. You will also learn to integrate third-party plugins (Artboard studio mockup and removebg) on Figma. To achieve this, we will work through : Task 1 : Introduction and creating an account on Figma Task 2 : Exploring Figma's interface Task 3 : Creating a men's t-shirt mockup on Figma Task 4 : Integrating artboard studio mockup plugin on Figma Task 5 : Importing a hair oil bottle mockup from the artboard studio plugin Task 6 : Adding designs to the hair

oil bottle mockup This project is unique because it's helpful for an individual who wants to design his/her own clothing mockups and is also helpful for small business owners who want to scale their businesses. This course is beginner-friendly, so you don't need to have any experience before. Let's get started!

### **Vesd2Dm8Ee2s8B6Q4t8w Customer Engagement and Discovery**

SAP Customer Engagement and Discovery is the third course in the SAP Technology Consultant Professional Certificate program. The course introduces you to SAP Activate methodology and teaches you how to engage with customers and work with them in exploring how to achieve their transformation goals. You'll learn how to gather information and insights about a customer's business, technology, and data. You'll investigate SAP's fit-to-standard analysis approach. You'll consider how to accurately understand and assess a client's needs. And you'll look at SAP's Customer Journey Roadmap, which includes how to identify and communicate the value of a solution to stakeholders and get signoff. By the end of this course, you will be able to: Describe the key elements of the SAP Activate methodology and Customer Engagement Model. Explain the program planning and set up activities for a typical SAP customer project. Explain what a technology consultant does in the Customer Engagement and Discovery phase of SAP projects. Explain how to gather relevant information and insights about customer strategy, objectives, processes, technology, and data. Describe how to conduct discovery workshops and interviews. Explain SAP's fit-to-standard approach and key preparation activities and develop a Customer Journey Roadmap. Identify and communicate the business value of a proposed SAP solution.

### **Vgf- Managing for Frictionless Sales D3TLEyrDAqvINCGXQ**

This course introduces you to the Frictionless Sales Framework and how it can enable your sales team to be more effective and efficient. You'll learn how to measure your team's effectiveness with a Rep Efficiency Audit. You will discover how to create a sales process that aligns with your targeted buyer's journey as well as your business goals. You'll also learn how to create an effective sales training program, hiring strategy and onboarding process to help you staff your team with the best sales professionals and train them to be successful. By the end of this course you will be able to:

- Define a sales process that minimizes friction in sales and is based on the target buyer's journey
- Create an effective sales training and coaching program
- Create a sales hiring strategy that enables you to find the right people for your team
- Implement a successful sales onboarding process to align your new hires with your business goals

Regardless of your current experience, this course will instruct you on how to create an effective sales process and how to hire, coach, and manage an effective sales team. This course is intended for anyone interested in jumpstarting their career in sales - whether you're changing careers and looking for an entry-level role, or want to hone your skills in your current role as a sales representative. It does not require any background knowledge or experience to get started. Throughout the course, you will complete exercises that ask you to apply the skills you have learned in a practical way, such as completing a Rep

Efficiency Audit, mapping your sales process, and implementing a coaching process using the GROW model.

## **WmLqXRfnEeyf4 Absolute Basics of COBOL aygVCw**

In this project you will have your first look at the COBOL programming language. As you view, compile, and execute COBOL code you will learn what COBOL is, where it began, and how it has evolved to remain an important player in today's business systems. In fact, it is estimated that up to 70% of large corporations still use COBOL for processing data in their mission-critical systems. For extra practice, be sure to check out the optional practice and capstone activities.

## **VxYuVbDXEeqC3KvE5Uvna1 Conversational Selling Playbook for SDRs**

This is Course 3 in the Salesforce Sales Development Representative Professional Certificate. In order to successfully complete the course, please ensure you have taken Course 1: Groundwork for Success in Sales Development and Course 2: Foundations for Interviewing with Confidence. This course will dive into the 8 principles of SV Academy's Conversational Selling Methodology, which will optimize you for success. You'll be able to integrate these principles not only in the real world, but in your career. Additionally, you'll be taught SV Academy's unique approach to objection handling and framework for high-quality prospecting. Course 3 in the Sales Development Representative (SDR) Professional Certificate will give you the necessary skills to launch a career in the non-technical side of the tech industry. By the end of the course, you will be able to:

- Understand the process of asking strategic questions, establishing trust, identifying pain points and proposing value in efforts to closing a sale
- Identify and empathize with your Ideal Customer Profile (ICP) and target persona to build a high-quality lead list, efficiently qualify prospects, and leverage data to drive activity
- Investigate various outreach channels and generate a call script incorporating Conversational Selling strategies
- Develop a foundation for emotional intelligence in a sales context and generate an empathetic email
- Generate a multi-channel sales strategy to outreach prospects via phone, email, video, and social media

To be successful in this course, you should have:

- An ability to communicate in verbal and written form in a way that is accessible and understandable by a general audience (you don't need to be formal or refined)
- Baseline computer literacy (you must be able to use a word processor, web search, and email)
- Familiarity with social media, including LinkedIn
- Ability and willingness to learn new technology tools
- Motivation to grow personally and professionally
- Hunger for feedback and coaching
- Successfully completed the previous courses in this training

## **W5kcLAP- Create High-Fidelity Designs and Prototypes in Figma Eeua7xKR7OK1aw**

Create High-Fidelity Designs and Prototypes in Figma is the fifth course in a certificate program that will equip you with the skills you need to apply to entry-level jobs in user

experience (UX) design. In this course, you will follow step-by-step tutorials to learn how to create high-fidelity designs, called mockups, in Figma, a popular design tool. Then, you'll turn those designs into an interactive prototype that works like a finished product. You'll conduct research to collect feedback about your designs and make improvements. Finally, you'll learn how to share your designs with development teams and highlight your work in your professional UX portfolio. Current UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. By the end of this course, you will be able to:

- Build mockups and high-fidelity prototypes in Figma.
- Define and apply common visual design elements and principles.
- Demonstrate how design systems can be used to organize, standardize, and enhance designs.
- Understand the role of design critique sessions and feedback while iterating on designs.
- Learn how to hand off finished design projects to engineering teams.
- Complete mobile app designs to include in a professional UX portfolio.

This course is suitable for beginner-level UX designers who have completed the previous four courses of the Google UX Design Certificate. Alternatively, learners who have not completed the previous courses should have a strong understanding of the design process, how to create low-fidelity designs on paper and in Figma, and how to conduct usability studies.

## **X2bX61doEerKDeBvJqH Bytes of Computer Networking**

This course is designed to provide a full overview of computer networking. We'll cover everything from the fundamentals of modern networking technologies and protocols to an overview of the cloud to practical applications and network troubleshooting. By the end of this course, you'll be able to:

- # describe computer networks in terms of a five-layer model
- # understand all of the standard protocols involved with TCP/IP communications
- # grasp powerful network troubleshooting tools and techniques
- # learn network services like DNS and DHCP that help make computer networks run
- # understand cloud computing, everything as a service, and cloud storage

## **X87R7ytEeuZtMnBzjBw to R Programming for Data Science**

When working in the data science field you will definitely become acquainted with the R language and the role it plays in data analysis. This course introduces you to the basics of the R language such as data types, techniques for manipulation, and how to implement fundamental programming tasks. You will begin the process of understanding common data structures, programming fundamentals and how to manipulate data all with the help of the R programming language. The emphasis in this course is hands-on and practical learning. You will write a simple program using RStudio, manipulate data in a data frame or matrix, and complete a final project as a data analyst using Watson Studio and Jupyter notebooks to acquire and analyze data-driven insights. No prior knowledge of R, or programming is required.

## X8ksefSmEeuwRbblvabwReady Tables in R

Learn how to create Publication-Ready Tables in R for descriptive statistics, contingency tables, correlation tables, model summary tables and survival probabilities tables

## XANaz8dEEey3Ggd0Bm7Da0w Preparation

The final course in this program will help prepare you for the unique aspects of a coding job interview, with approaches to problem-solving and computer science foundations needed to land the job. Ultimately you'll gain strategic insights and tips for successful interviewing. By the end of this course, you'll have knowledge of: • Appropriate communication during a coding interview • #Successful interviewing strategies • Using pseudocode • #The fundamentals of computer science • The capabilities of data structures and how to implement them • How to review data structures in the context of coding interviews • #The concept of algorithms and common approaches to working with them • #How to visualize an algorithm • Combining new and previously learned coding patterns to solve problems Ideally, you should have completed all the courses in this professional certificate.

## XL6AN7S1Eeq10v6Ging0 With Meta

This course will establish you as an expert in Meta Ads Manager. Learn how to structure campaigns in Ads Manager by selecting ad objectives, target audience, budget, and placement that fit your unique goals. Learn to create and manage ads across Facebook and Instagram and evaluate and optimize the results of your Ads Manager campaigns. You will end the course by creating an actual ad campaign in Ads Manager to expand not only your knowledge, but your social media marketing portfolio. By the end of this course, you will be able to: • Structure campaigns in Meta Ads Manager • Identify the major components and elements of an ad in Meta Ads Manager • Build an ad that aligns with your marketing objectives and target it to your intended audience • Set a budget, placement, and schedule for your ads in Meta Ads Manager • Edit and troubleshoot your ads in Meta Ads Manager This course is intended for people who want to learn how to use Meta Ads Manager to create, manage and optimize campaigns on Facebook and Instagram. Learners don't need marketing experience, but they have basic internet navigation skills and are eager to participate and connect in social media. Learners must have a Facebook account and an Instagram account helps. Ideally, learners have already completed the four previous courses in this program.

## XNsQpICMEeyAb5iswAnt0r Data Analysis and Visualization Foundations

This is the final course in the Data Analysis and Visualization Foundations Specialization. It contains a graded final examination covering content from three courses: Introduction to Data Analytics, Excel Basics for Data Analysis, and Data Visualization and Dashboards with Excel and Cognos. From the Introduction to Data Analytics course, you will be assessed on your knowledge of topics such as the data ecosystem and the fundamentals of data analysis, including data gathering and data mining tools. From the Excel Basics for Data Analysis course, you should be prepared

to answer test items on topics like how Excel spreadsheets are used in data analytics, cleansing and wrangling data, as well as pivot tables. Finally, from the Data Visualization and Dashboards with Excel and Cognos course, you will demonstrate your knowledge on topics such as the basics of IBM Cognos and using Excel for data visualization.

### **XXZBGc97EeufBlaGzCZQ Database Administration (DBA)**

Ongoing and proactive management is critical to the security and performance of database management systems. Database administration is the function of managing the operational aspects of database systems and maintaining them. Database administrators work to ensure that applications make the most efficient use of databases and that physical resources are used adequately and efficiently. In this course, you will discover some of the activities, techniques, and best practices for managing a database. You will learn about configuring and upgrading database server software and related products. You will also learn about database security; how to implement user authentication, assign roles, and assign object-level permissions. You will also gain an understanding of how to perform backup and restore procedures in case of system failures. You will learn about how to optimize databases for performance, monitor databases, collect diagnostic data, and access error information to help you resolve issues that may occur. Many of these tasks are repetitive, so you will learn how to schedule maintenance activities and regular diagnostic tests and send automated messages of the success or failure of a task.

### **Xbe2XfKzEeqoRbljhgkta Started with Rstudio**

In this 1-hour long project-based course, you will learn everything you need to know to get started with RStudio IDE, including how to install RStudio onto your Windows, MAC or Linux machine, how to use RStudio Cloud, a lightweight, cloud-based version of RStudio, how to start creating R projects, install and load R packages, as well as display interactive maps, graphs and tables with 1 line of code. This course is perfect if you want to start learning R programming with RStudio: the Premiere IDE for R Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **XmExpckfEey9BakZF62D Developer Capstone**

The Capstone project enables you to demonstrate multiple skills by solving an authentic real-world problem. You'll test your abilities in full-stack back-end development in a real-life scenario by composing a Django web app. Each module includes a brief recap of, and links to, content that you have covered in previous courses in this program. You will use clean and bug-free coding to create a Django web server with multiple API endpoints and connect it to a MySQL database. You'll also create a template system driven by Django views. By the end of the course you will be able to:

- Compose a backend application using multiple skills
- Use Django to serve static HTML content
- Commit the project to a Git repository
- Connect the backend to the database
- Implement the menu and table booking APIs
- Set up user registration and authentication
- Test the application with unit tests and Insomnia
- Synthesize the skills from this course and evaluate other learners
- Reflect on this project's content and on the learning path that

lies ahead. On completion of the Capstone project, you'll have a project-based portfolio that you can show to potential employers when interviewing for an engineering role. To complete this course, you will need back-end developer experience. Additionally, it always helps to have a can-do attitude!

### **Linux File Management for DevOps**

In this 1-hour long project-based course on Linux file management for DevOps, you will be working entirely on the command line and using powerful Linux commands working with files and directories and manipulating them. We will copying, moving and creating symlinks between files, as well as learning how to search through outputs and cut outputs by columns to only retrieve the data fields that we need. We will learn various commands and options that will give you the confidence to work with files in most Linux environments. This course is designed for any person working or who intends to work with Linux, from Linux system administrators to developers and DevOps practitioners. Or even if you are a student who is curious to get comfortable with Linux this course is for you also. By the end of this course, you will have worked with files across the filesystem and will have a solid working knowledge of file manipulation in Linux. This is an intermediate level course and is designed for an individual who has a beginner's knowledge of Linux command line and crud practices in computer science. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **Working with Data in Android**

Learn how to work with web technologies and persistent data on Android applications even after you close or restart an app. There is a focus on web communication and developer tools and you will discover how Kotlin applications communicate over the web. You'll learn how data formats and web protocols work in relation to Kotlin apps. Furthermore, you will practice applying asynchronous programming techniques using Kotlin. Learn the core functionality and uses of the SQLite database management system (DBMS). Learn about web clients and databases by adding connections from your app to other languages to access custom-built web application programming interfaces (APIs) and database management systems. To complete this course, it is recommended that you have an advanced understanding of Kotlin programming, along with a functional knowledge of operating Android Studio to complete this course. By the end of this course, you will be able to:

- Identify some of the most useful tools and packages available to a Kotlin developer
- Apply Kotlin coroutines in Android applications
- Apply the general principles of using Room
- Integrate code from other languages into Kotlin
- Build a data driven Android app

### **Responsive Web Design in Adobe XD**

Responsive Web Design in Adobe XD is the sixth course in a program that will equip you with the skills you need to apply to entry-level jobs in user experience (UX) design.

In this course, you will design a responsive website using Adobe XD, a popular design tool. You will complete the design process from beginning to end: empathizing with users, defining their pain points, coming up with ideas for design solutions, creating wireframes and prototypes, and testing designs to get feedback. By the end of this course, you will have a new design project to include in your professional UX portfolio. In addition, you'll learn how to search for entry-level UX design jobs, create a resume that highlights your skills and accomplishments, and build your professional portfolio website. Current UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. By the end of this course, you will be able to:

- Apply each step of the UX design process (empathize, define, ideate, prototype, test) to create a responsive website.
- Develop designs in a popular design tool, Adobe XD.
- Plan information architecture and create sitemaps for website designs.
- Apply common layouts for web pages.
- Plan and conduct a usability study to gather feedback about designs.
- Iterate on designs based on research insights.
- Work with design systems in Adobe XD.
- Add a new design project to your professional UX portfolio.
- [Optional] Create or update a UX-focused resume.
- [Optional] Learn how to search for and apply to introductory-level jobs in the field of UX.

This course is suitable for beginner-level UX designers who have completed the previous five courses of the Google UX Design Certificate. Alternatively, learners need to have a strong foundational understanding of the design process; experience creating wireframes, mockups, and prototypes; and the ability to conduct usability studies. No previous experience with Adobe XD is required.

### **UX Design Basics: Scripting on Linux to Execute Common commands**

By the end of this project, you will use a bash script to execute commands and observe their output on a Linux system. Bash, or Bourne Again Shell, is more than a shell running in a terminal on Linux; it is a programming language that is used to create powerful programs called shell scripts. Shell scripts are often used to capture common repetitive tasks so they can be executed without the need to memorize multiple individual commands.

