MOC 55123 AC Writing Reports with Report Builder and SSRS Level 1

Course Summary

Description

In this two-day course, students will continue their learning on the foundations of report writing with Microsoft SQL Server Report Builder and SSRS. The focus will be on report writing by connecting to a database and manipulating the data for presentation including: creating table and matrix reports, formatting reports, grouping report data, creating simple and complex expressions, displaying aggregated data, sorting and filtering data, charting data, and preparing reports for printing and exporting. Report Builder 3.0 is available for Microsoft SQL Server versions 2014, 2012, and 2008 R2.

Objectives

At the end of this course, students will be able to:

- Navigate the Report Builder Environment.
- Create table reports.
- Format reports.
- Create basic and complex expressions.
- Group report data.
- Create matrix reports.
- Sort and filter data.
- Summarize data with charts.
- Print and export reports.

Topics

- Exploring the Report Builder Environment
- Adding Data to Table Reports
- Formatting Data and Creating Expressions in Reports
- Grouping Report Data
- Matrix Reports
- Charts
- Printing and Exporting Reports

Audience

The primary audience for this course is persons who are new to reporting with Microsoft SQL Server Report Builder and SSRS, persons who are transitioning from another reporting software application, and persons who are existing Report Builder and SSRS report authors.

The secondary audience for this course is persons who are using Report Designer (SSRS).

Course participants may be business analysts, programmer analysts, data analysts, database administrators, or IT professionals and may or may not have experience with Microsoft SQL Server Report Builder and SSRS, programming (Visual Basic), and/or Transact-Structured Query Language (T-SQL) experience.

Prerequisites

Prior to taking this course, students should have the following skills:

- Familiarity with Windows.
- Creating and navigating folders.
- Opening programs.
- Manipulating windows.
- Copying and pasting objects.
- Formatting text.
- Saving files.
- Microsoft Office Access 2013: Level 1 or have equivalent experience with basic database concepts.

Duration

Two days
MOC 55123 AC Writing Reports with Report Builder and SSRS Level 1

Course Outline

I. Exploring the Report Builder Environment
   This module introduces the Report Builder application and its features. You will explore the Ribbon and its Tabs, Command groups, and Commands, the available Window panes for creating and manipulating reports, and the report design surface using Design and Run modes.
   A. Introducing the Report Builder Environment
   B. Working with Existing Reports

Lab 1: Exploring the Report Builder Application
   • Navigating the Ribbon and Window panes
   • View Existing Reports in Design and Run modes

II. Adding Data to Table Reports
   This module introduces how to populate a report with data and display that 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 data region including rows, columns, cells, handles, and field choosers, you will use in displaying your data.
   A. Create Report Data Sources
   B. Create Report Datasets
   C. Work with the Tablix Data Region
   D. Create a Table Report

Lab 1: Creating Table Reports
   • Create Queries Using the Report Builder Query Designer
   • Create a Table Report Using a Single Table
   • Create Table Relationships Using Query Designer
   • Create a Table Report Using Multiple Tables

III. 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.
   A. Formatting Reports
   B. Sorting and Filtering Report Data
   C. Adding Data to a Dataset
   D. Creating Simple Expressions
   E. Creating Complex Expressions

Lab 1: 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

IV. Grouping Report Data
   This module introduces data groupings in reports using dataset fields and using expressions. This module also discusses group hierarchies and adding aggregates to summarize grouped data.
   A. Group Data in Reports
   B. Group Data Using an Expression
   C. Creating Subgroups and Group Aggregates

Lab 1: 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
   • Configuring a Reference Image
MOC 55123 AC Writing Reports with Report Builder and SSRS Level 1

Course Outline (cont’d)

V.  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.
   A. Creating and Modifying Matrix Data Regions
   B. Creating and Modifying Column Groups
Lab 1: 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 Group Hierarchies

VI. Charts
This module introduces the ability to create and add charts to reports. Whether through wizard or individual effort, chart reports or charts as report components allow us to visualize data with or without the details.
   A. Create and Modify Chart Wizard Reports
   B. Add Charts to Existing Reports
   C. Modify Charts in Reports
Lab 1: Creating Charts and Chart Reports
- Create a Chart Wizard Report
- Add a Chart to an Existing Report
- Format Chart Elements
- Use Expressions in Charts

VII. 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.
   A. Print Features and Print Options
   B. Export Reports
Lab 1: Printing and Exporting Reports
- Exploring Page Layout view, Report Formatting, and Page Setup Options
- Exporting Reports