Microsoft SQL Server 2019 - Querying SQL

Structured technical training and certification preparation

A practical, student-friendly outline covering query Tools, introduction to T-SQL Querying, basic SELECT Queries, querying Multiple Tables, and sorting and Filter...

MODULES
16

LESSONS
67

FORMAT
Self-paced

Module Breakdown

MODULE 1

Query Tools
1.1 Course Introduction
1.2 Module 1 Introduction
1.3 Intro to Management Studio
1.4 Intro to command-line query tools

MODULE 2

Introduction to T-SQL Querying
2.1 Module 2 Introduction
2.2 Introducing T-SQL
2.3 Understanding Sets
2.4 Understanding the Logical Order of Operations in SELECT statements

MODULE 3

Basic SELECT Queries
3.1 Module 3 Introduction
3.2 Writing Simple SELECT Statements
3.3 Eliminate Duplicates with DISTINCT
3.4 Using Column and Table Aliases
3.5 Write Simple CASE Expressions

MODULE 4

Querying Multiple Tables
4.1 Module 4 Introduction
4.2 Understanding Joins
4.3 Querying with Inner Joins
4.4 Querying with Outer Joins
4.5 Querying with Cross Joins and Self Joins

MODULE 5

Sorting and Filtering Data
5.1 Module 5 Introduction
5.2 Sorting Data
5.3 Filtering Data with Predicates
5.4 Filtering with the TOP and OFFSET-FETCH
5.5 Working with Unknown Values

MODULE 6

Working with SQL Server Data Types
6.1 Module 6 Introduction
6.2 Writing Queries that return Date and Time Data
6.3 Writing Queries that use Date and Time Functions
6.4 Writing Queries that return Character Data
6.5 Writing Queries that use Character Functions

Module Breakdown (continued)

MODULE 7

Using DML to Modify Data

7.1 Module 7 Introduction
7.2 Inserting Records with DML
7.3 Updating Records Using DML
7.4 Deleting Records Using DML

MODULE 8

Using Built-In Functions

8.1 Module 8 Introduction
8.2 Writing Queries with Built-In Functions
8.3 Using Conversion Functions
8.4 Using Logical Functions
8.5 Using Functions to Work with NULL

MODULE 9

Grouping and Aggregating Data

9.1 Module 9 Introduction
9.2 Using Aggregate Functions
9.3 Using the GROUP BY Clause
9.4 Filtering Groups with HAVING

MODULE 10

Using Subqueries

10.1 Module 10 Introduction
10.2 Writing Self-Contained Subqueries
10.3 Writing Correlated Subqueries
10.4 Using the EXISTS Predicate with Subqueries

MODULE 11

Using Table Expressions

11.1 Module 11 Introduction
11.2 Using Views
11.3 Using Inline Table-Valued Functions
11.4 Using Derived Tables
11.5 Using Common Table Expressions

MODULE 12

Using Set Operators

12.1 Module 12 Introduction
12.2 Writing Queries with the UNION operator
12.3 Using EXCEPT and INTERSECT
12.4 Using APPLY

MODULE 13

Using Window Ranking, Offset, and Aggregate Functions

13.1 Module 13 Introduction
13.2 Creating Windows with OVER
13.3 Exploring Window Functions

MODULE 14

Pivoting and Grouping Sets

14.1 Module 14 Introduction
14.2 Writing Queries with PIVOT and UNPIVOT
14.3 Working with Grouping Sets

MODULE 15

Implementing Error Handling

15.1 Module Introduction
15.2 Implementing T-SQL error handling
15.3 Implementing structured exception handling

MODULE 16

Managing Transactions

16.1 Module 16 Introduction
16.2 Transactions and the Database Engine
16.3 Controlling Transactions
16.4 Course Wrap Up