### **Linux i/o Redirection for DevOps**

In this 1-hour long project-based course on Linux i/o redirection for DevOps you will be working entirely on the command line and using powerful Linux commands and redirection operators to learn how input and output redirection works in Linux. You will get experience of taking control of what happens to the stdin and stdout of all your commands and no longer be confused about the details on how piping and redirection works in Linux. This course is designed for any person working or who intends to work with Linux, from Linux system administrators to developers and DevOps practitioners. Or even if you are a student who is curious to get comfortable with Linux this course is for you also. By the end of this course, you will have used all of the redirection operators to redirect data and you will be comfortable to do so with ease going forward. This will also allow you to possess one of the important foundations of Bash scripting. This

is an intermediate level course and is designed for an individual who has a beginner's knowledge of Linux command line and crud practices in computer science. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **YlfzdXJKEeyKjA795600750 to Cybersecurity Essentials**

Build key skills needed to recognize common security threats and risks. Discover the characteristics of cyber-attacks and learn how organizations employ best practices to guard against them. Designed specifically for beginners and those who are interested in a Cyber Analyst I or an entry-level Cloud and Security Engineer role, this course dives into the world of cybersecurity to give you the critical skills employers need. This course also supports the needs of technical support roles, who can find themselves on the front lines of defense for cybersecurity issues and is part of the IBM Technical Support Professional Certificate. Learn about malware and explore methods for securing and managing confidential information. Then, discover how to configure browsers to help reduce security breaches.

### **YtMmyXGeEe2X074081pp0 Career Coach and Resources**

As you've explored a role as a Career Coach or Navigator in the preceding courses in this program, you've gained skills and knowledge about the profession and how to help clients find fulfilling jobs that allow them to earn a good living. This final course in the Career Coach and Navigator Professional Certificate will explore how the changing technology landscape affects the career landscape and what to do about it, develop skills for virtual coaching and career fairs, work with community organizations to develop referral relationships, understand funding sources, and complete a capstone project that will help you prepare for the role of a Career Coach or Navigator. By the end of the course, you will be able to: 1. Research and act on technology trends. 2. Develop computer application skills for virtual coaching. 3. Engage community partners and businesses to identify resources. 4. Identify career development opportunities for Career Coaches and Navigators. 5. Complete a capstone project. To be successful in this course, no prior experience with career coaching or navigation is required; but we recommend completing the previous courses in the program so you can build on the knowledge and skills from those courses here.

### **Z5NwLOy2Eeq4BldMwV First React Website (Part II)**

This 1.5 hours guided project is part 2 of the project "Build Your First React Website." In this project, we focus on persistent states for class components and different strategies for them to communicate with each other. At the end of this course, you will be able to choose and deploy different communication strategies for communications among React components. This class requires basic React and intermediate to advance experiment in JavaScript development as a prerequisite.

## **ZEB- Ask Questions to Make Data-Driven Decisions** **Lgp9Eeun\_RJEc0KNDw**

This is the second course in the Google Data Analytics Certificate. These courses will equip you with the skills needed to apply to introductory-level data analyst jobs. You'll build on your understanding of the topics that were introduced in the first Google Data Analytics Certificate course. The material will help you learn how to ask effective questions to make data-driven decisions, while connecting with stakeholders' needs. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources. Learners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary. By the end of this course, you will: - Learn about effective questioning techniques that can help guide analysis. - Gain an understanding of data-driven decision-making and how data analysts present findings. - Explore a variety of real-world business scenarios to support an understanding of questioning and decision-making. - Discover how and why spreadsheets are an important tool for data analysts. - Examine the key ideas associated with structured thinking and how they can help analysts better understand problems and develop solutions. - Learn strategies for managing the expectations of stakeholders while establishing clear communication with a data analytics team to achieve business objectives.

## **ZJo- Create a Python Application using PyMongo and MongoDB** **A6\_bEqBSw6GatH4Q**

Data plays a crucial role in application development. It plays such a crucial role that there are people called Database Administrators that specialize in just organizing the data. The traditional database used to be, and often still is, a relational database. MongoDB is more flexible than a relational database, and as such provides the developer with a database that can easily be changed during the development phase. The increased popularity of MongoDB combined with the popularity of Python has resulted in a Python library called PyMongo, which provides an API for communicating with MongoDB. In this course, you will create a Python application, using PyMongo, that creates a MongoDB database containing words and their definitions. You will then retrieve data from the collection and display a selected Word's definition. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## **ZWYBq9zVEeqMtrw0LjEonTo Data Analytics**

Ready to start a career in Data Analysis but don't know where to begin? This course presents you with a gentle introduction to Data Analysis, the role of a Data Analyst, and the tools used in this job. You will learn about the skills and responsibilities of a data analyst and hear from several data experts sharing their tips and advice to start a career. This course will help you to differentiate between the roles of Data Analysts, Data Scientists, and Data Engineers. You will familiarize yourself with the data ecosystem, alongside Databases, Data Warehouses, Data Marts, Data Lakes and Data Pipelines.

Continue this exciting journey and discover Big Data platforms such as Hadoop, Hive, and Spark. By the end of this course you'll be able to understand the fundamentals of the data analysis process including gathering, cleaning, analyzing and sharing data and communicating your insights with the use of visualizations and dashboard tools. This all comes together in the final project where it will test your knowledge of the course material, and provide a real-world scenario of data analysis tasks. This course does not require any prior data analysis, spreadsheet, or computer science experience.

## **Q354164: Continuous Integration and Continuous Delivery (CI/CD)**

**Q**

A principle of DevOps is to replace manual processes with automation to improve efficiency, reduce human error, and accelerate software delivery. This requires automation that continuously integrates code changes and continuously delivers those changes to a production environment. This course introduces you to Continuous Integration and Continuous Delivery (CI/CD), an automated approach to software development. You'll discover the benefits of CI/CD for creating a DevOps pipeline and explore popular CI/CD tools. You'll examine the key features of CI, explore social coding, and the Git Feature Branch Workflow. You will also learn about standard CI tools and gain a deep understanding of GitHub Actions workflows and their components. This course provides an overview of CD and its goals, benefits, and best practices. You will learn the requirements of a CI/CD pipeline and discover standard CD tools. You will explore Tekton and discover how its components work together to create a CD pipeline. You will learn how to build a pipeline, pass parameters to a pipeline, build triggers to start pipeline runs, implement reusable tasks, and create custom tasks. You will discover how to complete your CD pipeline by building a container image and deploying your application to an OpenShift Kubernetes cluster. Throughout the course, you can hone your skills and challenge yourself through several hands-on labs.

## **Q354164: Application Development using Microservices and Serverless**

Are you a developer ready to explore serverless application development? This intermediate-level course is for you! Begin with an understanding of how serverless benefits developers, learn when to use serverless programming, serverless deployment models, and discover its top use cases and design patterns. You'll also discover how serverless supports continuous integration and continuous delivery (CI/CD) and microservices integration. Hands-on labs reinforce serverless programming concepts for creation, deployment, and invocation of cloud-based functions—including the deployment of microservices using OpenShift and Istio. Complete the course with the confidence to build a multi-tier web app that uses IBM Cloud Functions, OpenShift, Istio, and more.

## **SAP Technology Consultant Hands-on Project**

SAP Technology Consultant Hands-on Project is the sixth course in the SAP Technology Consultant Professional Certificate program. This is your opportunity to put the knowledge and skills you have gained over the previous five courses into practice. This fun and interesting project is a high-level challenge based on a real-world problem. You'll identify key players in the proposed project and take the necessary steps to understand their current technical landscape. You'll identify their business requirements and develop a solution proposal. Once you've obtained sign off from the customer, you'll then identify the key technology elements you need to cover and assess the stakeholders and other SAP professionals you'll be working with. You'll work on and present your design, including your assumptions, proposed recommendations, and other considerations. Then you'll implement your proposed solution and complete QA/ testing activities. And finish off by creating a Post-Implementation Review Report documenting the lessons learnt and the future roadmap. Overall, this project presents an ideal opportunity to gain experience in assessing the digital transformation drivers in a real-life situation. By the end of this project, you will be able to: Review, understand and respond to a customer implementing a new SAP solution. Complete typical technology consultant project tasks for each SAP lifecycle phase. Develop and present selected technology consultant project deliverables. Compare course project work against provided best practice examples and identify gaps or opportunities for development.

## **Build an App in Android Studio using Resources**

In this project you will build an Android app with images, strings, and a string array that are saved as resources in the project (can be accessed by reference throughout the app). You will use the java programming language and will be given an explanation of the usefulness of using resources. In different parts of the res (resources) directory of your Android Studio project you will put images, create strings, and create a string array and all of these will be accessible for all appropriate widgets in your app. This app will have a piece of text (from the strings file) asking the user to select the name of an author from a spinner (a type of drop down menu where the user selects from a set of options - from the strings file). There will be an image (ImageView) below the spinner which will change (from the drawable directory) to match whichever author the user selects. Beneath this will be a piece of text (TextView) with the name of a book and the year it was published (from the strings file) which will change to match the selected author. Finally, there will be another piece of text (TextView) which will contain an appropriate quote (from the strings file) from the named book. When the user closes the app the program will remember the final choice made by the user in their previous visit. You will upload an APK of the app to a website called Appetize.io to test the app.

Projects in Series 1: 1. Build a Simple App in Android Studio with Java 2. Build a Persistent Storage App in Android Studio 3. Build a Linear Layout App in Android Studio 4. Build a Relative Layout App in Android Studio 5. Build a Table Layout App in Android Studio

Projects in Series 2: 1. Build an App in Android Studio using Resources 2. Build an App in Android Studio using Static Files 3. Build an App in Android Studio using Read -

Write 4. Build an App in Android Studio using onTouch 5. Build an App in Android Studio using Activities

## **Introduction to Networks and Cisco Devices**

In this 2-hours guided project, you will identify different components such as end devices, intermediary devices, and connection media and simulate network topologies in the Packet Tracer, manage Cisco network devices using telnet, SSH, and Console connections, and secure access to Cisco devices using passwords and password encryption services. By the end of this project, you will be able to use the Packet Tracer to create network topologies that are like the one you're seeing on the screen, connect to network devices using telnet, SSH, and Console, and manage basic security settings on Cisco devices. This project is one of a kind because it teaches foundational computer network skills to learners from a variety of experience levels using entirely simulated experience. In this project, learners will acquire what they need in simulation environments as if they were working on real devices.

## **Advanced Programming in Kotlin**

In this course, you will expand your Kotlin fluency by exploring the advanced concepts used by many Kotlin programmers. You will learn the more advanced features of Kotlin that are required to build a robust, functional Android app. Each week's learning provides ample opportunity for you to practice and apply what you learn as you learn it. By the end of this course, you will have an array of advanced programming tools to help you engineer solutions for your future Kotlin projects, progressing you toward a better understanding of Android development. On successful completion of the course you will be able to: Implement an Android application with an Activity Implement advanced object-oriented features in Android Use mocks and fakes to perform unit testing in Android Use a Lambda expression to define a function as an object Use collection processing methods for multistep collection processing To be successful in this course, you require a foundational understanding of Kotlin programming fundamentals and of creating a UI in Android Studio.

## **Foundations of User Experience (UX) Design**

Foundations of User Experience (UX) Design is the first of a series of seven courses that will equip you with the skills needed to apply to entry-level jobs in user experience design. UX designers focus on the interactions that people have with products like websites, mobile apps, and physical objects. UX designers make those everyday interactions usable, enjoyable, and accessible. The role of an entry-level UX designer might include empathizing with users, defining their pain points, coming up with ideas for design solutions, creating wireframes, prototypes, and mockups, and testing designs to get feedback. Current UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should

be equipped to apply for entry-level jobs as UX designers. No previous experience is necessary. By the end of this course, you will be able to: - Define the field of UX and explain why it's important for consumers and businesses. - Understand foundational concepts in UX design, such as user-centered design, the design process, accessibility, and equity-focused design. - Identify the factors that contribute to great user experience design. - Review common job responsibilities of entry-level UX designers and teams that they work with. - Explore job opportunities and career paths within the field of user experience. - Explain why design sprints are an important and useful part of a UX designer's work. - Describe common UX research methods. - Identify and account for biases in UX research.

### **amTeRCrMEeyXia512jion for Statistical Analysis**

In this project you will learn about several visualization techniques and their importance for Statistical Analysis. The project demonstrates different plotting techniques, for example, histograms, scatter plots, box and whiskers plot, violin plot, bar plot, addition of regression line to scatter plot, and creating matrix of multiple plots. It also discusses the suitability of each plots according to the data type of the variables and illustrates multiple ways to achieve the desired plots efficiently. The project refers to 'Palmer Penguins' data set for the illustrative purpose.

### **a\_iqcdf1EeuV- Create a Sales Dashboard using Power BI w4mcWVOEw**

In this 1 hour long project, you will build an attractive and eye-catching sales dashboard using Power BI in a black and blue theme that will make your audience go "wow". We will begin this guided project by importing data. We will then create bar charts and pie charts to visualize the sales data and then position the graphs on the dashboard. In the final tasks, we will create interactive maps to visualize sales data by countries and markets. By the end of this course, you will be confident in creating beautiful dashboards with many different kinds of visualizations.

### **aeFpm0tMEeu5Creactive Customer Satisfaction Survey with Typeform**

In this 1-hour long project-based course, you will learn how to design and structure a customer satisfaction survey, create it on Typeform and collect answers immediately. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **asuGbrRSEeqKRA41081 Guide to Navigating Professional Relationships**

This is Course 5 in the Salesforce Sales Development Representative Professional Certificate. In order to successfully complete the course, please ensure you have taken Course 1: Groundwork for Success in Sales Development, Course 2: Foundations for Interviewing with Confidence, 3: Conversational Selling Playbook for SDRs, and 4: Boosting Productivity through the Tech Stack. In this course, you'll develop 'power' skills that are often overlooked but can actually determine success in your role. As

tech industry professionals, we often get trained on how to do the technical work but not on how to give and receive feedback, communicate effectively, present ourselves professionally, and manage relationships. These human-centered skills make all the difference when you are being considered for a promotion within your company or applying for an exciting role at another company. By taking this course, you'll gain foundational knowledge and skills to crush it as a top-performing SDR and beyond. By the end of the course, you will be able to: - Build an empathetic approach to communication that highlights your professional demeanor - Produce a message with confidence and clarity in order to achieve results - Develop a clear understanding for implementing specific written communication styles in varying scenarios - Cultivate an understanding of diverse opinions and multiple perspectives in the workplace - Compose a three-month plan to implement feedback, optimize learning, and successfully ramp up your career To be successful in this course, you should have: - An ability to communicate in verbal and written form in a way that is accessible and understandable by a general audience (you don't need to be formal or refined) - Baseline computer literacy (you must be able to use a word processor, web search, and email) - Familiarity with social media, including LinkedIn - Ability and willingness to learn new technology tools - Motivation to grow personally and professionally - Hunger for feedback and coaching - Successfully completed the previous courses in this training

### **b21PY8n0EeuSABKedInWQAlytics Foundation**

This course lays the foundation of marketing analytics. You'll learn the basic principles of marketing. You'll learn the role analytics plays in digital marketing and how data is collected and managed for marketing. You will also learn basic privacy regulations that govern the online marketing space as well as common challenges when working with marketing data. By the end of this course you will be able to: • Describe how data and measurement inform a marketing action • Describe the basic principles of marketing • Identify why measurement and analytics matter in digital marketing • Describe how data is collected and related to digital marketing • Explain the significance of the privacy regulations that govern the online marketing space • Describe the Meta pixel and how it is created on the Meta platform • Describe how information is recorded on mobile devices • Explain how an API connects data captured offline to an online platform • Describe common platforms for online data management and evaluation • Navigate Google Analytics and Meta Ads Manager reports Regardless of your current marketing and analytics experience, this course will help you build a solid foundation for incorporating data into your marketing efforts. Learners don't need marketing or data analysis experience, but should have basic internet navigation skills and be eager to participate.

