SQL 2014 Developer P2: VS 2012 and Data Types

Modality: On Demand

Duration: 9 Hours

About this Course:

The SQL 2014 Developer P2: VS 2012 and Data Types course is the second course in the three course series on SQL Server 2014. This series of courses is a comprehensive series covering all the intermediate to advanced level topics of SQL Server 2014. The topics covered in part 2 of this series are related to the Visual Studio 2012 and focuses on the data types available in SQL Server 2014. The course covers the related sub-topics in a great detail and enables the students to implement the gained knowledge in their everyday tasks.

The SQL 2014 Developer P2: VS 2012 and Data Types course covers the fundamental topics necessary to build, manage, and maintain databases in SQL Server 2014. The course enables the students to efficiently perform the management tasks on their databases and learn the new and advanced features available in SQL Server 2014. The course series comprises of three courses which combine to give a complete and comprehensive knowledgebase to the students working with SQL Server 2014.

The average salary for SQL Developer is **$74,844** per year.

Course Objectives:

- Understand the concepts of aggregates, user defined types (UDT), table valued functions (TVF) and modules
- Develop and update a connected database
- Create new objects with T-SQL
- Compare database schemas
- Develop offline databases
- Learn to use APPLY and MERGE statements
- Learn about hierarchy and sparse columns
- Understand spatial data types

Audience:

- Database professionals with experience in SQL Server 2014 looking to learn more advanced features and techniques of SQL Server 2014
- Candidates seeking SQL Server 2014 certifications

Prerequisite:

- The SQL 2014 Developer series of courses is designed for experienced professionals having technical knowledge of building and managing databases, data warehouses and business intelligence solution with SQL Server 2014.

- In addition to this, operational knowledge and familiarity with Microsoft Windows Server 2012 R2 or later is required to grasp the concepts covered in this course.
- It is also recommended that the students undertake the SQL 2014 Developer series courses 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