

# **SQL 2014 Developer P2: VS 2012 and Data Types**

**Modality: On Demand**

**Duration: 9 Hours**

## **About this course:**

In the three-course series, this course is the second course “the SQL 2014 Developer P2: VS 2012 and Data Types course. This course series is an informative arrangement covering all the SQL Server 2014 subjects of intermediate to advanced level. The subjects included in the 2nd part of this arrangement are identified with the Visual Studio 2012 and aims at the kinds of data accessible in SQL Server 2014. The related sub-topics cover in this course in good detail and empowers the learners to accomplish the acquired information in their routine work.

This course of SQL 2014 Developer P2: VS 2012 and Data Types also contains the essential subjects important to manage, build, and maintain databases in SQL Server 2014. The course empowers the learners to productively work out the management activities on their databases and becomes familiar with the progressive and new features accessible in SQL Server 2014. The series of this course contains three courses that join to give a comprehensive and complete information base to the learners using SQL Server 2014.

The normal compensation for a SQL Developer is \$74,844 annually.

## **Course Objective:**

1. Comprehend the concepts of table-valued functions (TVF), user-defined types (UDT), aggregates, and modules.
2. Explore about sparse and hierarchy columns
3. Offline databases Development
4. Database schemas Creation
5. Update and develop a connected database
6. Learn to use MERGE and APPLY statements
7. New objects Creation with T-SQL
8. Realize spatial data types

## **Audience:**

- Database experts with the SQL Server 2014 experience, hoping to learn further developed techniques and features of SQL Server 2014.
- Competitors looking for the certifications of SQL Server 2014.

## **Prerequisite:**

- The series of SQL 2014 Developer courses are intended for experienced experts having specialized information on managing and building databases, business intelligence, and data warehouses solution with SQL Server 2014.

- Furthermore, operational recognition and information with MS Windows Server 2012 R2 or later is necessary to get a handle on the ideas included in this course.
- It is also suggested that the learners undertake the series of courses of SQL 2014 Developer in the respective order.

## Course Outline:

### Chapter 01: Aggregate, UDT, TVF and Modules

- **Topic A: Aggregates - Part 1**
- Aggregates - Part 2
- Aggregates - Part 3
- **Topic B: User Defined Types - Part 1**
- User Defined Types - Part 2
- User Defined Types - Part 3
- **Topic C: Table and Functions - Part 1**
- Table and Functions - Part 2
- Table and Functions - Part 3
- **Topic D: Managing Code Modules - Part 1**
- Managing Code Modules - Part 2
- Managing Code Modules - Part 3

### Chapter 02: Data Tools

- **Topic A: Introduction Data Tools - Part 1**
- Introduction Data Tools - Part 2
- Introduction Data Tools - Part 3
- **Topic B: Connected Database Development - Part 1**
- Connected Database Development - Part 2
- Connected Database Development - Part 3
- **Topic C: Updating a Connected Database - Part 1**
- Updating a Connected Database - Part 2
- Updating a Connected Database - Part 3

### Chapter 03: Schemas and Offline Development

- **Topic A: Creating New Objects with TSQL - Part 1**
- Creating New Objects with TSQL - Part 2
- Creating New Objects with TSQL - Part 3
- **Topic B: Comparing Database Schemas - Part 1**
- Comparing Database Schemas - Part 2
- Comparing Database Schemas - Part 3
- **Topic C: Offline Database Development - Part 1**
- Offline Database Development - Part 2
- Offline Database Development - Part 3
- **Topic D: Database Project Settings - Part 1**
- Database Project Settings - Part 2
- Database Project Settings - Part 3

## Chapter 04: APPLY, MERGE and Grouping Sets

- **Topic A: Using APPLY - Part 1**
- Using APPLY - Part 2
- Using APPLY - Part 3
- **Topic B: MERGE Statement - Part 1**
- MERGE Statement - Part 2
- MERGE Statement - Part 3
- **Topic C: Creating Recursive Queries - Part 1**
- Creating Recursive Queries - Part 2
- Creating Recursive Queries - Part 3
- **Topic D: Grouping Sets - Part 1**
- Grouping Sets - Part 2
- Grouping Sets - Part 3

## Chapter 05: ROLLUP, CUBE and Pivot Queries

- **Topic A: ROLLUP and CUBE Operators - Part 1**
- ROLLUP and CUBE Operators - Part 2
- ROLLUP and CUBE Operators - Part 3
- **Topic B: Creating Pivot Queries - Part 1**
- Creating Pivot Queries - Part 2
- Creating Pivot Queries - Part 3
- **Topic C: Executing Dynamic SQL - Part 1**
- Executing Dynamic SQL - Part 2
- Executing Dynamic SQL - Part 3

## Chapter 06: Query Execution

- **Topic A: Complex Query Execution - Part 1**
- Complex Query Execution - Part 2
- Complex Query Execution - Part 3
- **Topic B: Using Execution Plans - Part 1**
- Using Execution Plans - Part 2
- Using Execution Plans - Part 3
- **Topic C: Execution Plan Operators - Part 1**
- Execution Plan Operators - Part 2
- Execution Plan Operators - Part 3
- **Topic D: Common Join Operators - Part 1**
- Common Join Operators - Part 2
- Common Join Operators - Part 3

## Chapter 07: Hierarchy and Columns

- **Topic A: Hierarchy ID Data Type - Part 1**
- Hierarchy ID Data Type - Part 2
- Hierarchy ID Data Type - Part 3
- **Topic B: Exploring a Hierarchy - Part 1**

- Exploring a Hierarchy - Part 2
- Exploring a Hierarchy - Part 3
- **Topic C: Sparse Columns - Part 1**
- Sparse Columns - Part 2
- Sparse Columns - Part 3
- **Topic D: Column Sets - Part 1**
- Column Sets - Part 2
- Column Sets - Part 3

## Chapter 08: Filtered, Streams, Sequences

- **Topic A: Filtered Indexes - Part 1**
- Filtered Indexes - Part 2
- Filtered Indexes - Part 3
- **Topic B: FILESTREAM Storage - Part 1**
- FILESTREAM Storage - Part 2
- FILESTREAM Storage - Part 3
- **Topic C: Adding Sequences to Queries - Part 1**
- Adding Sequences to Queries - Part 2
- Adding Sequences to Queries - Part 3

## Chapter 09: Spatial Data Types

- **Topic A: Introduction to Spatial Data - Part 1**
- Introduction to Spatial Data - Part 2
- Introduction to Spatial Data - Part 3
- **Topic B: Spatial Data in SQL Server - Part 1**
- Spatial Data in SQL Server - Part 2
- Spatial Data in SQL Server - Part 3
- **Topic C: Manipulating Spatial Shapes - Part 1**
- Manipulating Spatial Shapes - Part 2
- Manipulating Spatial Shapes - Part 3
- **Topic D: Interactions Between Objects - Part 1**
- Interactions Between Objects - Part 2
- Interactions Between Objects - Part 3