Getting started with Microsoft Fabric

Course Description:

This one-day course provides a comprehensive introduction to Microsoft Fabric's end-to-end analytics capabilities. Participants will learn how to create and manage lakehouses, use Apache Spark for data analysis, work with Delta Lake tables, orchestrate data processes with pipelines, and ingest data using Dataflows Gen2. The course also covers working with data warehouses, real-time intelligence, and administering a Microsoft Fabric environment.

Course Duration: 1 day

Prerequisites:

- Familiarity with basic data concepts and terminology4.
- Understanding of fundamental data storage and analytics concepts.
- Prior experience with data engineering concepts and terminology is recommended

Content Coverage:

Module 01: Introduction to end-to-end analytics using Microsoft Fabric

• Describe end-to-end analytics in Microsoft Fabric

Module 02: Get started with lakehouses in Microsoft Fabric

- Describe core features and capabilities of lakehouses in Microsoft Fabric.
- Create a lakehouse.
- Ingest data into files and tables in a lakehouse.
- Query lakehouse tables with SQL.

Module 03: Use Apache Spark in Microsoft Fabric

- Configure Spark in a Microsoft Fabric workspace
- Identify suitable scenarios for Spark notebooks and Spark jobs
- Use Spark dataframes to analyze and transform data

- Use Spark SQL to query data in tables and views
- Visualize data in a Spark notebook

Module 04: Work with Delta Lake tables in Microsoft Fabric

- Understand Delta Lake and delta tables in Microsoft Fabric
- Create and manage delta tables using Spark
- Optimize delta tables
- Use Spark to query and transform data in delta tables
- Use delta tables with Spark structured streaming

Module 05: Orchestrate processes and data movement with Microsoft Fabric

- Describe pipeline capabilities in Microsoft Fabric.
- Use the Copy Data activity in a pipeline.
- Create pipelines based on predefined templates.
- Run and monitor pipelines.

Module 06: Ingest Data with Dataflows Gen2 in Microsoft Fabric

- Describe Dataflow capabilities in Microsoft Fabric
- Create Dataflow solutions to ingest and transform data
- Include a Dataflow in a pipeline

Module 07: Get started with data warehouses in Microsoft Fabric

- Describe data warehouses in Fabric.
- Understand a data warehouse vs a data Lakehouse.
- Work with data warehouses in Fabric.
- Create and manage fact tables and dimensions within a data warehouse.

Module 08: Get started with Real-Time Intelligence in Microsoft Fabric

Ingest and transform real-time data

- Store and query real-time data
- Visualize real-time data

Module 09: Administer a Microsoft Fabric environment

- Describe Fabric admin tasks
- Navigate the admin center
- Manage user access
- Govern data in Fabric