Day After Dashboard in a Day with Microsoft Fabric

About : This course will help you learn about various advanced analytics experiences offered by Microsoft Fabric such as the Direct Lake mode with Synapse Data Engineering, data destinations with Dataflow Gen2 and Pipelines in Data Factory, and designing stunning reports and more with Power BI.

Duration : 1 Day

Content Coverage :

Module 01 : Introduction and Setup

- Introduction to the workshop
- Session Material and Setup

Module 02 : Understanding Microsoft Fabric

- Microsoft Fabric Overview
- OneLake for all Data

Module 03 : Data Preparation

- Working with Dataflow Gen 2
- Understanding Data Pipelines

Module 04 : Data Modeling

- Analysis Services Engine
- Storage modes
- Relational Modeling
- Working with Semantic Model

Module 05 : Data Visualization

- Design Effective Reports
- Report Types
- Process, Tools and testing

Labs Included :

1. **Getting Started :** In this lab, you will learn how to create a project task flow and understand the basics of navigating Microsoft Fabric experiences. This lab is designed to provide you with hands-on experience in building and managing the foundation of your solution using Microsoft Fabric.
   a. First, you will learn how to create a basic data analytics task flow within a workspace. This pattern enables you to gather batch data, process it, build a semantic model, and ultimately generate quick insights through visualizations.
   b. Next, you will create a lakehouse item for data storage. A lakehouse combines the best features of data lakes and data warehouses, providing a unified platform for storing and analyzing large volumes of data. This step is crucial for setting up a scalable and efficient data solution that supports various data processing and analytics tasks.

2. **Data Preparation :** In this lab, you'll learn how to orchestrate your data movement and shape your data using Data Factory experiences.
   a. Create a data pipeline to efficiently copy raw data into the lakehouse files section and orchestrate your solution's activities.
   b. Use dataflow gen2 to prepare and load your data into Delta tables in the lakehouse optimized for analysis.
   c. Understanding the storage and compute staging architecture for large-scale data transformations with dataflow gen2.

3. **Data Modeling :** In this lab you'll learn how to create datasets optimized for scale and performance usability using web model editing in the Microsoft Fabric service (cloud).
   a. How to create a Direct Lake semantic model.

b. How to properly model your data using the web model editing experience.

c. How to add metadata to your semantic model for deeper analysis and insights.

4. **Data Visualization :** In this lab you'll learn about designing efficient and stunning reports using Power BI Desktop.

a. How to use canvas backgrounds and shape elements to create professional report layouts.

b. How to create report level measures for dynamic report elements.

c. How to leverage no-code artificial intelligence to find new insights in your data.