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Microsoft SQL Server 2012 - Database Querying
(Exam Code 70-461)

Course Objective:

Managing required information by storing and retrieving data is part of Database Administrators day-to-day activities. One of the most effective ways to manage required information is by using databases.
You may need to manipulate and modify your table data based on changing business requirements.
The course, Microsoft SQL Server 2012: Database Querying will help you use SQL Server 2012 as a tool to manage organizational data.

Prerequisite:

Basic knowledge of relational database, some experience in database design and MS Windows operating system 7 and its core functionality

Certificate Of Attendance :

Certificate Of Attendance will be awarded to students completing the course achieving a minimum 75% attendance.

Training Methodology & Materials:

- Practical hands-on sessions,
- Additional and well-designed lab handouts are given to enhance further enhance the courseware given.

Training Duration:

Full-time: 5 Days
Time : 9.30am – 5.30pm

Course Fee :

Course Fee : S$1999 excluding Microsoft Exam
Regn Fee : S$50
Microsoft Exam Fee : S$296 (optional)
All fees subject to GST 7%.

DETAILED COURSE OUTLINE

Lesson 1: Getting Started with SQL Server 2012
- Overview of SQL Server 2012
- Work with SQL Server Management Studio Tools

Lesson 2: Working with T-SQL
- Overview of T-SQL
- Work with T-SQL Statements

Lesson 3: Writing SELECT Queries
- Write SELECT Statements
- Assign Aliases Using Queries
- Write CASE Expressions

Lesson 4: Working with SQL Data Types
- Work with String and Numeric Data Types
- Work with Date and Time Data Types
- Work with Binary Data Types
- Work with the XML Data Type
- Work with Grouping Sets

Lesson 5: Sorting and Filtering Data
- Sort the Queried Data
- Filter the Queried Results
- Work with Predicates
- Perform Advanced Filtering

Lesson 6: Querying Data from Multiple Tables
- Combine Data Using Simple Joins
- Create Queries Using Join Algorithms

Lesson 7: Modifying Data
- Insert Data
- Update Data
- Delete Data
- Merge Data

Lesson 8: Working with SQL Server Built-in Functions
- Create Queries Using Built-in Functions
- Create Queries to Test Nullability
- Group and Aggregate Data

Lesson 9: Programming in T-SQL
- Work with Variables and Batches
- Control Program Flow
- Manage Triggers
- Work with Data Access Technologies

Lesson 10: Implementing Stored Procedures
- Manage Stored Procedures
- Work with Dynamic SQL

Lesson 11: Working with Subqueries and Table Expressions
- Work with Subqueries
- Work with Table Expressions

Lesson 12: Working with Set Operators, Conditional Operators, and Window Functions
- Work with Set Operators
- Work with Window Functions
- Configure User-Defined Functions (UDF)
- Work with Advanced Functions

Lesson 13: Working with PIVOT, UNPIVOT, and Grouping Sets
- Work with PIVOT and UNPIVOT
- Work with Grouping Sets

Lesson 14: Managing Error Handling and Transactions
- Implement Error Handling
- Manage Transactions

Lesson 15: Querying SQL Server System Metadata
- Work with System Databases
- Work with SSPs and SMOs
- Work with System Catalog Views

Lesson 16: Optimizing Query Performance
- Manage Query Plans
- Configure Indexes
- Manage Views
- Analyze Data from Query Plans

Lesson 17: Working with Windows Azure SQL Database
- Overview of WASD
- Work with WASD