### **bHbgpQjyEeuSABKedInWQAlytics Basics**

This is the first course in a series of four that will give you the skills needed to start your career in bookkeeping. If you have a passion for helping clients solve problems, this course is for you. In this course, you will be introduced to the role of a bookkeeper and learn what bookkeeping professionals do every day. You will dive into the accounting

concepts and terms that will provide the foundation for the next three courses. You will learn how to work your way through the accounting cycle and be able to read and produce key financial statements. By the end of this course, you will be able to: - Define accounting and the concepts of accounting measurement -Explain the role of a bookkeeper and common bookkeeping tasks and responsibilities -Summarize the double entry accounting method -Explain the ethical and social responsibilities of bookkeepers in ensuring the integrity of financial information. No previous bookkeeping or accounting experience required.

### **blopQXeNEeuCw5fKfZr Simple Calculator in Android using Java**

In this 1-hour long project-based course, you will learn how to (Set up a new project in Android Studio, Implement the application's Design, Make the application responsive in Java, Run the application and add an Icon). Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **bN9fcgp9Eeu0VrPnLz9 Data for Exploration**

This is the third course in the Google Data Analytics Certificate. These courses will equip you with the skills needed to apply to introductory-level data analyst jobs. As you continue to build on your understanding of the topics from the first two courses, you'll also be introduced to new topics that will help you gain practical data analytics skills. You'll learn how to use tools like spreadsheets and SQL to extract and make use of the right data for your objectives and how to organize and protect your data. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources. Learners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary. By the end of this course, you will: - Find out how analysts decide which data to collect for analysis. - Learn about structured and unstructured data, data types, and data formats. - Discover how to identify different types of bias in data to help ensure data credibility. - Explore how analysts use spreadsheets and SQL with databases and data sets. - Examine open data and the relationship between and importance of data ethics and data privacy. - Gain an understanding of how to access databases and extract, filter, and sort the data they contain. - Learn the best practices for organizing data and keeping it secure.

### **bvaUWldrEeerkQpzdng Systems and You: Becoming a Power User**

In this course -- through a combination of video lectures, demonstrations, and hands-on practice -- you'll learn about the main components of an operating system and how to perform critical tasks like managing software and users, and configuring hardware. By the end of this course you'll be able to: # navigate the Windows and Linux filesystems using a graphical user interface and command line interpreter # set up users, groups, and permissions for account access # install, configure, and remove software on the Windows and Linux operating systems # configure disk partitions and filesystems # understand how system processes work and how to manage them # work with system logs and

remote connection tools # utilize operating system knowledge to troubleshoot common issues in an IT Support Specialist role

### **Google Data from Dirty to Clean**

This is the fourth course in the Google Data Analytics Certificate. These courses will equip you with the skills needed to apply to introductory-level data analyst jobs. In this course, you'll continue to build your understanding of data analytics and the concepts and tools that data analysts use in their work. You'll learn how to check and clean your data using spreadsheets and SQL as well as how to verify and report your data cleaning results. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources. Learners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary. By the end of this course, you will be able to do the following: - Learn how to check for data integrity. - Discover data cleaning techniques using spreadsheets. - Develop basic SQL queries for use on databases. - Apply basic SQL functions for cleaning and transforming data. - Gain an understanding of how to verify the results of cleaning data. - Explore the elements and importance of data cleaning reports.

### **Advanced Commands in Linux**

In this one-hour, project-based course, you'll learn advanced commands for the Linux command-line. You'll learn how to grab files, even Web-site, from the internet and download it, how to copy files from drives to drives locally and remotely and how to display, terminate, and troubleshoot programs and processes manually. This guided project will introduce you to the following commands: -wget -- Download anything from the Internet or other remote computers; -rsync -- Synchronise files and directories locally or with a remote machine; -ps, pstree, top, htop -- Monitor applications and processes running on a PC; -kill, killall -- force the closing of troublesome applications and processes.

### **Encryption and Decryption using C++**

By the end of this project, you will be able to create a basic application using Vigenere encryption-decryption technique to encrypt and decrypt messages. Throughout the project, you will be able to identify the basics of cryptography and how to encrypt and decrypt messages using a specific technique, you will be able to apply concepts like ASCII codes and type casting. Moreover, you will be able to do some mathematical operations on characters, and finally you will be ready to dive more into the cryptography world. This guided project is for beginner programmers or any programmer who would like to enter the cryptography world. This project will be the beginning for you to build applications to encrypt and decrypt messages coming from the user using a certain technique. This project will give you the basic knowledge of cryptography and push you into the security engineering field. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## **cmFRA\_AOEeqDmQd7wD6DKQ Develop a Website using Figma and CSS**

In this 2-hour long project-based course, you will learn how to use the basic tools and features of Figma, design a website's prototype and convert it into a website exactly as designed, using HTML and CSS. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## **coP2hgp- Eeuh2QpCvqFzYQ Design a User Experience for Social Good and Prepare for Jobs**

Design a User Experience for Social Good and Prepare for Jobs is the seventh and final course in a program that will equip you with the skills you need to become an entry-level UX designer. In this course, you will design a dedicated mobile app and a responsive website focused on social good. You will showcase all that you've learned during the certificate program to complete the design process from beginning to end: empathizing with users, defining their pain points, coming up with ideas for design solutions, creating wireframes and prototypes, and testing designs to get feedback. By the end of this course, you will have a new cross-platform design project to include in your professional UX portfolio. This course will also prepare you to land your first job as a UX designer. You'll learn how to interview for entry-level UX design positions. You'll get tips from Googlers based on their own interview experiences and their unique perspectives as hiring managers. And, you'll polish the professional UX portfolio you've been building throughout the program so that it's ready for job applications. Current UX designers and researchers at Google will serve as your instructors, and you will complete hands-on activities that simulate real-world UX design scenarios. Learners who complete the seven courses in this certificate program should be equipped to apply for entry-level jobs as UX designers. By the end of this course, you will be able to:

- Apply each step of the UX design process (empathize, define, ideate, prototype, test) to create designs focused on social good.
- Identify the differences between dedicated mobile apps and responsive web apps.
- Understand progressive enhancement and graceful degradation approaches for designing across devices.
- Build wireframes, mockups, and low-fidelity and high-fidelity prototypes in Figma or Adobe XD.
- Add a new design project to your professional UX portfolio.
- Create your portfolio of design work for job applications.
- Join and participate in online UX communities.
- Interview for an entry-level UX design job.
- Determine if freelance design work is a good career fit for you.

This course is suitable for beginner-level UX designers who have completed the previous six courses of the Google UX Design Certificate.

## **ctUpMiNjEe2Psc5Ytgr2NQ And Manage Azure Key Vault**

In this 1 hour long project-based course, you will learn to configure and manage Azure Key Vault along with the sensitive data stored inside. First, we will learn to create an Azure Key Vault within the Azure portal. Then we will learn to create keys, secrets, and certificates on the Azure Key Vault using PowerShell and the Azure portal. We will also assign a Key Vault contributor role to an existing user. You will also discover how to configure access policies in order to grant permissions to the Key Vault objects and store

the connection strings of the storage account and Azure SQL database to secrets in Azure Key Vault. Finally, we'll explore how to use Azure Key Vault in the Azure data factory. You must have an active Azure account. Basic knowledge of working with Azure is recommended.

## **Full Stack**

### **TLTw**

As you prepare for your role in back-end development, practice bringing together multiple skills to build a full-stack Django app. You'll start by setting up an environment for a local practical project, and refactoring the front and back-ends of an existing application. You will then have the opportunity to create the front and back-ends of a new application using your full-stack developer skills. By the end of this course you will be able to:

- Explain common concepts related to full stack development
- Use HTML, CSS and JavaScript to develop well-structured, interactive and responsive websites
- Build a full stack application using Django that stores its data in models on a MySQL database and updates its pages with forms and API endpoints
- Describe the different environments that web applications are deployed to

To complete this course you will need previous experience with back-end development, Python, version control, databases, Django web framework and APIs.

## **Engage Customers with Digital Marketing**

Attract and Engage Customers with Digital Marketing is the second of seven courses in the Google Digital Marketing and E-commerce Certificate. In this course you will practice using search engine optimization (SEO), search engine marketing (SEM), and display advertising to attract and engage customers online. You will explore the stages of the marketing funnel and learn how to use digital marketing tactics to move customers through the stages. You'll learn how to increase the quality and quantity of website traffic by understanding SEO fundamentals like keyword research, search engine algorithms, and link building. You will also learn about paid search and advertising, and explore tactics used to gain visibility and reach potential customers on search engine results pages, or SERPs. By the end of this course you'll be able to apply digital marketing strategies, best practices, and tools to increase awareness of a business, understand customer needs, and engage people's interests with products and services. Google employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks while showing you some of the best tools and resources used on the job. Learners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary. By the end of this course, you will be able to do the following:

- Identify customer personas and build your target audience
- Describe the marketing funnel's purpose and benefits
- Know how to increase your conversion rate
- Explain the purpose of SEO and the essential SEO terms to know
- Use Google Search Console and its reports to monitor a site's presence in Google Search results
- Recognize the benefits of SEM and why to do it
- Understand the fundamentals of Google Ads and targeting audiences

## Meta Social Media Marketing Capstone

In this capstone course, you will practice creating a presentation on the marketing campaign you've been developing throughout the program with a project where you will gain hands-on experience with communicating results and formulating recommendations based on the results of a social marketing campaign. In addition, you will sign up for and take the Meta Digital Marketing Associate Certification Exam and receive your Digital Marketing Associate Certification from Meta. After successfully completing your project and passing the Meta exam, you will receive your Coursera certificate of completion for the Meta Social Media Marketing Professional Certificate Program. By the end of this course, you will be able to:

- Present and communicate the results of a campaign to a team
- Complete the Digital Marketing Associate Certification Exam

This course is for people who have completed all 5 previous courses of the Meta Social Media Marketing Professional Certificate and are ready to take their Digital Marketing Associate Certification Exam and complete a Capstone project to receive their Meta Social Media Marketing Professional Certificate. In order to take the exam, learners must have access to a Mac or PC with a webcam.

## Using Rest Assured Test Automation Tool

RestAssured is one of the best test automation tools to test APIs with Java programming language. It's an open-source tool and is very easy to code using Rest Assured. It also integrates easily with Test Automation tool like TestNG This project will provide you step by step instructions to write scripts to automate API testing using Rest Assured, how to automate and test CRUD (Create, Read, Update and Delete) operations with HTTP methods like GET, POST, PUT and DELETE, understanding JSON request and response, adding assertions to the API response.

## Python for Data Science, AI and Development

Kickstart your learning of Python with this beginner-friendly self-paced course taught by an expert. Python is one of the most popular languages in the programming and data science world and demand for individuals who have the ability to apply Python has never been higher. This introduction to Python course will take you from zero to programming in Python in a matter of hours—no prior programming experience necessary! You will learn about Python basics and the different data types. You will familiarize yourself with Python Data structures like List and Tuples, as well as logic concepts like conditions and branching. You will use Python libraries such as Pandas, Numpy and Beautiful Soup. You'll also use Python to perform tasks such as data collection and web scraping with APIs. You will practice and apply what you learn through hands-on labs using Jupyter Notebooks. By the end of this course, you'll feel comfortable creating basic programs, working with data, and automating real-world tasks using Python. This course is suitable for anyone who wants to learn Data Science, Data Analytics, Software Development, Data Engineering, AI, and DevOps as well as a number of other job roles.

## COVID19 Data Visualization Using Python

### COVID19 Data Visualization Using Python

By the end of this project, you will learn How you can use data visualization techniques to answer to some analytical questions. in this project we are going to use COVID19 dataset we have consisting of the data related cumulative number of confirmed, recovered, and deaths cases. we are going to prepare this dataset to answer these questions: How does the Global Spread of the virus look like?, How intensive the spread of the virus has been in the countries? Does covid19 national lockdowns and self-isolations in different countries have actually impact on COVID19 transmission? we are going to use Plotly module, which is a great visualization tool in python, in order to plot some insightful and intuitive graphs to answer the questions.

## Introduction to Relational Database and SQL

In this guided project, you will get hands-on experience working with a relational database using MySQL Workbench from Oracle. The basic knowledge you learn will allow you to work with any other relational database. At the end of this project, you will be able to create a billing report and a club member roster.

## Data Analysis with Python

Analyzing data with Python is an essential skill for Data Scientists and Data Analysts. This course will take you from the basics of data analysis with Python to building and evaluating data models. Topics covered include: - collecting and importing data - cleaning, preparing and formatting data - data frame manipulation - summarizing data - building machine learning regression models - model refinement - creating data pipelines You will learn how to import data from multiple sources, clean and wrangle data, perform exploratory data analysis (EDA), and create meaningful data visualizations. You will then predict future trends from data by developing linear, multiple, polynomial regression models and pipelines and learn how to evaluate them. In addition to video lectures you will learn and practice using hands-on labs and projects. You will work with several open source Python libraries, including Pandas and Numpy to load, manipulate, analyze, and visualize cool datasets. You will also work with scipy and scikit-learn, to build machine learning models and make predictions. If you choose to take this course and earn the Coursera course certificate, you will also earn an IBM digital badge.

## Fundamentals of Accounting and Reporting

This course is for those interested in starting a career in bookkeeping. The course will help you learn and apply the basic concepts of computerized accounting using TallyPrime, fundamentals of accounting, book-keeping, day-to-day business transactions, creating charts of accounts, preparing and analyzing management information systems, and how to secure company data. The course is enriched with numerous real business scenarios, screenshots, observations, solved illustrations, and practice scenarios to help you experience the simplicity and the power of technology of working on TallyPrime as you solve these real-life business scenarios. You will gain skills in the intricacies of

business operations and learn to handle such transactions in the daily work environment with ease. By the end of the course, you will be able to: - Explain and apply the fundamentals of accounting - Use TallyPrime as an integrated business management software - Create and maintain chart of accounts - Record and maintain accounting transactions - Describe and manage banking payments - Generate and analyze financial statements - Implement security control to protect data - Backup and restore company data No prior experience in bookkeeping is required, but you should have an interest and aptitude in working with numbers.

## **fxgolcbTEeqZ0F5eKdHl** Foundations of Project Management

**w**

This course is the first in a series of six to equip you with the skills you need to apply to introductory-level roles in project management. Project managers play a key role in leading, planning and implementing critical projects to help their organizations succeed. In this course, you'll discover foundational project management terminology and gain a deeper understanding of the role and responsibilities of a project manager. We'll also introduce you to the kinds of jobs you might pursue after completing this program. Throughout the program, you'll learn from current Google project managers, who can provide you with a multi-dimensional educational experience that will help you build your skills for on-the-job application. Learners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary. By the end of this course, you will be able to: - Define project management and describe what constitutes a project. - Explore project management roles and responsibilities across a variety of industries. - Detail the core skills that help a project manager be successful. - Describe the life cycle of a project and explain the significance of each phase. - Compare different program management methodologies and approaches and determine which is most effective for a given project. - Define organizational structure and culture and explain how it impacts project management. - Define change management and describe the role of the project manager in the process.

## **g-0dF3JpEeys9RdMw4816** Foundations of Digital Marketing and E-commerce

This is the first of seven courses in the Google Digital Marketing and E-commerce Certificate, which will equip you with the skills you need to apply to entry-level roles in these fields. People who work in digital marketing and e-commerce help their organizations attract new customers, engage customers through various digital channels, and drive transactions like purchases and customer loyalty. In this course, you'll explore entry-level jobs in digital marketing and e-commerce and identify the roles and functions that those jobs play within an organization. You'll also learn about the marketing funnel and how it shapes the customer journey. Google employees who currently work in the field will guide you, providing hands-on activities and examples that simulate common digital marketing and e-commerce tasks, and helping you build your skills and prepare for the job. Learners who complete the seven courses in this program will be equipped to apply for entry-level jobs in digital marketing and e-commerce. No previous experience is necessary. By the end of this course, you will be able to do the following: - Define

the fields of digital marketing and e-commerce - Describe the job responsibilities of an entry-level digital marketing coordinator and e-commerce analyst (and similar job titles) - Summarize how this program will help prepare you for a career in digital marketing and e-commerce - Identify the roles and functions that digital marketing and e-commerce play within an organization - Understand the customer journey and the function of journey maps - Explain the concept of a marketing funnel - Understand the elements and goals of a digital marketing and e-commerce strategy

### **g98MzcdAEeydAWBktL3Xvw**

Delve deeper into the processes and concepts behind APIs and their infrastructure. Explore the key concepts that underpin API development and the principles of representational state transfer architectural style (REST) architecture. Build basic API and REST data backbones for web apps using Django. Discover emerging API technology and practice other ways to build and work with APIs. Finally, you will test, optimize and develop documentation for an API. By the end of this course you will be able to: • Work with and build APIs • Build basic API and REST data backbones for web apps using Django • Discover emerging API technology • Test, optimize and develop documentation for an API To complete this course, you will need Django experience. Additionally, it always helps to have a can-do attitude!

