20778 Analyzing Data with Power BI

Overview

The main purpose of the course is to give students a good understanding of data analysis with Power BI. The course includes creating visualizations, the Power BI Service, and the Power BI Mobile App.

Prerequisite Comments

Before attending this course, students must have:
•Excellent knowledge of relational databases and reporting.

•Some basic knowledge of data warehouse schema topology (including star and snowflake schemas).

•Some exposure to basic programming constructs (such as looping and branching).

•An awareness of key business priorities such as revenue, profitability, and financial accounting is desirable.
•Familiarity with Microsoft Office applications – particularly Excel.

Target Audience

The course will likely be attended by SQL Server report creators who are interested in alternative methods of presenting data.

Course Objectives

After completing this course, students will be able to:
• Perform Power BI desktop data transformation.
• Describe Power BI desktop modelling.
• Create a Power BI desktop visualization.
• Implement the Power BI service.
• Describe how to connect to Excel data.
• Describe how to collaborate with Power BI data.
• Connect directly to data stores.
• Describe the Power BI developer API.
• Describe the Power BI mobile app.

Course Outline

1 - Introduction to Self-Service BI Solutions

Introduction to business intelligence
Introduction to data analysis
Introduction to data visualization
Overview of self-service BI
Considerations for self-service BI
Microsoft tools for self-service BI
Lab : Exploring an Enterprise BI solution

2 - Introducing Power BI

Power BI
The Power BI service
Lab : Creating a Power BI dashboard

3 - Power BI

Using Excel as a data source for Power BI
The Power BI data model
Using databases as a data source for Power BI
The Power BI service
Lab : Importing data into Power BI

4 - Shaping and Combining Data

Power BI desktop queries
Shaping data
Combining data
Lab : Shaping and combining data

5 - Modelling data

Relationships
DAX queries
Calculations and measures
Lab : Modelling Data

6 - Interactive Data Visualizations

Creating Power BI reports
Managing a Power BI solution
Lab : Creating a Power BI report

7 - Direct Connectivity

Cloud data
Connecting to analysis services
Lab : Direct Connectivity

8 - Developer API

The developer API
Custom visuals
Lab : Using the developer API

9 - Power BI mobile app

The Power BI mobile app
Using the Power BI mobile app
Power BI embedded