

# **SQL Server Reporting Services for Report Writers**

(3 Days)

## **About this Course**

This Introduction to SQL Server 2016/2019 Reporting Services (SSRS) training class teaches students how to create, format, and manage SQL Server 2016/2019 Reporting Services reports. This course focuses primarily on the Report Designer tool in the SSDT-BI for Visual Studio. Attendees will also work in and become familiar with Report Builder and Report Manager.

# **Course Benefits**

- Use Report Designer and Report Manager.
- Work with solutions and projects.
- Create basic reports.
- Enhance reports with formatting, images, and charts.
- Effectively group and summarize data.
- Work with parameterized reports.
- Build dynamic reports with expressions and parameters.
- Incorporate charts and custom maps.
- Work with drillthrough reports.
- Manage reports.
- Utilize Report Builder.

# **Prerequisites**

Experience in the following is required for this Microsoft SQL Server class:

- Working knowledge of Microsoft SQL Server or Microsoft Office applications is encouraged. Experience in the following *would be useful* for this Microsoft SQL Server class:
  - General familiarity with databases

#### **COURSE OUTLINE**

## 1. SSRS Overview and Tools

- A. Reporting Services Features
- B. Tools Available with SQL Server

## 2. Working with Solutions and Projects

- A. Working with SQL Server Data Tools
- B. Understanding Solutions and Projects
- C. Working with the Visual Studio Interface
- D. Working with Solutions and Projects Lab (Optional)
- E. Answers to Exercises

## 3. Creating Basic Reports

- A. What is a Data Source?
- B. What is a Dataset?
- C. Using the Report Wizard
- D. What is Tablix?
- E. Creating a Tabular Report
- F. Creating a List Report
- G. What is a Matrix?
- H. Understanding Drill-down
- I. Creating Basic Reports Lab
- J. Answers to Exercises

## 4. Formatting Reports

- A. Working with Text Boxes
- B. Rich Text Formatting
- C. Managing Text Boxes
- D. Drawing Lines and Boxes
- E. Images
- F. Page Headers and Footers
- G. Formatting Reports Lab
- H. Answers to Exercises

# 5. Summarizing and Sorting

- A. Creating Groups
- B. Parent/Child vs. Adjacent Groupings
- C. Adding Totals and Aggregations
- D. Summarizing and Sorting Lab
- E. Answers to Exercises

## 6. Introduction to Expressions

- A. Understanding Expressions
- B. Defining Expressions
- C. Working with Report Variables
- D. Introduction to Expressions Lab
- E. Answers to Exercises

#### 7. Add Flexibility with Parameters

- A. Adding Parameters to a Report
- B. Report Parameters vs. Query Parameters
- C. Manage Report Parameter Properties
- D. Use Parameters with SQL Queries and Stored Procedures
- E. Work with Cascading Parameters
- F. Sort Based on a Parameter Setting
- G. Filtered Reports
- H. Add Flexibility with Parameters Lab
- I. Answers to the Exercise

## 8. Enhanced Report Items

- A. Charts
- B. Gauges
- C. Add a Map to a Report
- D. Data Bar, Indicator, and Sparkline Report Items
- E. Nesting Data Regions
- F. Subreports and Drillthrough Reports
- G. Working with Drillthrough Reports
- H. Enhanced Report Items Lab
- I. Answers to Exercises

## 9. Rendering, Deploying, and the Web Portal

- A. Deploying Reports
- B. The Web Portal
- C. Working with Shared Data Sources
- D. Viewing Reports
- E. Rendering Reports
- F. Rendering, Deploying, and the Web Portal Lab
- G. Answers to Exercises

## 10. KPIs and Mobile Reports

- A. Working with KPIs 1
- B. Working with Mobile Reports 1
- C. The SQL Server Mobile Report Publisher 1
- D. Exploring the Mobile Report Publisher 1
- E. KPIs and Mobile Reports Lab
- F. Answers to the Exercise

# 11. Beyond Basic Reporting

- A. Utilizing Report Template 1
- B. Creating Document Maps and Bookmarks 1
- C. Recursive Parents
- D. Understanding Lookup, LookupSet, and Multilookup Functions
- E. Report Rendering
- F. Using the ReportItems Collection
- G. Initial Toggle States
- H. Interactive Sorting
- I. Expression Samples
- J. Creating Aggregates of Aggregates

# 12. Using Report Builder (If Time Permits)

- A. Desktop App
- B. Using the Report Builder Tool
- C. Creating Datasets
- D. Creating Reports
- E. Creating Reports Using Wizards
- F. Creating Reports Without a Wizard
- G. Opening Existing Reports
- H. Working with Report Parts
- I. Using Report Builder Lab
- J. Answers to Exercises