### **gFzIHXTKEey5dg66RtLMSAs**

In this course, you will learn how to create a successful inbound sales strategy by connecting with and earning the attention of your most promising leads. After learning the basics of inbound sales and the buyer's journey, you will learn how to develop your buyer persona as well as find and prioritize active buyers. You'll discover how to reach out to these leads by creating and using an outreach sequence. Next, you will use qualification frameworks to profile and identify the details of your prospects, including their CGP, TCI, and BA. The course will culminate in you applying your new knowledge to design a personalized sales presentation and a multi-step project for developing an inbound sales strategy. By the end of this course you will be able to: • Describe the importance of inbound sales • Develop an inbound sales strategy • Create your ideal customer profile • Identify and prioritize inbound leads • Use social selling • Enrich leads • Connect with inbound leads • Reach out to inbound leads via phone or email • Use trigger events and common connections to connect to leads • Create outreach sequence • Use technology to automate parts of the outreach • Identify a prospect's challenges, goals and plans • Understand a prospect's timeline, consequences and implications • Profile a prospect's budget and authority • Create a personalized sales presentation Throughout the course, you will complete exercises that allow you to apply the skills you have learned in a practical way, such as creating a customer profile, writing emails to prospects, brainstorming a list of questions for a sales call, and creating a sales presentation. You will compile your work and submit it as a project at the end of the course. This course is intended for anyone interested in jumpstarting their career in sales - whether you're changing careers and looking for an entry-level role, or want to hone your skills in your

current role as a sales representative. It does not require any background knowledge or experience to get started.

### **gKChfS2gEeuP3K0V6H3RnQ Programming for Beginners - A simple BMI calculator**

By the end of this project you'll create a Simple BMI calculator Android application using Android studio and Java. we are going to work with: - Text Views - Buttons - Toast Messages - EditText Views - Intents and Activities - ImageViews - Linear Layouts. In this project we will also cover different types of listeners in Android. Note: This project works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **gM7IM79AEeylR04hXhUz6Q to Databases**

In this course, you will be introduced to databases and explore the modern ways in which they are used. Learn to distinguish between different types of database management systems then practice basic creation and data selection with the use of Structured Query Language (SQL) commands. By the end of this course, you'll be able to: - Demonstrate a working knowledge of the concepts and principles that underpin how databases work - Identify and explain the different types of core technology and management systems used in databases - Identify and interpret basic SQL statements and commands - Manipulate records in a database with the use of SQL statements and commands - Outline alternatives to SQL - and plan and design a simple relational database system You'll also gain experience with the following: • Fundamental concepts in database • Basic MySQL syntax and commands • Database management systems • MySQL software • Relational databases

### **ga7fNwxYE2in075j0HB Development and JavaScript**

This course is the first in a series that will allow you to expand your skills as an Android developer into the world of cross-platform mobile development. This will allow you to use your foundations as an Android developer to build cross-platform mobile applications. The first step in this expansion is learning to program in JavaScript. This will prepare you to learn to use the React library for mobile development. JavaScript is the programming language that powers the modern web. In this course, you will learn the basic concepts of web development with JavaScript. You will work with functions, objects, arrays, variables, data types, the HTML DOM, and much more. You will learn how to use JavaScript and discover interactive possibilities with modern JavaScript technologies. Finally, you will learn about the practice of testing code and how to write a unit test using Jest. This course can be applied to multiple Specializations or Professional Certificates programs. Completing this course will count towards your learning in any of the following programs: • Meta Android Developer Professional Certificate • Meta iOS Developer Professional Certificate By the end of this course you will be able to: • Explain the basic concepts of web development with Javavascript. • Practice using functions, objects, arrays, variables, data types, the HTML DOM, and much more. • Use JavaScript within the React framework • Practice testing code and how to write a unit test using Jest

### gaD7sM97EeuHw536cD8C Pipelines with Shell, Airflow and Kafka

After taking this course, you will be able to describe two different approaches to converting raw data into analytics-ready data. One approach is the Extract, Transform, Load (ETL) process. The other contrasting approach is the Extract, Load, and Transform (ELT) process. ETL processes apply to data warehouses and data marts. ELT processes apply to data lakes, where the data is transformed on demand by the requesting/calling application. Both ETL and ELT extract data from source systems, move the data through the data pipeline, and store the data in destination systems. During this course, you will experience how ELT and ETL processing differ and identify use cases for both. You will identify methods and tools used for extracting the data, merging extracted data either logically or physically, and for importing data into data repositories. You will also define transformations to apply to source data to make the data credible, contextual, and accessible to data users. You will be able to outline some of the multiple methods for loading data into the destination system, verifying data quality, monitoring load failures, and the use of recovery mechanisms in case of failure. Finally, you will complete a shareable final project that enables you to demonstrate the skills you acquired in each module.

### gawUVgp9EeuYAC752vD Data to Answer Questions

#### Yw

This is the fifth course in the Google Data Analytics Certificate. These courses will equip you with the skills needed to apply to introductory-level data analyst jobs. In this course, you'll explore the "analyze" phase of the data analysis process. You'll take what you've learned to this point and apply it to your analysis to make sense of the data you've collected. You'll learn how to organize and format your data using spreadsheets and SQL to help you look at and think about your data in different ways. You'll also find out how to perform complex calculations on your data to complete business objectives. You'll learn how to use formulas, functions, and SQL queries as you conduct your analysis. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources. Learners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary. By the end of this course, you will:

- Learn how to organize data for analysis.
- Discover the processes for formatting and adjusting data.
- Gain an understanding of how to aggregate data in spreadsheets and by using SQL.
- Use formulas and functions in spreadsheets for data calculations.
- Learn how to complete calculations using SQL queries.

### gkTgOrreEur3A8H5HUSQL Database with PHP

In this 1.5 hour project, you will combine your knowledge of HTML, object-oriented PHP, SQL, and MySQL to make a dynamic website that uses MySQL database on the web server. You will learn two different methods, one applies to 12 other SQL databases and one specific to MySQL. Basic HTML, object-oriented PHP, relational database, and SQL required as prerequisites. Completing my courses "Build an Automobile Listing

Website with PHP" and "Learn Object-Oriented Programming with PHP" first is highly recommended.

## **gtR1lBuoEeyZ9BUBTBT6Q Create Multi-App Cluster with Ingress and Logging Kubernetes: Create Multi-App Cluster with Ingress and Logging**

## **hBmmv1drEeer8Q5teWqM Administration and IT Infrastructure Services**

This course will transition you from working on a single computer to an entire fleet. Systems administration is the field of IT that's responsible for maintaining reliable computers systems in a multi-user environment. In this course, you'll learn about the infrastructure services that keep all organizations, big and small, up and running. We'll deep dive on cloud so that you'll understand everything from typical cloud infrastructure setups to how to manage cloud resources. You'll also learn how to manage and configure servers and how to use industry tools to manage computers, user information, and user productivity. Finally, you'll learn how to recover your organization's IT infrastructure in the event of a disaster. By the end of this course you'll be able to: # utilize best practices for choosing hardware, vendors, and services for your organization # understand how the most common infrastructure services that keep an organization running work, and how to manage infrastructure servers # understand how to make the most of the cloud for your organization # manage an organization's computers and users using the directory services, Active Directory, and OpenLDAP # choose and manage the tools that your organization will use # backup your organization's data and know how to recover your IT infrastructure in the case of a disaster # utilize systems administration knowledge to plan and improve processes for IT environments

## **hVYPKKbQEeuV3MJC0B22OB Basic Testing and Debugging**

Welcome to IBM COBOL – Basic Testing and Debugging! By enrolling in this course, you are taking a big step in increasing your knowledge and hands on experience with IBM COBOL testing and debugging topics and technologies. In this course, you will describe common errors associated with working with COBOL. You will list file status codes. You will also describe the process of debugging COBOL code. So let's get started!

## **hY5laDm8Ee2rCp5Z6Gg an SAP Solution**

**bw**

Designing an SAP Solution is the fourth course in the SAP Technology Consultant Professional Certificate program. The course dives into the SAP Implementation lifecycle so you can immerse yourself in the key phases, including design, pitch, and re-design. You'll work with SAP Activate methodology and look at how to identify business requirements to determine system and data requirements. You'll learn how to interrogate the gaps between SAP technical capabilities within Business Technology Platform and the customer's existing environment. You'll explore the SAP iterative approach, understand how the predefined content available for the most common SAP

solutions can provide you a baseline to build your demos and showcase the solution capabilities. You'll learn how to incorporate customer feedback so any gaps will be addressed and how to reach consensus regarding what should be developed, when it should be developed and how it should be developed. By the end of this course, you will be able to: Explain what a technology consultant does in the Design, Pitch and Re-Design phases of the SAP Implementation lifecycle. Explain how to review a solution proposal and business requirements to determine SAP application technical requirements for customers. Describe how to interrogate gaps between SAP technical capabilities and the customer's existing environment. Explain how to design an SAP technical solution that fulfills the business requirements documented in the customer interview, analysis, and communication phases. Develop a Technical Design Outline in accordance with provided parameters.

### **5m1EwdLEuHXgngsAycAO** **Change Leadership: Strategic Route Analysis with Miro**

By the end of this guided project, you will be fluent in creating a change implementation model using Route Analysis for a hands-on example. This will equip you with a systemic implementation framework for change that can be utilised in professional and personal life. Change happens all the time, and in being able to identify factors involved in change and developing a model for how to implement change you increase your chances for success. This analysis will help you if you are in: + Strategy development + Program Management + Project Management + Business Process Re-Engineering + Product Development + Organisational Development Furthermore, this guided project is designed to engage and harness your visionary and exploratory abilities. You will use proven models in change management with Miro to develop your change leadership skills for various settings.

### **7shRkB1Eeu0vYkKkARQ** **Python Project for Data Engineering**

Showcase your skills in Data Engineering with this Python Project! This mini-course is intended to apply foundational Python skills by implementing different techniques to collect and work with data. You will assume the role of a Data Engineer and extract data from multiple file formats, transform it into specific datatypes, and then load it into a single source for analysis. Continue with the course and test your knowledge by implementing webscraping and extracting data with APIs all with the help of multiple hands-on labs. By the end of this project, you will have demonstrated your familiarity with important skills in Information Engineering and Extraction, Transformation and Loading (ETL), Jupyter Notebooks, and of course, Python Programming. Upon completion of this course, you will have acquired the confidence to begin collecting large datasets, webscraping, using APIs, and performing ETL tasks, to hone valuable data management skills - all with the use of Python. **PRE-REQUISITE: \*\*Python for Data Science, AI and Development\*\*** course from IBM is a pre-requisite for this project course. Please ensure that before taking this course you have either completed the Python for Data Science, AI and Development course from IBM or have equivalent proficiency in working with Python and data. **NOTE:** This course is not intended to teach you Python

and does not have too much instructional content. It is intended for you to apply prior Python knowledge.

### **Python Security and Monitoring**

How vulnerable are your applications to security risks and threats? This course will help you identify vulnerabilities and monitor the health of your applications and systems. You'll examine and implement secure code practices to prevent events like data breaches and leaks, and discover how practices like monitoring and observability can keep systems safe and secure. You will gain extensive knowledge on various practices, concepts, and processes for maintaining a secure environment, including DevSecOps practices that automate security integration across the software development lifecycle (SDLC), Static Application Security Testing (SAST) for identifying security flaws, Dynamic Analysis, and Dynamic Testing. You'll also learn about creating a Secure Development Environment, both on-premise and in the cloud. You'll explore the Open Web Application Security Project (OWASP) top application security risks, including broken access controls and SQL injections. Additionally, you will learn how monitoring, observability, and evaluation ensure secure applications and systems. You'll discover the essential components of a monitoring system and how application performance monitoring (APM) tools aid in measuring app performance and efficiency. You'll analyze the Golden Signals of monitoring, explore visualization and logging tools, and learn about the different metrics and alerting systems that help you understand your applications and systems. Through videos, hands-on labs, peer discussion, and the practice and graded assessments in this course, you will develop and demonstrate your skills and knowledge for creating and maintaining a secure development environment.

### **Tableau Through the Art of Visualization**

This is the sixth course in the Google Data Analytics Certificate. These courses will equip you with the skills needed to apply to introductory-level data analyst jobs. You'll learn how to visualize and present your data findings as you complete the data analysis process. This course will show you how data visualizations, such as visual dashboards, can help bring your data to life. You'll also explore Tableau, a data visualization platform that will help you create effective visualizations for your presentations. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources. Learners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary. By the end of this course, you will:

- Examine the importance of data visualization.
- Learn how to form a compelling narrative through data stories.
- Gain an understanding of how to use Tableau to create dashboards and dashboard filters.
- Discover how to use Tableau to create effective visualizations.
- Explore the principles and practices involved with effective presentations.
- Learn how to consider potential limitations associated with the data in your presentations.
- Understand how to apply best practices to a QandA with your audience.

## IBM Data Analyst Capstone Project

By completing this final capstone project you will apply various Data Analytics skills and techniques that you have learned as part of the previous courses in the IBM Data Analyst Professional Certificate. You will assume the role of an Associate Data Analyst who has recently joined the organization and be presented with a business challenge that requires data analysis to be performed on real-world datasets. You will perform the various tasks that professional data analysts do as part of their jobs, including: - Data collection from multiple sources - Data wrangling and data preparation - Exploratory data analysis - Statistical analysis and data mining - Data visualization with different charts and plots, and - Interactive dashboard creation. The project will culminate with a presentation of your data analysis report for various stakeholders in the organization. The report will include an executive summary, your analysis, and a conclusion. You will be assessed on both your work for the various stages in the Data Analysis process, as well as the final deliverable. As part of this project you will demonstrate your proficiency with using Jupyter Notebooks, SQL, Relational Databases (RDBMS), Business Intelligence (BI) tools like Cognos, and Python Libraries such as Pandas, Numpy, Scikit-learn, Scipy, Matplotlib, Seaborn and others. This project is a great addition to your portfolio and an opportunity to showcase your Data Analytics skills to prospective employers.

## Understanding JSON with JavaScript

If you are relatively new to the world of cloud computing, you might have come across a term JSON and not know what it is exactly. JSON stands for JavaScript Object Notation and is widely used to exchange information between clients and servers. Many No-SQL databases also uses the format to store data. In this 1-hour long project-based course, you will learn about the format and structure of JSON, accept and process JSON in your code, and transmit JSON to other processes. No prior experience with JSON is required but basic to intermediate HTML and JavaScript is required.

## Introduction to DevOps

DevOps skills are in demand! DevOps skills are expected to be one of the fastest-growing skills in the workforce. This course can be a first step in obtaining those skills. Introduction to DevOps explores DevOps as a cultural movement, including building a business case for DevOps, the essentials of DevOps, and a brief history of DevOps. You will learn new ways of thinking, working, organizing, and measuring to fully gain the benefits of DevOps. You will learn how breaking down silos and organizing developers and operators into single cross-functional teams is necessary for truly adopting DevOps. Having everyone contributing and everyone being responsible for success is at the heart of DevOps. By thinking from a DevOps perspective, you will be able to build better products for your customer. You will view DevOps from a business perspective as well as for becoming a DevOps practitioner. You will see how building a culture of shared responsibility and transparency is the foundation of every high-performing DevOps teams. You will have an opportunity to explore the concepts of infrastructure for Continuous Integration and Continuous Delivery. You will be able to use actionable measures that apply directly to decision-making and will ultimately result in continuous

improvement. This course is designed for those new to DevOps as well as those looking to increase their current knowledge of DevOps.

