Designing and Implementing a Data Science Solution on Azure (DP-100.1)

Modality: On Demand

Duration: 16 Hours

About this Course:

This course provides professionals with the conceptual knowledge of Microsoft Azure Support Services and Data Science Solution and Processes. Through this course, professionals gain a high-level of Azure Data Science understanding and get to know about the leading data science solutions. Furthermore, professionals also learn the essentials of Azure Machine Learning Models Deployment & Training, and other Machine Learning Features & Services. They also learn the art of supporting automation in machine learning models and streamlining cognitive services.

This is an intermediate-level course and presents professionals with an opportunity to learn advanced-level skills. Professionals and candidates enrolling in this course need to have basic knowledge of Microsoft Azure in order to gain maximum advantage from the learning material of this course.

Course Objectives:

The core objective of this course is to help professionals gain a better understanding and conceptual knowledge of the following key elements:

- Accounts Configuration of Microsoft Azure Cognitive Services
- Fundamental Knowledge of Building Basic Chat Bots
- Understanding Cognitive Services Consumption in Applications
- The Fundamentals of LUIS and Bot Integration

Audience:

This course is specifically tailored for the following group of professionals and interested candidates:

- Data Scientists
- IT Professionals
- Professionals Responsible for Deploying and Training Machine Learning Models
- Azure App Developers

Prerequisite:

Professionals planning to enroll in the Designing and Implementing a Data Science Solution on Azure (DP-100.1) course must comply with the following prerequisites:

- Fundamental Knowledge and Conceptual Understanding of Microsoft Azure
- Familiarity with Key Concepts of Data Science, Data Preparation & Model Training

- Basic Skills of Evaluating and Identifying Data Models
- Programming and Coding Skills in Python Language
- Know-how of Python Libraries such as Scikit-Learn, Seaborn, Matplotlib and Pandas

Course Outline:

Welcome to the Course

Doing Data Science on Azure

- Understand the Data Science Process on Azure
- Choose the Data Science Service You Need
- Introduction to Data Science with Azure Notebooks

Doing Data Science with Azure Machine Learning service

- Introduction to Azure Machine Learning service
- Train a local model with the Azure Machine Learning service
- Register and Deploy Models

Automate Machine Learning with Azure Machine Learning service

- Automate Model Selection with AML Service
- Automate Hyperparameter Tuning with HyperDrive

Manage and Monitor Machine Learning Models with the Azure Machine Learning service

- Manage and Monitor Models

Course Completion

- Summary
- Post-Course Survey