

# **Writing Reports with Report Designer and SSRS 2014 Level 1 (MS-55204)**

**Modality: Virtual Classroom**

**Duration: 2 Days**

## **About this Course:**

This beginner level course defines the essential aspects of a Report Designer. Report Designer presents a set of graphical query and design tools that are incorporated within the Microsoft Visual Studio environment.

A Report Designer will deliver a Report Data pane for data organization in the report, and tab views for design and preview purposes in order to help you design a report in an interactive manner. A Report Designer will also educate query designers on how to specify data to extract from data sources and the Expression dialog which will specify the report data to be utilized in the report layout.

In this Microsoft Training based course, students learn about the basics of report writing with Microsoft® SQL Server® Report Designer and SSRS. The primary emphasis will revolve around the report writing by associating to a database and manipulating the data for presentation such as developing table and matrix reports, formatting reports, grouping report data, developing simple and complex expressions, presenting aggregated data, arranging and filtering data, charting data, and preparing reports for printing and exporting purpose. Report Designer is compatible for all supported versions of Microsoft® SQL Server®.

A professional Business Analyst earns an average salary of **\$94,881** per year.

## **Course Objective:**

After the course completion, students should be able to:

- Understand the Report Designer environment
- Develop table reports
- Format reports
- Make simple and complex expressions
- Group report data
- Develop matrix reports
- Arrange and filter report data
- Summarize data with charts

- Print and export reports

## **Audience:**

This course is primarily designed for:

- People who are fresh to the process of reporting with Microsoft® SQL Server® Report Designer and SSRS.
- People who moving from another reporting software application
- People who currently are Report Designers and SSRS report authors
- People who are using a Report Builder (SSRS)
- Business analysts, programmer analysts, data analysts, database administrators, or related IT personnel who may or may not have a sound information and experience with Microsoft® SQL Server® Report Designer and SSRS, Visual Basic programming, and/or Transact-Structured Query Language (T-SQL) experience

## **Prerequisites:**

Prior to pursuing this course, students must know:

- The basic functionality of Windows
- How to create and navigate folders
- How to open programs
- How to manipulate windows
- How to copy and paste objects
- How to format text
- How to save files

## **Recommended prerequisite course:**

- Microsoft Office 2016 Access Introduction- Level 1 (091405) (Access2016-L1)

## **Course Outline:**

## Module 1: Exploring the Report Designer Environment

This module introduces the Report Designer application and its features. You will explore the Menu bar, the Toolbox, and the available Window panes for creating and manipulating reports, and the report design surface using Design and Preview modes.

### Lessons

- SQL Server Reporting Services
- The Report Designer Environment
- Working with Existing Reports

### Lab : Exploring the Report Designer Application

- Navigating the Menu bar and the Toolbox
- ? View Existing Reports in Design and Preview modes

After completing this module, students will be able to:

- Describe the purpose of SQL Server Reporting Services.
- Describe and navigate the graphical elements of the Report Designer application.
- Work with existing reports and navigate between Design and Run modes.

## Module 2: Adding Data to Table Reports

This module introduces report writers to populating a report with data and displaying the data in a table data region on the report. We will begin with defining the data source and continue with query building through data sets to bring data into the report. Next, we will explore the elements of the Tablix including rows, columns, cells, handles, and field choosers.

### Lessons

- Create Report Data Sources
- Create Report Datasets
- Create Table Reports

### Lab : Creating Table Reports

- Create Queries using the Report Designer Query Designer
- Create a Table Report using a Single Table
- Create Table Relationships using Query Designer
- Create a Table Report using Multiple Tables

After completing this module, students will be able to:

- Create report data sources.
- Create report datasets.
- Work with the tablix data region.

- Create a table report.

## Module 3: Formatting Data and Creating Expressions in Reports

This module introduces report formatting techniques which allow a report writer to control how and where data displays in the report. Additional data may also be required and this can be accomplished by adding data from a source or adding a calculated field to the dataset. Simple and complex expressions will also be introduced in this topic.

### Lessons

- Formatting Reports
- Sorting and Filtering Report Data
- Adding Data to a Dataset
- Creating Simple and Complex Expressions

### Lab : Formatting Reports

- Format Tablix Columns
- Format Data in a Tablix Cell using Properties
- Format Data in a Tablix Cell using Simple and Complex Expressions
- Sort Data using Expressions
- Use Simple and Complex Expressions to Display Data in a Tablix

After completing this module, students will be able to:

- Format data in a report using the Report Designer Properties dialog boxes.
- Add data to a report and make changes to column names in the dataset query.
- Format data in a report using simple and complex expressions.
- Display data in a report using simple and complex

## Module 4: Grouping Report Data

This module introduces data groupings in reports using dataset fields and expressions. This module also discusses group hierarchies and adding aggregates to summarize grouped data.

### Lessons

- Group Data in Reports
- Group Data using an Expression
- Creating a Grouping Hierachy and using Group Aggregates

### Lab : Creating Reports with Groups and Aggregates

- Display Grouped Data in a Report
- Create a Group Hierarchy in a Report
- Group Data using a Complex Expression
- Add Aggregates to Tablix Rows

After completing this module, students will be able to:

- Group data in reports using fields.
- Group data in reports using expressions.
- Create group hierarchies.
- Aggregate grouped data in a report

## Module 5: Matrix Reports

This module introduces matrix data regions which are used in reports to control how crosstabular data can be used. While table reports rely on rows and columns, matrix reports rely on row groupings, column groupings, and aggregated values.

### Lessons

- Create and Modify Matrix Data Regions
- Create and Modify Column Groups

### Lab : Creating Matrix Reports

- Create Matrix Reports
- Create Column Groups
- Use Expressions to Sort Group Data
- Use Expressions to Display Group Names
- Create Matrix Reports with Grouping Hierarchies

After completing this module, students will be able to:

- Describe the key features of using a matrix in a report.
- Create and modify matrix reports.
- Define column group hierarchies.
- Use expressions to define matrix headings and sort orders.

## Module 6: Charts

This module introduces charting and the ability to create and add charts to reports. Chart reports allow us to visualize data with or without the details.

### Lessons

- Create and Modify Charts in Reports
- Modify Charts in Reports

### Lab : Creating Charts and Chart Reports

- Create a Chart Report
- Add a Chart to an Existing Report
- Format Chart Elements

- Use Expressions in Charts

After completing this module, students will be able to:

- Describe the key features of charts.
- Create charts.
- Modify chart data and the format of chart elements.
- Use expressions in charts

## **Module 7: Printing and Exporting Reports**

This module introduces report printing and exporting. Reports can be created for electronic display, paper display, or display in another application. This module covers the basics of those three scenarios.

### **Lessons**

- Print Features and Print Options
- Export Reports

### **Lab : Printing and Exporting Reports**

- Explore Page Layout view, Report Formatting, and Page Setup Options
- Export Reports

After completing this module, students will be able to:

- Describe the key features of electronic reporting vs. print reporting.
- Prepare a report for paper printing.
- Export reports in supported formats.