### izFjHXt9Eeu1JxDi00k00 Analysis with R

The R programming language is purpose-built for data analysis. R is the key that opens the door between the problems that you want to solve with data and the answers you need to meet your objectives. This course starts with a question and then walks you through the process of answering it through data. You will first learn important techniques for preparing (or wrangling) your data for analysis. You will then learn how to gain a better understanding of your data through exploratory data analysis, helping you to summarize your data and identify relevant relationships between variables that can lead to insights. Once your data is ready to analyze, you will learn how to develop your model and evaluate and tune its performance. By following this process, you can be sure that your data analysis performs to the standards that you have set, and you can have confidence in the results. You will build hands-on experience by playing the role of a data analyst who is analyzing airline departure and arrival data to predict flight delays. Using an Airline Reporting Carrier On-Time Performance Dataset, you will practice reading data files, preprocessing data, creating models, improving models, and evaluating them to ultimately choose the best model. Watch the videos, work through the labs, and add to your portfolio. Good luck! Note: The pre-requisite for this course is basic R programming skills. For example, ensure that you have completed a course like Introduction to R Programming for Data Science from IBM.

### j- Introduction to Enterprise Computing zL7CvgEemV\_A4t3mTtWg

Large Scale Enterprise Computing powers all major transactions, and the Mainframe is responsible for 87% of all credit card transactions and enables 71% of all Fortune 500 companies. Mainframes are fundamental on how we do business, and IBM Z is the only production mainframe sold today. Virtually everyone depends on it. This is your introduction to the hardware, operating systems, security, and features that make this possible. On successful completion of this course, learners are eligible to earn their Introduction to Enterprise Computing badge. More information can be found here: <https://www.youracclaim.com/org/ibm/badge/introduction-to-enterprise-computing>

### jGnxH4g1EeyQR0zptNB0S Custom workflow in Wrike

In this 2 hours project you will create custom workflows in Wrike to manage your projects, change status to tasks using custom workflows and creating dashboards to display task by workflow and status.

### jigZGJrqEey10AWd00 Introduction to Front-End Development

Welcome to Introduction to Front-End Development, the first course in the Meta Front-End Developer program. This course is a good place to start if you want to become a web developer. You will learn about the day-to-day responsibilities of a web developer

and get a general understanding of the core and underlying technologies that power the internet. You will learn how front-end developers create websites and applications that work well and are easy to maintain. You'll be introduced to the core web development technologies like HTML and CSS and get opportunities to practice using them. You will also be introduced to modern UI frameworks such as Bootstrap and React that make it easy to create interactive user experiences. By the end of the course, you will be able to:

- Describe the front-end developer role
- Explain the core and underlying technologies that power the internet
- Use HTML to create a simple webpage
- Use CSS to control the appearance of a simple webpage
- Explain what React is
- Describe the applications and characteristics of the most popular UI frameworks

For the final project in this course, you will create and edit a webpage using HTML and the Bootstrap CSS framework. Using a responsive layout grid, you will construct a responsive webpage containing text and images that looks great on any size screen. This is a beginner course intended for learners eager to learn the fundamentals of web development. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.

### **Linux Directories in the Linux filesystem**

In this project, you will use Linux commands to traverse Linux directories and list files. You will also learn where certain files are stored, how to change permissions to allow access, and how to decide where files should reside. Linux is a popular operating system that is based on the Unix operating system. It has many distributions which have different interfaces for installing software, different user interfaces, and so on. Each distribution has a similar filesystem with directories used to house and organize files.

### **Data Analysis with R Programming**

This course is the seventh course in the Google Data Analytics Certificate. These courses will equip you with the skills needed to apply to introductory-level data analyst jobs. In this course, you'll learn about the programming language known as R. You'll find out how to use RStudio, the environment that allows you to work with R. This course will also cover the software applications and tools that are unique to R, such as R packages. You'll discover how R lets you clean, organize, analyze, visualize, and report data in new and more powerful ways. Current Google data analysts will continue to instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources. Learners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary. By the end of this course, you will:

- Examine the benefits of using the R programming language.
- Discover how to use RStudio to apply R to your analysis.
- Explore the fundamental concepts associated with programming in R.
- Explore the contents and components of R packages including the Tidyverse package.
- Gain an understanding of dataframes and their use in R.
- Discover the options for generating visualizations in R.
- Learn about R Markdown for documenting R programming.

## k- Django Web Framework

### reWsdAEeyUBK3-TLTIw

It's time to build something bigger. In this course, you will use the Django web framework to build, secure and administer a web server. You will have the opportunity to create, design and configure a web app using the Django framework in-line with best practices. Explore the usage of models in Django and their relationship to databases. Use views to render requested data to meaningful template structures for a composed user interface (UI). Implement proactive security practices and mitigate common security risks. By the end of the course you will be able to:

- Design a Django web application using Python, HTML and CSS.
- Describe and implement the HTTP request response cycle by creting views, routes and templates.
- Describe and build a data model to create database tabless and dynamic web forms.
- Explore the Django Template Language to create dyanamic webpages that display data stored in a database.
- Create, share and test your web application by using industry standard best practice and guidelines.

To succeed in this course, you are required to have a fundamental knowledge of the following: HTML and CSS Python MySQL You also require basic internet navigation skills and an eagerness to get started with coding in Django!

## k2EFW1kfEeyoJmtrN9Tzww to Test Driven Development (TDD)

Successful developers need to not only build the right software but build it right. To know your software works correctly, you need to test each unit of code. One of the best methods for this unit-level testing is test driven development. This course provides a detailed overview of test driven development (TDD). First, you'll learn what automated testing is and why it is essential for building robust applications resilient to failure. You'll explore the basics of testing, including test cases, testing levels, and the traditional release cycle. You'll learn about TDD and its complement, behavior driven development (BDD): TDD tests individual units of code while BDD tests how these units work together. Then you'll examine TDD in detail. You'll explore TDD's benefits, concepts, and popular tools, and you'll hone your new testing skills through hands-on labs. You'll create TDD test cases by writing test assertions and building test fixtures, and you'll run these test cases by using the Nose testing package. You'll then practice more advanced TDD methods such as increasing code coverage, generating and using fake data, and testing mock objects.

## kNBGqhlIEeuZQ57Bascwa for Project Management

In this course, we will create our account and user profile and explore four of the key features of Basecamp Personal. Once you complete this project, you will be able to continue using Basecamp for personal and professional project management. "Basecamp is the premier project management + internal communication tool for remote WFH teams worldwide." Basecamp allows its users to seamlessly collaborate in real-time on a virtual platform. Professional teams that use Basecamp report increased productivity, better organization, and streamlined communication. It offers a wide variety of project management tools including: To-Do lists, automatic check-ins, scheduling, document

hosting, and so much more. The platform centralizes work-related notifications which allows its users to stay focused on the task at hand. From executive leadership to individuals, Basecamp gives its users the tools to stay in touch without extra emails, phone calls, and meetings. Basecamp takes your data privacy and protection seriously. If you have questions or concerns regarding how Basecamp handles your data, their full security policy can be accessed here: <https://basecamp.com/about/policies/security>

### **Meta Marketing Science Certification Exam**

This course helps you prepare for the Meta Marketing Science Certification exam. You'll be guided through scheduling and taking the exam through Meta Blueprint. You'll get access to the study guide and other resources to help you prepare to take the exam. This course is only accessible to learners who have successfully completed course 1 (Marketing Analytics Foundation), course 2 (Introduction to Data Analytics), course 3 (Statistics for Marketing), course 4 (Data Analytics for Marketing) and course 5 (Marketing Analytics with Facebook) in this program.

### **Liabilities and Equity in Accounting**

In this third course, you will learn about liability and equity accounts and its effect on the balance sheet. If you have mastered bookkeeping basics and understand accounting assets, you are ready to jump into Liabilities and Equity in Accounting. You will explore the various types of liability, including: current and long term, payroll, and sales tax. Additionally, you will learn about the equity portion of the accounting equation and how to account for changes in owner's equity. By the end of this course, you will be able to:

- Describe the three main characteristics of liabilities.
- Demonstrate an understanding of the basic payroll accounting functions and tasks.
- Compare and contrast the different types of equity
- Use the accounting equation to describe the financial position of an organization.

Courses 1 and 2 in the Intuit Bookkeeping Professional Certificate, or the equivalent, are recommended prerequisites for this course.

### **Data, Data, Everywhere**

This is the first course in the Google Data Analytics Certificate. These courses will equip you with the skills you need to apply to introductory-level data analyst jobs. Organizations of all kinds need data analysts to help them improve their processes, identify opportunities and trends, launch new products, and make thoughtful decisions. In this course, you'll be introduced to the world of data analytics through hands-on curriculum developed by Google. The material shared covers plenty of key data analytics topics, and it's designed to give you an overview of what's to come in the Google Data Analytics Certificate. Current Google data analysts will instruct and provide you with hands-on ways to accomplish common data analyst tasks with the best tools and resources. Learners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary. By the end of this course, you will:

- Gain an understanding of the practices and processes used by

a junior or associate data analyst in their day-to-day job. - Learn about key analytical skills (data cleaning, data analysis, data visualization) and tools (spreadsheets, SQL, R programming, Tableau) that you can add to your professional toolbox. - Discover a wide variety of terms and concepts relevant to the role of a junior data analyst, such as the data life cycle and the data analysis process. - Evaluate the role of analytics in the data ecosystem. - Conduct an analytical thinking self-assessment. - Explore job opportunities available to you upon program completion, and learn about best practices in the job search.

### **IHJ696FpEqRBApDkUat8mto CRM with HubSpot**

In this project, we will develop and utilize a CRM in HubSpot and learn how to utilize our CRM to better grow and manage our business. HubSpot is a cloud-based customer relationship management (CRM) platform that can improve all aspects of your business. The HubSpot CRM is a launching pad to all other customer-facing teams as it houses all customer data ranging from contact information to detailed communication logs. HubSpot allows you to incorporate your sales, marketing, and customer service processes into one, all-inclusive platform with their CRM as the foundation. With its user friendly features, HubSpot allows you to easily manage and grow your customers as well as improve your business relationship with existing customers. Best of all, HubSpot's CRM is completely free! With "Grow Better" as their mantra, HubSpot has mastered the CRM game. Also, as a platform, HubSpot is able to easily sync and work with other platforms which allows you to incorporate every aspect of your business to better streamline and manage your company. HubSpot is an invaluable tool that is sure to improve your company's growth, productivity, and brand! Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **IWaEE511EeumDakE5yC Data Engineering and Machine Learning using Spark**

Organizations need skilled, forward-thinking Big Data practitioners who can apply their business and technical skills to unstructured data such as tweets, posts, pictures, audio files, videos, sensor data, and satellite imagery and more to identify behaviors and preferences of prospects, clients, competitors, and others. In this short course you'll gain practical skills when you learn how to work with Apache Spark for Data Engineering and Machine Learning (ML) applications. You will work hands-on with Spark MLlib, Spark Structured Streaming, and more to perform extract, transform and load (ETL) tasks as well as Regression, Classification, and Clustering. The course culminates in a project where you will apply your Spark skills to an ETL for ML workflow use-case. NOTE: This course requires that you have foundational skills for working with Apache Spark and Jupyter Notebooks. The Introduction to Big Data with Spark and Hadoop course from IBM will equip you with these skills and it is recommended that you have completed that course or similar prior to starting this one.

## Configure and Test Basic Network Connectivity

Welcome to this guided project about Configuring and Testing Basic Network Connectivity. This project is designed for IT security professionals and aspiring network engineers. To succeed in this project, it's recommended to have a good background in computer networks. A Cisco networking academy ID is also required to use the Packet Tracer in this project. In this project, you will configure and test basic network connectivity by managing configuration on Cisco devices such as IP addresses, virtual interfaces, and DHCP servers and verifying end-to-end network connectivity. By the end of this project, you will be able to configure small-size computer networks and test their end-to-end connectivity. This project is one of a kind because it teaches foundational computer network skills to beginners and professionals alike. Moreover, it is based on an entirely simulated environment where learners can practice as if they have access to real devices.

## Getting Started with ProfitBooks

This project will give you the opportunity to familiarize yourself with the cloud-based platform, ProfitBooks. We will start this project by introducing you to the platform through creating an online account and taking a virtual tour of the software. This step will include updating your company profile in the settings. We will continue our introduction by building out a CRM through the customer profile feature. Once the customer profiles are created, you will be introduced to some beginner features on the platform. This project will focus on the Item feature for products and services and invoice feature for billing. Upon completion of this project, you will understand how to add customers to your CRM, inventory items and services, and invoice customers. You will have the confidence to continue towards intermediate use of ProfitBooks in a continuation series. ProfitBooks is an online accounting and payroll management software for small businesses. It allows users to organize offices finances and track all activities related to their business. This free online tool allows you to manage your money without accounting knowledge, grow sales with powerful invoicing tools, track inventory with ease, and run your business with total confidence. ProfitBooks hosts your information on the secure and widely-trusted Amazon Web Services (AWS) while implementing additional security features like secure-access, built-in firewalls, encrypted data storage and periodic back-ups. You can read more about their security policy here: <https://www.profitbooks.net/cloud-data-security/>.

## Google Data Analytics Capstone: Complete a Case Study

This course is the eighth course in the Google Data Analytics Certificate. You'll have the opportunity to complete an optional case study, which will help prepare you for the data analytics job hunt. Case studies are commonly used by employers to assess analytical skills. For your case study, you'll choose an analytics-based scenario. You'll then ask questions, prepare, process, analyze, visualize and act on the data from the scenario. You'll also learn other useful job hunt skills through videos with common interview questions and responses, helpful materials to build a portfolio online, and more. Current Google data analysts will continue to instruct and provide you with hands-on ways to

accomplish common data analyst tasks with the best tools and resources. Learners who complete this certificate program will be equipped to apply for introductory-level jobs as data analysts. No previous experience is necessary. By the end of this course, you will:

- Learn the benefits and uses of case studies and portfolios in the job search.
- Explore real world job interview scenarios and common interview questions.
- Discover how case studies can be a part of the job interview process.
- Examine and consider different case study scenarios.
- Have the chance to complete your own case study for your portfolio.

### **How to use roadmaps in Jira**

In this 1.5 hour guided project you will learn to use basic roadmaps in Jira, creating epics and issues, planning and visualizing timelines and assignments, editing progress and dependencies, adding labels and finally exporting and sharing the roadmap with project team mates and stakeholders.

### **Get Started With Tableau**

Tableau is a powerful software program frequently used by business analysts in a variety of departments including sales, marketing, finance, operation and more. Analysts within these departments use Tableau to create visualizations that explain datasets and tell data stories. In this project, learners will learn the basic steps to begin using Tableau. They will learn how to upload data and how the user interface works. Learners will move on to understand the difference between dimensions and measures as well as discrete and concrete variables. Learners will apply these new skills as they build bar graphs, line graphs, and tables. At the conclusion of this project, learners will feel confident in their ability to answer common business questions with Tableau visualizations. Along the way, there are questions and challenges to test learning and to display skills.

### **Introduction to Software, Programming, and Databases**

There are many types of software and understanding software can be overwhelming. This course aims to help you understand more about the types of software and how to manage software from an information technology (IT) perspective. This course will help you understand the basics of software, cloud computing, web browsers, development and concepts of software, programming languages, and database fundamentals. After completing this course, you will have a better understanding of software processes, and you'll be more confident in your understanding of using and securing your applications. In this course, you'll learn about software that ranges from the operating system running on your mobile phone to the applications that run databases on your computer at work. You'll also begin to understand more about installing and managing web browsers, using extensions and plug-ins, and keeping web browsers secure and updated. Additionally, you'll see how cloud-based technologies can help businesses create and deploy applications more quickly. This course will also teach you about the development and delivery of software and applications. By the end of the course, you'll understand

simple programming concepts and types, and you'll become more familiar with the fundamentals of database management.

