Course 20768A:

Developing SQL Data Models

⊖ Course details

Course Outline

Module 1: Introduction to Business Intelligence and Data Modeling

This module introduces key BI concepts and the Microsoft BI product suite.

Lessons

- Introduction to Business Intelligence
- The Microsoft business intelligence platform

Lab : Exploring a Data Warehouse

After completing this module, you will be able to:

- Describe the concept of business intelligence
- Describe the Microsoft business intelligence platform

Module 2: Creating Multidimensional Databases

This module describes the steps required to create a multidimensional database with analysis services.

Lessons

- Introduction to multidimensional analysis

- Creating data sources and data source views

- Creating a cube

- Overview of cube security

Lab : Creating a multidimensional database

After completing this module, you will be able to:

- Use multidimensional analysis

- Create data sources and data source views

- Create a cube

- Describe cube security

Module 3: Working with Cubes and Dimensions

This module describes how to implement dimensions in a cube.

Lessons

- Configuring dimensions

- Define attribute hierarchies

- Sorting and grouping attributes

Lab : Working with Cubes and Dimensions

After completing this module, you will be able to:

- Configure dimensions

- Define attribute hierarchies.

- Sort and group attributes

Module 4: Working with Measures and Measure Groups

This module describes how to implement measures and measure groups in a cube.

Lessons

- Working with measures

- Working with measure groups

Lab : Configuring Measures and Measure Groups

After completing this module, you will be able to:

- Work with measures

- Work with measure groups

Module 5: Introduction to MDX

This module describes the MDX syntax and how to use MDX.

Lessons

- MDX fundamentals

- Adding calculations to a cube

- Using MDX to query a cube

Lab : Using MDX

After completing this module, you will be able to:

- Describe the fundamentals of MDX

- Add calculations to a cube

- Query a cube using MDX

Module 6: Customizing Cube Functionality

This module describes how to customize a cube.

Lessons

- Implementing key performance indicators

- Implementing actions

- Implementing perspectives

- Implementing translations

Lab : Customizing a Cube

After completing this module, you will be able to:

- Implement key performance indicators

- Implement actions

- Implement perspectives

- Implement translations

Module 7: Implementing a Tabular Data Model by Using Analysis Services

This module describes how to implement a tabular data model in PowerPivot.

Lessons

- Introduction to tabular data models

- Creating a tabular data model

- Using an analysis services tabular model in an enterprise BI solution

Lab : Working with an Analysis services tabular data model

After completing this module, you will be able to:

- Describe tabular data models

- Create a tabular data model

- Be able to use an analysis services tabular data model in an enterprise BI solution

Module 8: Introduction to Data Analysis Expression (DAX)

This module describes how to use DAX to create measures and calculated columns in a tabular data model.

Lessons

- DAX fundamentals

- Using DAX to create calculated columns and measures in a tabular data model

Lab : Creating Calculated Columns and Measures by using DAX

After completing this module, you will be able to:

- Describe the fundamentals of DAX

- Use DAX to create calculated columns and measures in a tabular data model

Module 9: Performing Predictive Analysis with Data Mining

This module describes how to use data mining for predictive analysis.

Lessons

- Overview of data mining

- Using the data mining add-in for Excel

- Creating a custom data mining solution

- Validating a data mining model

- Connecting to and consuming a data mining model

Lab : Perform Predictive Analysis with Data Mining

After completing this module, you will be able to:

- Describe data mining

- Use the data mining add-in for Excel

- Create a custom data mining solution

- Validate a data mining solution

- Connect to and consume a data mining solution