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Learning Style: Virtual Classroom

Technology: Microsoft

Difficulty: Intermediate

Course Duration: 2 Days

Writing Reports with Report Designer and SSRS 2016 Level 2 (MS-55170)

About this course:

This course will focus on the teaching of the basics of report writing with Microsoft® SQL Server® Report Designer and SSRS to the students. This is a 2-day course with intermediate difficulty level. The course will be focused upon report creation.

This will be done by connecting to a database and tweaking the data for presentation that would include making parameter reports and list reports, adding complicated expressions, images and sub-reports, drilldown and drill-through functionality, and sparklines, data bars, and indicators, all of these to the reports. Report Designer is available for all supported versions of Microsoft® SQL Server®.

Audience:

The course has been designed for two groups of audiences:

The primary or main audience, for which this course is intended for, are those are new to reporting with Microsoft® SQL Server® Report Designer and SSRS. It is also for those people who are shifting from some other reporting software application, and people who are already Report Builder and SSRS report authors.

The secondary audience for this course is of those who are using Report Builder (SSRS).

People who are taking this course can be anyone from business analysts, programmer analysts, data analysts, database administrators, to IT professionals. It is for those people who may or may not have any experience with Microsoft® SQL Server® Report Builder and SSRS, programming (Visual Basic), and/or Transact-Structured Query Language (T-SQL).

Learning objectives:

The course has the following learning objectives:

- Making parameter reports
- Making list reports
- Inserting complex expressions in the reports
- Inserting images and sub-reports
- Inserting drilldown and drill-through functionality
- Inserting sparklines, data bars, and indicators

Course Outline:

Module 1: Parameter Reports

This module introduces the use of the parameter in report writing. Parameters allow a level of self-service reporting wherein the report audience can choose the data to view (date range, department, geography, etc.).

Lessons

- Parameterized Reporting
- Create Report Parameters
- Modify Report Parameters
- Provide Default Parameter Values

- Provide Available Values for Parameters

Lab : Creating Parameterized Reports

- Create Single Value Parameter Reports
- Create Multi-Value Parameter Reports
- Create an Available Values Parameter Report
- Create a Parameter Report with Default Values
- Modify Existing Parameter Reports

After completing this module, students will be able to:

- Describe the key benefits and features of report parameters.
- Create parameterized queries and parameterized reports.
- Create parameters which accept single values, multiple values, expose or hide the parameter value, provide a list of available parameter values, and provide parameters with default values.
- Modify existing parameters and parameter reports.

Module 2: List Data Regions

This module introduces the list data region. List data regions allow report writers free-form control over their reports, whereas, table and matrix reports bind you to a table or matrix data presentation. This free-form feature affords the report writer the ability to truly customize the report.

Lessons

- Introducing the List Data Region
- Create Reports Using List Data Regions
- Modify Reports Which Use List Data Regions

Lab : Creating List Reports

- Create a Multiple Column Report with List Data Regions
- Create a Report with Rectangles and Nested Data
- Create an Enhanced Report with Rectangles and List Data Regions

After completing this module, students will be able to:

- Describe the benefits of list data regions and rectangles in reporting scenarios.
- Create reports which display data in multiple columns.
- Create reports which take advantage of nested data.
- Create enhanced reports using list data regions and rectangles.

Module 3: Enhancing Reports with Complex Expressions

This module introduces several new report formatting techniques which allow the report writer better control over the data displayed in the report.

Lessons

- Formatting Reports
- Top N Reports
- Running Values

Lab : Enhancing Reports with Complex Expressions

- Create Conditional Formats for Data
- Use Complex Expressions in Charts
- Calculate Running Values in Table and Matrix Data Regions
- Create TOP N Reports
- Add Row Banding in Table and Matrix Reports

After completing this module, students will be able to:

- Create conditional formats for data displayed in a report.
- Use complex expressions in charts.
- Calculate running values for groups and datasets.
- Create TOP N reports for groups and datasets.
- Use row banding in a data region

Module 4: Enhance Reports with Images and Subreports

In this module, students will add images and reports (subreports) to reports, tour and students will be introduced to SSRS (SQL Server Reporting Services).

Lessons

- Add Images to Reports
- Retrieve Images from a Database
- Introducing SSRS (SQL Server Reporting Services) Report Server
- Add Subreports to Reports

Lab : Working With Images and Subreports

- Add an Image to an Existing Report
- Display Images from a Database in a Report
- Format HTML5 Data to Display Properly in a Report
- Use SSRS Report Server to Facilitate Subreporting
- Add Subreports to a Report
- Add Parameterized Subreports to Reports

- Describe the available options for adding images to reports.
- Add images to reports.
- Describe the features of SSRS Report Server
- Add subreports and parameterized subreports to reports.

Module 5: Drilldown and Drillthrough Reports

This module introduces the ToggleByItem and Action properties to incorporate drilldowns and drillthrough reporting.

Lessons

- Add and Configure Drilldown Reporting
- Add and Configure Drillthrough Reporting

Lab : Add Drilldown and Drillthrough Functionality to Reports

- Add Drilldown Functionality to Text Boxes
- Add Drilldown Functionality to Groups
- Add Drilldown Functionality to Group Hierarchies
- Add Drillthrough Functionality to a Report
- Add Parameterized Drillthrough Functionality to a Chart

- Describe the key features of drilldowns and drillthroughs in a report.
- Add drilldowns to Reports.
- Add drillthroughs to Reports.
- Add parameterized drillthroughs to Reports.

Module 6: Sparklines, Data Bars, and Indicators

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.

Lessons

- Sparklines
- Data Bars
- Indicators

Lab : Adding Sparklines, Data Bars, and Indicators to Reports

- Create Group Charts
- Add Indicators and Data Bars to a Report
- Add Sparklines to a Report
- Add Indicators to a Report
- Add Sparklines, Data Bars, and Indicators to a Report

- Describe the key features of incorporating mini-charts and mini-gauges in reports.
- Add and modify sparklines, data bars, and indicators in reports.