### **mPQDzw0IEuHMQpGqFmQ Versions with Git (Part I)**

This 1.5 hours project-based course is the first part of "Manage Your Versions with Git". In this course, you will learn about the ubiquitous Git version management system. Git is an industry standard that is used in virtually every major development platform and environment to manage code changes and versions. This class will deepen your understanding of how git works and the relevant terminologies. No specific coding experience is required but basic software development experience would be highly beneficial.

### **mQ28TrJgEeqZBk57ngFP Productivity through the Tech Stack**

This is Course 4 in the Salesforce Sales Development Representative Professional Certificate. In order to successfully complete the course, please ensure you have taken Course 1: Groundwork for Success in Sales Development, Course 2: Foundations for Interviewing with Confidence, and 3: Conversational Selling Playbook for SDRs. This course demonstrates how to enhance productivity by implementing tech tools that streamline your SDR workflow. You'll be introduced to a variety of best-in-class sales software that will help you achieve the most optimal results — every time. By the end of the course, you'll feel confident in formulating bulletproof outreach strategies in order to engage with prospective customers. Course 4 in the Sales Development Representative (SDR) Professional Certificate will give you the necessary skills to launch a career in the non-technical side of the tech industry. By the end of the course, you will be able to:

- Examine and navigate the tech stack and stay up-to-date on the latest tech tools used in the tech sales workforce
- Understand the basic principles of customer relation management (CRM) tools and how to use them effectively as part of your workflow
- Use sales intelligence tools to find prospects and optimize your workflow
- Formulate bulletproof outreach strategies to engage with prospective customers
- Apply the power of social media and video to find and connect with prospects

To be successful in this course, you should have:

- An ability to communicate in verbal and written form in a way that is accessible and understandable by a general audience (you don't need to be formal or refined)
- Baseline computer literacy (you must be able to use a word processor, web search, and email)
- Familiarity with social media, including LinkedIn
- Ability and willingness to learn new technology tools
- Motivation to grow personally and professionally
- Hunger for feedback and coaching
- Successfully completed the previous courses in this training

### **mTZFe8cpEeyyABV Advanced MySQL Topics**

#### **TLTIw**

In this course, you'll begin to push beyond simple SQL statements in MySQL to an advanced level in database engineering. By the end of this course, you'll be able to:

- Use control statements and variables in different contexts in MySQL
- Develop user defined

functions and procedures - Optimize MySQL database queries - Demonstrate a working knowledge of common table expressions and the JSON data type - Understand how and when to use triggers and events - Utilize subqueries, JOINS, views and transactions to perform data analysis - and use database optimization techniques such as MySQL transactions You'll gain experience with the following advanced MySQL database skills: - MySQL user defined functions - Advanced MySQL stored procedures - MySQL optimization techniques including Indexes, Transactions, CTE and JSON - MySQL triggers and events - Database analytics in MySQL - Advanced SQL queries for data analysis with JOINS, views and subqueries Through this course you'll develop new skills, improve your productivity, learn to act effectively with data and boost your career prospects. To be successful in this course, you should have already completed the previous course, "Database Structures and Management with MySQL," or have prior experience with the skills taught in that course.

### **Project Management Capstone: Starting a Successful Project**

This is the second course in the Google Project Management Certificate program. This course will show you how to set a project up for success in the first phase of the project life cycle: the project initiation phase. In exploring the key components of this phase, you'll learn how to define and manage project goals, deliverables, scope, and success criteria. You'll discover how to use tools and templates like stakeholder analysis grids and project charters to help you set project expectations and communicate roles and responsibilities. Current Google project managers will continue to instruct and provide you with hands-on approaches for accomplishing these tasks while showing you the best project management tools and resources for the job at hand. Learners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary. By the end of this course, you will be able to: - Understand the significance of the project initiation phase of the project life cycle. - Describe the key components of the project initiation phase. - Determine a project's benefits and costs. - Define and create measurable project goals and deliverables. - Define project scope and differentiate among tasks that are in-scope and out-of-scope. - Understand how to manage scope creep to avoid impacting project goals. - Define and measure a project's success criteria. - Complete a stakeholder analysis and explain its significance. - Utilize RACI charts to define and communicate project team member responsibilities. - Understand the key components of project charters and develop a project charter for project initiation. - Evaluate various project management tools to meet project needs.

### **Cybersecurity Capstone: Breach Response Case Studies**

This course gives you the background needed to gain Cybersecurity skills as part of the Cybersecurity Security Analyst Professional Certificate program. You will explore incident response methodologies and security models. You will learn to recognize and categorize key types of vulnerabilities and associated attacks against today's organizations. You will explore in depth several past and recent breaches to learn how they were detected and what was done or could have been done to reduce the threat

risk to the organization. Finally, you will explore the costs of data breaches through research studies and well known breaches. This course requires you to select and research a cybersecurity breach in the news today and apply your knowledge and skills from this course and previous cybersecurity courses to analyze the type of attack, attack timeline, vulnerable systems, and any missed opportunities. This project will be graded by your peers in the course. This course is intended for anyone who wants to gain a basic understanding of Cybersecurity or as the seventh and final course in a series of courses to acquire the skills to work in the Cybersecurity field as a Cybersecurity Analyst. The completion of this course also makes you eligible to earn the Cybersecurity Capstone: Breach Response Case Studies IBM digital badge. More information about the badge can be found <https://www.youracclaim.com/org/ibm/badge/cybersecurity-breach-case-studies>. In this course, you will learn to: # Apply incident response methodologies. # Research and describe a watering hole attack. # Research and describe ransomware threats and the consequences to organization. # Research and describe 3rd party breaches and how they affect an organization. # Research and describe the effects of a phishing attack. # Research and describe a point of sale attack and approximate cost of data breaches. # Perform a case study on a current cyber attack and breach.

### **n1CCQ7uEqfR Profit Analysis using Economic Value Added**

In this 1-hour long project-based course, you will learn how to calculate the Weighted Average Cost of Capital, calculate capital invested, finance charge, and NOPAT, and use financial statements to calculate Economic Value Added. Economic Value Added is one of the most critical metrics in financial modeling and analysis and is used to measure the profitability of the projects and management performance. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions. It is recommended to take the Introduction to Valuation with WACC and Analyzing Company's Performance using Ratios projects first.

### **n1We3TAuEeyR Marketing Analytics with Meta**

This course explores Meta Marketing Analytics Tools. You'll learn how the advertising platform works and you'll learn to create ads using Meta Ads Manager. Then, you'll learn how Meta reports results and how you can customize the reports to match your business goals. You'll also learn how you can use Meta experiments to evaluate the effectiveness of your advertising campaign. You'll learn to optimize ads with A/B testing and you will explore how you can integrate data from Meta campaigns in marketing mix modeling. In this course, you'll also find a summary of Meta's recommended approach to data analysis. By the end of this course you will be able to: • Describe how an ad is created and delivered in Meta Ads Manager • Evaluate campaign results • Conduct an A/B Test • Evaluate advertising effectiveness with Conversion Lift Tests • Evaluate advertising effectiveness with Brand Lift tests • Choose the best approach to evaluating advertising effectiveness given a scenario • Explain how and when to apply Marketing Mix Modeling • Choose the best approach to optimizing your marketing mix given a scenario • Implement a full analysis process from the formulation of a hypothesis to

recommending measurement solutions, performing an analysis, generating insights and presenting results and recommendations. This course is for people who want to learn how to use Meta Ads Manager to conduct advertising effectiveness tests and evaluate their campaign results. Learners don't need marketing or data analysis experience, but should have basic internet navigation skills and be eager to participate. Ideally, learners have already completed course 1 (Marketing Analytics Foundation), course 2 (Introduction to Data Analytics), course 3 (Statistics for Marketing), and course 4 (Data Analytics Methods for Marketing) in this program.

### **3x7kiEeupsR44t0U0 Installation in Linux**

In this one-hour, project-based course, you'll learn several ways to install and update applications in Linux. These include the Software Center, apt, AppImage and something called a "tarball." This guided project will introduce you to the following concepts: - Linux Software Center -apt command-line utility -Batch files -AppImage -Tarball

### **518dwp9EeuIR5 Project Planning: Putting It All Together**

#### **nJvwRw**

This is the third course in the Google Project Management Certificate program. This course will explore how to map out a project in the second phase of the project life cycle: the project planning phase. You will examine the key components of a project plan, how to make accurate time estimates, and how to set milestones. Next, you will learn how to build and manage a budget and how the procurement processes work. Then, you will discover tools that can help you identify and manage different types of risk and how to use a risk management plan to communicate and resolve risks. Finally, you will explore how to draft and manage a communication plan and how to organize project documentation. Current Google project managers will continue to instruct and provide you with hands-on approaches for accomplishing these tasks while showing you the best project management tools and resources for the job at hand. Learners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary. By the end of this course, you will be able to:

- Describe the components of the project planning phase and their significance.
- Explain why milestones are important and how to set them.
- Make accurate time estimates and describe techniques for acquiring them from team members.
- Identify tools and best practices to build a project plan and risk management plan.
- Describe how to estimate, track, and maintain a budget.
- Explain the procurement process and identify key procurement documentation.
- Draft a communication plan and explain how to manage it.
- Explain why milestones are important and how to set them.
- Explain why a project plan is necessary and what components it contains.
- Make accurate time estimates and describe techniques for acquiring them from team members.

## Developing Front-End Apps with React

React is one of the most popular frameworks in the Web and Front-end application Development category. In this course, you will - build rich Front-End applications with React and ES6 - connect React components using data and state - write rich React components with advanced features like Hooks and Redux In addition, you will explore how to access the React web framework user interface (UI) library and run rich React applications. You will find ways to use React components and change their properties and states in a dynamic user interface. You will learn to connect to an external server from a React page. The course introduces different testing tools that you can use to test the component without manual verification. Throughout the course, you will complete numerous hands-on labs to gain practical experience. At the end of the course, you will demonstrate your React skills with a final project to add to your portfolio. This course will help you succeed as a front-end or full-stack developer. It suits those in IT looking to step up in their careers or new graduates seeking to establish their client-side skills. Note: This course requires knowledge of HTML, CSS, JavaScript and Git/GitHub

## Full Stack Software Developer Assessment

This is the final course in the Full Stack Professional Certificate. It will test your knowledge and the skills you've acquired so far. This course contains the graded final examination covering content from nine of the eleven courses in the certificate. You will be assessed on topics such as core cloud computing concepts; languages such as HTML, CSS, JavaScript, and Python; frameworks such as Node.js and React; and backend technologies such as Docker, Kubernetes, OpenShift, SQL, Django, and Serverless.

## Data Science

In order to be successful in Data Science, you need to be skilled with using tools that Data Science professionals employ as part of their jobs. This course teaches you about the popular tools in Data Science and how to use them. You will become familiar with the Data Scientist's tool kit which includes: Libraries and Packages, Data Sets, Machine Learning Models, Kernels, as well as the various Open source, commercial, Big Data and Cloud-based tools. Work with Jupyter Notebooks, JupyterLab, RStudio IDE, Git, GitHub, and Watson Studio. You will understand what each tool is used for, what programming languages they can execute, their features and limitations. This course gives plenty of hands-on experience in order to develop skills for working with these Data Science Tools. With the tools hosted in the cloud on Skills Network Labs, you will be able to test each tool and follow instructions to run simple code in Python, R, or Scala. Towards the end the course, you will create a final project with a Jupyter Notebook. You will demonstrate your proficiency preparing a notebook, writing Markdown, and sharing your work with your peers.

## oyLdmw0CEe2\*5p6Rj54 Clients

To reach your goal of becoming a Career Coach or Navigator, you have learned about relationship management and human-centered career coaching in course 1 and gained skills to recruit and work with clients in course 2. This third course in the Career Coach and Navigator Professional Certificate will help you advise people as they move along their career paths; assist with job searches, interviewing, and resume creation; and set them up for success as they start their careers. By the end of the course, you will be able to: 1. Assist people who desire to pursue a career, make a career change, or work towards career advancement. 2. Guide people in finding relevant employment opportunities that meet their needs and the labor market. 3. Assist, review, and provide feedback on developing resumes, CVs, and cover letters. 4. Help people develop interviewing skills. To be successful in this course, no prior experience with career coaching or navigation is required; but we recommend completing the first two courses in the program so you can build on the knowledge and skills from those courses here.

## pC5wk1U0Eey5Bp681nd6Q Regression for the Absolute Beginner

Hello everyone and welcome to this hands-on guided project on simple linear regression for the absolute beginner. In simple linear regression, we predict the value of one variable Y based on another variable X. X is called the independent variable and Y is called the dependent variable. This guided project is practical and directly applicable to many industries. You can add this project to your portfolio of projects which is essential for your next job interview.

## p\_so- Introduction to Android Mobile Application Development L9AEeylnQ4kvXUz6Q

This course is an ideal stepping stone if you want to become a mobile developer. We'll introduce you to this career path and give you a high-level overview of programming and the tools needed to develop Android applications. Explore the Android Studio and the fundamental concepts of Android app development. Learn about operating systems and different platforms for creating mobile apps. You'll conclude your introduction to Android application development by building out each aspect of a guided project.

## paPh1LDIEeggQ4um8f1PQ for Interviewing with Confidence

This is Course 2 in the Salesforce Sales Development Representative Professional Certificate. In order to successfully complete the course, please ensure you have taken Course 1: Groundwork for Success in Sales Development. The goal of this course is to prepare you to build your professional tech sales portfolio, and develop and leverage your personal and professional brand. You will be primed to ace your interview and leave a lasting impression on your future employer. These skills will get you in the door of a fast-growing tech company and launch your tech sales career. Course 2 in the Sales Development Representative (SDR) Professional Certificate will give you the necessary skills to launch a career in the non-technical side of the tech industry. By the end of the course, you will be able to: - Develop an understanding of the tech industry landscape in

order to cultivate a long term career plan - Construct an intimate understanding of your audience and express a personal story that is unforgettable - Formulate a results-driven professional portfolio that showcases your track record and sets you apart from other candidates - Create a lasting impression through the interview process To be successful in this course, you should have: - An ability to communicate in verbal and written form in a way that is accessible and understandable by a general audience (you don't need to be formal or refined) - Baseline computer literacy (you must be able to use a word processor, web search, and email) - Familiarity with social media, including LinkedIn - Ability and willingness to learn new technology tools - Motivation to grow personally and professionally - Hunger for feedback and coaching - Successfully completed Course 1 in this training

### **Introduction to Databases for Back-End Development**

Back-end developers write applications that end-users use to interact with databases. Some common tasks that end-users carry out using these applications include storing, searching, extracting and manipulating data. Therefore, it's essential that all back-end developers possess strong knowledge and experience with how databases work. In this course, you'll receive an introduction to databases and explore the different ways in which they can be used to store and manage data. You'll also learn to distinguish between different types of database management systems. You'll then practice basic creation and data selection tasks with the use of Structured Query Language (SQL) commands. By the end of this course, you'll be able to: - Demonstrate a working knowledge of the concepts and principles that underpin how databases work - Identify and explain the different types of core technology and management systems used in databases - Identify and interpret basic SQL statements and commands - Manipulate records in a database with the use of SQL statements and commands - Outline alternatives to SQL - and plan and design a simple relational database system You'll also gain experience with the following: - Fundamental concepts in database - Basic MySQL syntax and commands - Database management systems - Relational databases

### **Security Analyst Assessment**

A growing number of exciting, well-paying jobs in today's security industry do not require a college degree. This is the final course required to assess your acquired knowledge and skills from from the previous two specializations, IT Fundamentals of Cybersecurity and Security Analyst Fundamentals, to become job-ready for a cybersecurity analyst role. You will be expected to pass a final assessment quiz for each of the seven (7) prior courses within the IBM Cybersecurity Analyst Professional Certificate. Upon successful completion of the quizzes, you will acquire the IBM Cybersecurity Analyst Professional Certificate.

