

# **Writing Reports with Report Designer and SSRS Level 3 (MS-55240)**

**Modality:** Virtual Classroom

**Duration:** 1 Day

## **About this Course:**

The focus of this course is enhancing custom report visualizations and the use of Visual Basic programming in SSRS reporting. Supporting Visual Basic programming in reports is a normal requirement in today's reporting landscape and this course presents the information you will need through the course content, group discussions, worksheets, practices, demonstrations, and lab activities. Report Designer is available for all supported versions of Microsoft SQL Server.

## **Course Objectives:**

- Use shapes to create enhanced custom report visualizations.
- Understand the use of Visual Basic programming in SSRS reports.
- Use and support Visual Basic code in the SSRS reporting effort.

## **Audience:**

- The primary audience for this course are persons experienced with Report Designer and SSRS. The secondary audience for this course are experienced Report Builder (SSRS) report authors. Course participants may be business analysts, programmer analysts, data analysts, database administrators, or IT professionals.

## **Prerequisites:**

Before attending this course, students must have:

- Familiarity with Windows.
- Creating and navigating folders.
- Opening programs.
- Manipulating windows.
- Copying, pasting, and formatting text.
- Saving files.
- Course 55170: Writing Reports with Report Designer and SSRS Level 2

## **Course Outline:**

### **Module 1: Creating Enhanced Visualizations**

This module introduces report formatting techniques which create enhanced visualizations using shapes, rectangles, images, and data regions. To support customized and enhanced reporting visualizations, this course requires a review of specific properties which support the control of

displayed items in a report.

## Lessons

- The Importance of Shapes in Reporting
- Enhanced Visualizations Using the Rectangle
- Control the Display of Report Items
- Creating Tiles in a Tablix

## Lab : Creating Enhanced Visualizations

- Create Tiles in a Report with Rectangles
- Create Tiles in a Tablix with Text Boxes
- Create Enhanced Visualizations with Text Box Tiles, Tablix Tiles, and Tablixes

After completing this module, students will be able to:

- Describe the key features, uses, and approaches to using shapes in reporting.
- Have a more thorough understanding of the rectangle tool.
- Manipulate report item properties which have an impact on a report item's display.
- Transform data regions by displaying tiles rather than text boxes.

## Module 2: Visual Basic

This module introduces the Microsoft Visual Basic programming language. The goal of this module is to make the programming language and its use meaningful to non-programmers. This module uses the course handbook, group discussions, worksheets, and reviews to not only introduce Visual Basic programming, but to also understand what the code is doing.

## Lessons

- The Visual Basic Programming Language
- Visual Basic Language Components
- Decision Structures and Procedures

## Lab : Working with Visual Basic

- Convert Expressions to Visual Basic Procedures
- Work with Value Types in Reports
- Work with Reference Types in Reports

After completing this module, students will be able to:

- Describe the key features of Visual Basic.
- Describe the Visual Basic language elements.
- Recognize Visual Basic statements and their purpose.
- Use decision structure to apply workflow logic.
- Convert business logic into Visual Basic code.

## Module 3: Using Visual Basic in SSRS Reporting

Report writers can take advantage of the Visual Basic language in three different ways in the Report Designer application. Whether the Visual Basic programming language was incorporated by design or inherited through existing reports, report writers need to be aware of how the features can be applied to achieve the reporting goal. Visual Basic is the required language for Report Designer.

### Lessons

- Visual Basic in SSRS Reports
- Calling Visual Basic code from the Report
- Using External Visual Basic code in a Report

### Lab : Using Visual Basic in Reports

- Use Conditional Logic with Literals, Fields, and Report Items
- Create a Report using Visual Basic
- Update a Report to Use External Code
- Troubleshoot Visual Basic Errors in a Report

After completing this module, students will be able to:

- Describe the key features and uses of Visual Basic in SSRS reporting solutions.
- Recognize the three implementations of Visual Basic code available to a report.
- Create Visual Basic variables, constants, expressions, and procedures.
- Link and consume an external assembly with custom code in a report.
- Troubleshoot Visual Basic errors in a report.