### **Portfolio Website with HTML and CSS**

This 1-hour long tutorial will take you step by step to create a portfolio website. You will learn the basic components of a website, and how to create simple contents using HTML (hypertext markup language) and CSS (cascading style sheets), and how to host it on a

popular developer website called “GitHub” with your own subdomain name! By the end of the tutorial, you will be hosting a website that you can use to showcase your work and your résumé to the world!

### **qDwrZXLnEeyKp79FSMBTQ Delivery and Managing Builds with Azure DevOps**

This Guided Project is for IT professionals who want to raise the quality of their software products to a higher level by totally automating their software applications' build, test and packaging processes. In this 1-hour long project-based course, you will learn how to use Azure DevOps Services to safely store your applications' code in a source control and how to set up build pipelines and branch policies to automate packaging of your products and preparing them for deployment. Since this project uses Azure DevOps Services, you will need access to an Azure DevOps account. In the video at the beginning of the project you will be given instructions on how to sign up for one. If you are ready to start automating your applications' lifecycle management process, then this project is for you! Let's get started!

### **qNrWFjDIEeua-Introduction to Relational Databases (RDBMS)**

**goM8-0Q8w**

Are you ready to dive into the world of data engineering? You'll need a solid understanding of how data is stored, processed, and accessed. You'll need to identify the different types of database that are appropriate for the kind of data you are working with and what processing the data requires. In this course, you will learn the essential concepts behind relational databases and Relational Database Management Systems (RDBMS). You'll study relational data models and discover how they are created and what benefits they bring, and how you can apply them to your own data. You'll be introduced to several industry standard relational databases, including IBM DB2, MySQL, and PostgreSQL. This course incorporates hands-on, practical exercises to help you demonstrate your learning. You will work with real databases and explore real-world datasets. You will create database instances and populate them with tables. No prior knowledge of databases or programming is required. Anyone can audit this course at no-charge. If you choose to take this course and earn the Coursera course certificate, you can also earn an IBM digital badge upon successful completion of the course.

### **qfuueccqEeydPnKlXw Programming Fundamentals in Kotlin**

Practice and expand on the fundamentals of programming that are core to any language as well as the unique aspects of Kotlin syntax. You will work with data types, functions, conditionals, operators, collections-arrays, variables and loops. Furthermore, you will declare and initialize different types of variables and explain their scope as well as create arrays and collections in Kotlin. You'll create control flow patterns using conditionals and loops. There will be opportunities to practice using structs and classes while considering best cases for both. Discover deeper ways to use objects in Kotlin through exploring interfaces and classes. After completing this course, you will be able to:

- Describe basic types and variables
- Explain numbers in Kotlin
- Explain what conditions

are • Describe how to use loops • Explain the concept of a function# • Differentiate between a parameter and an argument • Explain that a function can return a value and describe how it works • Explain the difference between a class, an object and a type • Differentiate between various visibility modifiers • Describe the use of collections in programming • Identify which collection type to use in any given situation • Explain the difference between List, Set and Map • Synthesize the skills you gained from the course to create code for the Bank Account project. This is a beginner course for learners who would like to prepare themselves for a career as an Android developer using Kotlin. To succeed in this course, you do not need prior web development experience, only basic internet navigation skills and an eagerness to get started with coding.

### qpVajkliEeyq9Q6Bfmg Started with Git and GitHub

Collaboration and social coding are crucial parts of contemporary Software Engineering practices and the DevOps culture. In this course, you'll be introduced to collaborative version control and popular Git platforms. You will explore key Git concepts such as branching and repositories, as well as the use of Git commands. You will also learn and practice various Git concepts such as forking, cloning and merging workflows. You will learn to use GitHub to work effectively as a team, and perform common Git operations, such as Pull Requests, from both the Web UI and command line. Developed and taught by experienced IBM practitioners, in this course you'll gain vital skills and hands-on experience using Git and GitHub. Each module contains hands-on labs for you to apply and practice what you learn. The course wraps up with a final project where you will start building your portfolio by creating and sharing a public/open-source GitHub project. All hands-on activities in this course can be performed using web-browser based tools and interfaces. Installation of any specialized software is NOT required on your own computer in order to complete the course.

### quF5rVdrEesGU6a1NzPA Defense against the digital dark arts

This course covers a wide variety of IT security concepts, tools, and best practices. It introduces threats and attacks and the many ways they can show up. We'll give you some background of encryption algorithms and how they're used to safeguard data. Then, we'll dive into the three As of information security: authentication, authorization, and accounting. We'll also cover network security solutions, ranging from firewalls to Wifi encryption options. The course is rounded out by putting all these elements together into a multi-layered, in-depth security architecture, followed by recommendations on how to integrate a culture of security into your organization or team. At the end of this course, you'll understand: # how various encryption algorithms and techniques work as well as their benefits and limitations. # various authentication systems and types. # the difference between authentication and authorization. # how to evaluate potential risks and recommend ways to reduce risk. # best practices for securing a network. # how to help others to grasp security concepts and protect themselves.

## **What is Data Science?**

### **Q6jQMxIrg**

Do you want to know why Data Science has been labelled as the sexiest profession of the 21st century? After taking this course you will be able to answer this question, and get a thorough understanding of what is Data Science, what data scientists do, and learn about career paths in the field. The art of uncovering the insights and trends in data has been around since ancient times. The ancient Egyptians used census data to increase efficiency in tax collection and they accurately predicted the flooding of the Nile river every year. Since then, people using data to derive insights and predict outcomes have carved out a unique and distinct field for the work they do. This field is data science. In today's world, we use Data Science to find patterns in data, and make meaningful, data driven conclusions and predictions. This course is for everyone, and teaches concepts like Machine Learning, Deep Learning, and Neural Networks and how companies apply data science in business. You will meet several data scientists, who will share their insights and experiences in Data Science. By taking this introductory course, you will begin your journey into the thriving field that is Data Science!

## **Cybersecurity Compliance Framework and System Administration**

This course gives you the background needed to understand the key cybersecurity compliance and industry standards. This knowledge will be important for you to learn no matter what cybersecurity role you would like to acquire or have within an organization. You will learn the basic commands for user and server administration as it relates to security. You will need this skill to be able to understand vulnerabilities within your organizations operating systems. You will learn the concepts of endpoint security and patch management. Both of these topics are important to keep systems current to avoid cybersecurity incidents against an organization. Finally you will learn in depth skills around cryptography and encryption to understand how these concepts affect software within a company. This course is intended for anyone who wants to gain a basic understanding of Security Frameworks, Compliance, endpoint management, encryption or cryptography or as the third course in a series of courses to gain the skill as a Jr Cybersecurity analyst.

## **Working with CSS**

In this intermediate-level course you will explore how CSS (Cascading Stylesheets) can be used to alter the appearance of an image on your web page. HTML is used to add image content to a website and CSS is used to make that content visually appealing to website visitors. You will use the Notepad++ editor to write CSS rules with a variety of selectors and properties that are applied to images to change their appearance. The Chrome browser is used to display the page to test the results of your work. CSS is a very powerful tool and using it to gain more control over the visual aspects of images is a valuable skill for a web developer. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **SP06201 Wine Basics in Linux**

In this one-hour, project-based course, you'll learn your first commands for the Linux command-line. You'll learn how to bring up the manual for any Linux command, how to issue a command as a super-user to access restricted files and operations and how to navigate directories and display Linux command history. This guided project will introduce you to the following concepts: -Navigating directories -Listing, copying and moving files -Outputting to and amending text files

### **SP06202 Data Visualization with R**

In this course, you will learn the Grammar of Graphics, a system for describing and building graphs, and how the ggplot2 data visualization package for R applies this concept to basic bar charts, histograms, pie charts, scatter plots, line plots, and box plots. You will also learn how to further customize your charts and plots using themes and other techniques. You will then learn how to use another data visualization package for R called Leaflet to create map plots, a unique way to plot data based on geolocation data. Finally, you will be introduced to creating interactive dashboards using the R Shiny package. You will learn how to create and customize Shiny apps, alter the appearance of the apps by adding HTML and image components, and deploy your interactive data apps on the web. You will practice what you learn and build hands-on experience by completing labs in each module and a final project at the end of the course. Watch the videos, work through the labs, and watch your data science skill grow. Good luck! NOTE: This course requires knowledge of working with R and data. If you do not have these skills, it is highly recommended that you first take the Introduction to R Programming for Data Science as well as the Data Analysis with R courses from IBM prior to starting this course. Note: The pre-requisite for this course is basic R programming skills.

### **SP06203 Introduction to Technical Support**

Gain the daily work skills and knowledge you'll need for IT Technical Support career success. This course, part of the IBM Technical Support Professional Certificate, is designed for beginners with no prior IT experience or formal degree. Get an insider's view into IT Support work. Learn about IT Support roles and levels, the support escalation matrix, ticketing systems, common support tools, and remote support software. Then, hear about career opportunities and career pathways from experienced, expert Information Technology professionals. By the end of this course, you will be able to:

- Describe and develop a customer service and support mindset.
- Define the levels of IT support and the escalation matrix.
- Explore the features and benefits of ticketing systems.
- Identify support tools and systems used in technical support.
- Explore various tech support roles and responsibilities, including service level agreement responsibilities.
- Recognize the career paths and progression in Technical Support.

These skills will equip you to speak with prospective employers and ask insightful questions that demonstrate your knowledge of the day-to-day administrative role-related responsibilities.

## rc\_zpSXzEeyYQpZdq Input File with COBOL

In this 2 hour long project you will create a SCRUM project in Jira, exploring the SCRUM agile methodology and familiarizing with all of its elements. You will create user stories and tasks, plan and action sprints, manage the backlog and sprints with the board, create epics, add dependencies and finally creating burn-down charts to evaluate the progression of your sprints.

## ru\_BPAP9EeuMPjmfCBZQ Project Closure: Running the Project

In this project you will use COBOL code to read the data records from a sequential file. You will code, compile, and run programs using the PC-based COBOL IDE called OpenCobolIDE. Since COBOL is often used with large amounts of data, the ability to process files—to read the records in them as input and write the records as output—is a critical skill for any COBOL programmer.

This is the fourth course in the Google Project Management Certificate program. This course will delve into the execution and closing phases of the project life cycle. You will learn what aspects of a project to track and how to track them. You will also learn how to effectively manage and communicate changes, dependencies, and risks. As you explore quality management, you will learn how to measure customer satisfaction and implement continuous improvement and process improvement techniques. Next, you will examine how to prioritize data, how to use data to inform your decision-making, and how to effectively present that data. Then, you will strengthen your leadership skills as you study the stages of team development and how to manage team dynamics. After that, you will discover tools that provide effective project team communication, how to organize and facilitate meetings, and how to effectively communicate project status updates. Finally, you will examine the steps of the project closing process and how to create and share project closing documentation. Current Google project managers will continue to instruct and provide you with hands-on approaches for accomplishing these tasks while showing you the best project management tools and resources for the job at hand. Learners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary. By the end of this course, you will be able to:

- Identify what aspects of a project to track and compare different tracking methods.
- Discuss how to effectively manage and communicate changes, dependencies, and risks.
- Explain the key quality management concepts of quality standards, quality planning, quality assurance, and quality control.
- Describe how to create continuous improvement and process improvement and how to measure customer satisfaction.
- Explain the purpose of a retrospective and describe how to conduct one.
- Demonstrate how to prioritize and analyze data and how to communicate a project's data-informed story.
- Identify tools that provide effective project team communication and explore best practices for communicating project status updates.
- Describe the steps of the closing process for stakeholders, the project team, and project managers.

### **sNGXTMd4EqWtW3mBJSS: Building a Single-Page Website**

In this 1-hour long project-based course, you will learn how to create a single page website for an imaginary travel agent using HTML and CSS. HTML and CSS are the core for building any website or web application and are indispensable knowledge for any web developer. HTML enables the creation of the web pages layout and structures while CSS enriches the HTML pages by adding the style and feel to them. Eventually, you will be able to use the knowledge acquired on far complex projects that employ these technologies in one way or another. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **sVRhpVp2EeufE68r0M0q: Customizable Sales Presentation Graphics using Canva**

By the end of this project, you will have the ability to develop and design a target market analysis graphic, a sales CRM workflow graphic, and a data chart graphic using Canva. A web-based graphic design tool, Canva offers free accounts with broad access to facilitate visual content development. The learner will develop graphics appropriate for use in sales presentations and any other presentations the user deems appropriate. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **siM1UTm8Ee2r0g5Z0P: Implementing an SAP Solution**

Implementing an SAP Solution is the fifth course in the SAP Technology Consultant Professional Certificate program. You'll learn how to collaborate with stakeholders and other SAP professionals for key phases in the SAP Implementation lifecycle. You'll explore how to build and prepare system and test environments for implementation and look at different types of testing. You'll learn how to cleanse and anonymize test data, and use automation tools. You'll look at SAP Best Practice Explorer and build your understanding of baseline configurations and integrations. You'll learn how to document issues, bugs, and recommended fixes after testing. Plus, you'll look at the process for going-live and getting sign off for a project. By the end of this course, you will be able to: Explain what a technology consultant does in the implement, monitor and QA/testing phases of the SAP lifecycle. Implement and deploy a technical solution approved in the design, pitch, and re-design phases. Explain how to test an implemented technical solution including creating test plans, writing test scripts, and issuing fix or bug resolutions. Explain how to conduct a post-implementation review including developing the Post-Implementation Review Report and the Post-Production Roadmap.

### **siGWLCoEe2r0g5Z0P: SAP Professional Fundamentals**

SAP Professional Fundamentals is the first course in the SAP Technology Consultant Professional Certificate program. The course introduces you to the world of consulting and the range of skills that you need to succeed in this competitive field. You'll explore SAP professional consulting roles and discover what technical consultants, functional

consultants, and other professionals do. You'll investigate the wide range of skills consultants need to have, for example strategic thinking, business process analysis, systems and design thinking, and understanding data, as well as effective soft skills, communication and relationship management. You'll explore various planning and project management methodologies such as Waterfall, Agile, DevOps, and Cloud. Plus, you'll start to get a feel for the whole SAP journey, from engaging with the customer to deploying a solution. By the end of this course, you will be able to: Explain what is meant by the SAP ecosystem and the value it brings to customers. Describe what different SAP professionals do and how they engage with customers. Understand the core and soft consulting skills that are both in highest demand, and frequently not taught in classroom environments. Describe a typical SAP engagement and how key professional skills are used at each stage of the SAP Implementation Lifecycle. Describe key roles with whom an SAP professional typically collaborates.

### **soXOJIE2EeyMQreatd5slu Create a business value proposition canvas in Miro**

In this 2 hours long project you will create a business value proposition canvas in Miro, categorizing business products, services and features by company pillars, mapping customer gains, pains and tasks with product, adding a competitor comparison and finally exporting slides, PDF and images. You will use frames, sticky notes, shapes and colors, and explore business concepts to create a value proposition team work.

### **su7OfLdVEeuTj6 Financial Statement Analysis** **\_zYGCCQ**

In the final course of this certificate, you will apply your skills towards financial statement analysis. If you have the foundational concepts of accounting under your belt, you are ready to put them into action in this course. Here, you will learn how to reconcile different types of accounts, check for accuracy, and troubleshoot errors. Additionally, you will practice how to apply different analytical methods to key financial statements and understand how these methods inform a variety of business decisions. By the end of this course, you will be able to: -Describe and illustrate the use of a bank reconciliation in controlling cash -Outline the purpose of financial statements in relationship to decision making -Describe basic financial statement analytical methods -Apply quantitative skills to analyze business health Courses 1-3 in the Intuit Bookkeeping Professional Certificate, or the equivalent, are recommended prerequisites for this course.

### **tMwAnfCwEeqrlRtdhEol Introduction to JavaScript** **iQ**

In this beginning-level course you will discover where JavaScript fits into the world of web development. Through hands-on exercises, you will use the Notepad++ text editor to embed JavaScript code to an existing HTML document. As you code a simple JavaScript program to provide user interaction you will learn to recognize and apply syntax rules and coding standards associated with JavaScript. The final activity in the course has you moving your JavaScript code into an external file so that you can compare inline and

external JavaScript. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

### **Agile Project Management**

This is the fifth course in the Google Project Management Certificate program. This course will explore the history, approach, and philosophy of Agile project management, including the Scrum framework. You will learn how to differentiate and blend Agile and other project management approaches. As you progress through the course, you will learn more about Scrum, exploring its pillars and values and comparing essential Scrum team roles. You will discover how to build, manage, and refine a product backlog, implement Agile's value-driven delivery strategies, and define a value roadmap. You will also learn strategies to effectively organize the five important Scrum events for a Scrum team, introduce an Agile or Scrum approach to an organization, and coach an Agile team. Finally, you will learn how to search for and land opportunities in Agile roles. Current Google project managers will continue to instruct and provide you with the hands-on approaches, tools, and resources to meet your goals. Learners who complete this program should be equipped to apply for introductory-level jobs as project managers. No previous experience is necessary. By the end of this course, you will be able to:

- Explain the Agile project management approach and philosophy, including values and principles.
- Explain the pillars of Scrum and how they support Scrum values.
- Identify and compare the essential roles in a Scrum team and what makes them effective.
- Build and manage a Product Backlog and perform Backlog Refinement.
- Describe the five important Scrum events and how to set up each event for a Scrum team.
- Implement Agile's value-driven delivery strategies and define a value roadmap.
- Explain how to coach an Agile team and help them overcome challenges.
- Conduct a job search for an Agile role and learn how to succeed in your interview.

### **Styling Tables with CSS**

In this intermediate-level course you will explore how CSS (Cascading Stylesheets) can be used to alter the appearance of a table on your web page. HTML is used to add a table to a website to organize content. CSS is used to make that table easier to read and more visually appealing to website visitors. You will use the Notepad++ editor to write CSS rules with a variety of selectors and properties that are applied to table components to change their appearance. The Chrome browser is used to display the page to test the results of your work. CSS is a very powerful tool and using it to enhance the look of a table is a valuable skill for a web developer. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## uZZCok-0Eei5Ap06tt-D Applied Data Science Capstone

**g**

This is the final course in the IBM Data Science Professional Certificate as well as the Applied Data Science with Python Specialization. This capstone project course will give you the chance to practice the work that data scientists do in real life when working with datasets. In this course you will assume the role of a Data Scientist working for a startup intending to compete with SpaceX, and in the process follow the Data Science methodology involving data collection, data wrangling, exploratory data analysis, data visualization, model development, model evaluation, and reporting your results to stakeholders. You will be tasked with predicting if the first stage of the SpaceX Falcon 9 rocket will land successfully. With the help of your Data Science findings and models, the competing startup you have been hired by can make more informed bids against SpaceX for a rocket launch. In this course, there will not be much new learning, instead you'll focus on hands-on work to demonstrate and apply what you have learnt in previous courses. By successfully completing this Capstone you will have added a project to your data science and machine learning portfolio to showcase to employers.

## vE6auWj7EeuQBz16zCBr Data Visualization: Matplotlib and Seaborn

**w**

In this hands-on project, we will understand the fundamentals of data visualization with Python and leverage the power of two important python libraries known as Matplotlib and seaborn. We will learn how to generate line plots, scatterplots, histograms, distribution plot, 3D plots, pie charts, pair plots, countplots and many more! Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## wOGMoscqEeyGrc6k12Wsr User Interface in Android Studio

This is a beginner course for learners who would like to prepare themselves for a career in Android development. To succeed in this course, you should understand the basics of Kotlin and cross-platform development for mobile applications. The course introduces you to creating a User Interface (UI) in Android Studio on a foundational level. You will learn about the fundamentals that will enable you to build meaningful and functional user interfaces for Android using Android Studio and Kotlin. By the end of this course, you will be able to:

- Identify different approaches for building UI with Kotlin and build a basic UI.
- You will learn about Jetpack compose, describe how composables are decorated with modifiers, how to handle state management and how to better lay out composables based on Material Design guidelines.
- You will also learn how to apply themes, custom styles and animations to develop an attractive UI.

## wRsWbVOLEeyA-Q6Fz1eQ5EG and processes with Jira

In this 2 and a half hours long guided project you will learn the basics of Jira automation. You will create automation rules using triggers, conditions and actions to auto assign tasks, apply sub tasks templates to reflect your business processed into your project

management. You will add branches applying conditions based on relationships between issues so to automatically update their status depending on completion of their sub-tasks. Finally you will use smart values to interact with Jira information and optimize communication by sending automatic emails depending on events of your project management.

### **wwKidiPbEe2P5yYlozjNC Back-End Apps with Node.js and Express**

In a recent Stack Overflow survey, Node.js was used by about 50% of the developers who answered the survey, making it the most used server-side technology. Express ranked as the fourth most popular web technology overall, making it the most popular server-side web framework. In this course, you will focus on Node.js and Express. Specifically, you will - develop applications using asynchronous callbacks and promises - create REST APIs and perform CRUD operations - implement authentication and session management Throughout the course, you will complete numerous hands-on labs to gain practical experience. At the end of the course, you will demonstrate your Node skills with a final project to build your portfolio. This course will help you succeed as a back-end or full-stack developer. It suits those in IT looking to step up in their careers or new graduates seeking to establish their server-side skills. This course suits those who need to manage cloud-centric projects. Note: This course requires knowledge of JavaScript and Git.

### **wiJuJIIReEuolwz1tE55Q CRM Overview**

This course is the first of a series that aims to teach you the foundational skills in Salesforce that will prepare you for a variety of entry-level sales roles, including the sales operations specialist position. This course is designed for beginners. No previous experience in Salesforce, sales, or CRM is necessary to be successful. In this course, you will be introduced to essential concepts like the fundamentals of the sales process. You'll also learn about what Customer Relationship Management (CRM) systems are and what they are used for, you'll dive into Salesforce's main products and their use cases, and you will gain a working knowledge of the key functionalities of the Salesforce Sales Cloud that help support a business's growth. This course is the first step in your learning journey with Salesforce. It will provide you with the foundation you need to go into depth with more advanced Salesforce tools taught later in the certificate, and ultimately launch your new career. Please note that if you already have background knowledge in sales and CRM, or if you want to dive immediately into content that goes into more depth with Salesforce, it is recommended that you start with Course 2 in this certificate: Lead Management in Salesforce.

### **wqQalHbCEey56t68RjMEBwerving, and Processing JSON data with Python**

By the end of this project, you will learn how to work with JSON data in python. we will learn what is an API and how we can access the data using HTTP requests in Python. We are going to retrieve the data and use TKinter module in python to develop a desktop application for browsing characters rolled in Rick and Morty series. During this project, you will learn what a JSON API is and how it works. you will learn about how to send an

HTTP request to the server to retrieve the JSON data and at the end, we are going to learn how to use this data to develop a desktop application using python and TKinter.

## **wtYRSE1kEeyLIRb6niz0n to Hardware and Operating Systems**

If you're ready to enter the world of Information Technology (IT), you need job-ready skills. This course provides the core hardware and operating system knowledge needed by anyone new to IT and computer hardware who wants to start a new career in technology, including IT Support, Networking, Cybersecurity, and Software Development. Learn about the software brain of a computer—its operating system software—and explore Microsoft Windows. Become knowledgeable of internal computer components, including motherboards, central processing units (CPUs), memory, hard drives, expansion slots, and others. Learn to identify interfaces, ports, connectors, and peripherals such as mice, keyboards, and others. Explore workstation setup processes, commonly used operating system settings, screen capture commands, computer acquisition practices, and job-essential troubleshooting processes. You will also learn about mobile operating systems, Linux, and macOS, and complete a final project. Throughout the course you will practice what you learn using interactive exercises and hands-on labs. This course is also part of the series to help you prepare for CompTIA ITF + and A+ certification exams.

## **x- hi8ARvEe21Qg76AIMoeQ Advanced Programming in Swift**

At the heart of any remarkable iOS app is a thorough understanding of the Swift programming language. Embark on a journey to expand your knowledge and skillset with Advanced Programming in Swift. Discover Swift's advanced custom data types, explore code organization best practices, tap into error handling to improve your program's performance, and foster an understanding of programming the functional way with higher-order functions like map, filter and reduce. Then, to further understand the inner workings of successful app development, learn how to implement unit tests to ensure that your applications function as intended. By the end of this course, you will practice creating the functionality you often encounter in apps with large lists of items. You'll implement advanced programming concepts including higher-order functions to process collections and build your own list in Xcode. Upon completion of this course, you will be able to:

- Create custom data types including enumerations and sets.
- Organize and optimize your code by using subclassing and inheritance, typecasting and polymorphism.
- Discover how to set restrictions in your code using access control.
- Create blueprints for your code with optional and required protocols.
- Give control and pass responsibilities from one instance to another with delegation.
- Employ appropriate error handling approaches, implement throwable functions and catch errors.
- Describe what recursion is and identify common use cases.
- Implement higher-order functions like map, filter and reduce.
- Ensure your applications perform as expected by implementing unit tests.

This course is ideal for intermediate learners who would like to prepare themselves for a career in iOS development. To succeed in this course, you need a foundational understanding of the programming fundamentals of Swift and SwiftUI.

## Get Started with Data Warehousing and BI Analytics

Data is one of an organization's most valuable commodities. But how can organizations best use their data? And how does the organization determine which data is the most recent, accurate, and useful for business decision making at the highest level? After taking this course, you will be able to describe different kinds of repositories including data marts, data lakes, and data reservoirs, and explain their functions and uses. A data warehouse is a large repository of data that has been cleaned to a consistent quality. Not all data repositories are used in the same way or require the same rigor when choosing what data to store. Data warehouses are designed to enable rapid business decision making through accurate and flexible reporting and data analysis. A data warehouse is one of the most fundamental business intelligence tools in use today, and one that successful Data Engineers must understand. You will also be able to describe how data warehouses serve a single source of data truth for organization's current and historical data. Organizations create data value using analytics and business intelligence applications. Now that you have experienced the ELT process, gain hands-on analytics and business intelligence experience using IBM Cognos and its reporting, dashboard features including visualization capabilities. Finally, you will complete a shareable final project that enables you to demonstrate the skills you acquired in each module.

## Introduction to Docker: Build Your Own Portfolio Site

In this 1-hour long project-based course on Introduction to Docker: Build your own portfolio website, you will learn how to use Docker on the command line and create your own portfolio website from a Bootstrap template in a Docker container. You will get to explore and demystify the Docker landscape and see how Docker works by using it. You will learn many fundamental concepts which will help you progress in your career, studies and knowledge, such as images, containers, the registry, the client/server model in Docker via the Docker Engine etc. You will use various commands and become comfortable spinning up containers, doing basic debugging to see statuses of containers, linking local files to files inside of Docker and learning basic networking to map a container port to a port on your local host machine to set up a development environment with Docker. Most importantly you will leave this course more confident in your knowledge of Docker and ready to understand Docker at a more advanced level, and ready to contribute better to your technical or development teams Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## IBM COBOL Core

COBOL is a programming language that serves a wide range of businesses. Key aspects of COBOL are that it is scalable, mature, and self-documenting. In this COBOL CORE class you'll discover more features of the language, how to handle tables, edit, use switches, numeric usage, and structured COBOL. Enjoy your ride through the world of COBOL! We're excited to have you here and can't wait to get started.

## **yQJFWMR8EeuGXw4j1205f Data Visualization**

In this project, you will develop an understanding and appreciation for data visualization. You will review the benefits of data visualization as you examine existing examples of data that is displayed in a variety of visual formats. In addition, you will gain some hands-on experience in building your own data visualization examples by aggregating data and generating simple charts in Google Sheets. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## **yR- IBM COBOL Data and File Management**

### **TSKbQEeuJrAoup8YoCw**

Welcome to IBM COBOL – Data and File Management! By enrolling in this course, you are taking a big step in increasing your knowledge and hands on experience with IBM COBOL data and file management. In this course, you will learn the fundamental elements of COBOL code. You will learn the process of working with COBOL data. You will learn handling COBOL files. This course also relational databases in a mainframe, COBOL context. So let's get started!

## **yYOR- How to Schedule Posts to Multiple Platforms using Hootsuite**

### **zLyEeyTERK47a9PLQ**

In this hands on guided course, you will learn about Hootsuite, a social media management platform and you will learn how we can schedule posts to different social media platforms. So by the end of this course, you will learn to use the Hootsuite platform, you will learn to publish posts across your various social media sites through one centralized location, you will explore various functionality of the Hootsuite dashboard and you will also learn how we can use Hootsuite to automate the social media posts

## **z-8kW3icEey5d69fLcM0v of Data Analysis in Business with R Programming**

This Guided Project 'Application of Data Analysis in Business with R Programming' is for the data science learners and enthusiasts of 2 hours long. The learners will learn to discover the underlying patterns and analyse the trends in data with Data Science functions. They will explore a Real world application of Data Analysis in the field of business. They will gain insights that will assist in suggesting recommendations or strategic decision making for optimising business and efficient allocation of resources. This Guided Project is unique because it is a research study and analysis of data of a pandemic affected period from the year 2020. Hence, learners will study customer purchasing trends of an uncertain period marked by covid-19 where the world economy has been suffering which will also prepare learners for analysing uncertain and uneven trends. In order to be successful, learners will need prior fundamental knowledge of R programming, Statistics and familiarity with using RStudio.

## zQV3KCOCEuIArOQjS7BQo Data Engineering

This course introduces you to the core concepts, processes, and tools you need to know in order to get a foundational knowledge of data engineering. You will gain an understanding of the modern data ecosystem and the role Data Engineers, Data Scientists, and Data Analysts play in this ecosystem. The Data Engineering Ecosystem includes several different components. It includes disparate data types, formats, and sources of data. Data Pipelines gather data from multiple sources, transform it into analytics-ready data, and make it available to data consumers for analytics and decision-making. Data repositories, such as relational and non-relational databases, data warehouses, data marts, data lakes, and big data stores process and store this data. Data Integration Platforms combine disparate data into a unified view for the data consumers. You will learn about each of these components in this course. You will also learn about Big Data and the use of some of the Big Data processing tools. A typical Data Engineering lifecycle includes architecting data platforms, designing data stores, and gathering, importing, wrangling, querying, and analyzing data. It also includes performance monitoring and finetuning to ensure systems are performing at optimal levels. In this course, you will learn about the data engineering lifecycle. You will also learn about security, governance, and compliance. Data Engineering is recognized as one of the fastest-growing fields today. The career opportunities available in the field and the different paths you can take to enter this field are discussed in the course. The course also includes hands-on labs that guide you to create your IBM Cloud Lite account, provision a database instance, load data into the database instance, and perform some basic querying operations that help you understand your dataset.

## zF\_uqG1Eeq3ORhZ4h7Q to HTML

In this project, you will develop an HTML resource sheet and a very basic sample webpage. You will use a text editor called Notepad++ to write your code, and the Chrome browser to display the resulting webpage. You will learn how to add content to your webpage using the basic content elements. While gaining experience with the Notepad++ editor, you will build an HTML resource webpage. You will use and include common HTML tags and elements and learn what each does to help present your document in a web browser. This course starts at the beginning with HTML; and it will prepare you for the next steps in your Web Development journey, and for future courses where you can expand your knowledge of HTML elements, and learn to apply cascading style sheets. HTML is a gateway skill to more advanced competencies required for Web Development. There is a high demand for developers who understand front-end languages, like HTML, CSS, and JavaScript. Learning to manually code with HTML instead of turning to a WYSIWYG editor will allow you to better understand the ins and outs of web development. Coding always gives you more control over the final product—in this case a webpage. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.

## **Business Accounting Explained**

In this 1-hour long project-based course, you will access and evaluate financial statements of publicly traded companies and learn how financial statement users rely on this information to make lending, regulatory, and investing decisions. You'll also perform common accounting tasks like creating journal entries and producing financial statements. Note: This course works best for learners who are based in the North America region. We're currently working on providing the same experience in other regions.