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Computer Visions Course Outline

Get What You Want

We offer highly customizable group training courses: desktop applications, web development, networking & operating systems, technical certification, professional development & skills, help desk.

Get It When & Where You Want It

All Computer Visions courses are available for presentation on-site or off-site for your convenience. We can roll out any combination of courses at one or more locations anywhere in the United States, according to your requirements and time table. Just let us know and we'll work with you!

Corporate Training Solutions

Corporations look to us to train their employees. Why? Because our proven training methods have increased employee proficiency and productivity. We assign one person to each of our corporate clients to ensure quality service, and we also offer extranet Web registration, management, reporting and billing for all clients. Simplicity, quality and outstanding service are our hallmarks.

20761: Querying Data with Transact- SQL

Course Outline:

Module 1: Introduction to Microsoft SQL Server 2016

- The Basic Architecture of SQL Server
- SQL Server Editions and Versions
- Getting Started with SQL Server Management Studio

Module 2: Introduction to T-SQL Querying

- Introducing T-SQL
- Understanding Sets
- Understanding Predicate Logic
- Understanding the Logical Order of Operations in SELECT statements

Module 3: Writing Select Queries

- Writing Simple SELECT Statements
- Eliminating Duplicates with DISTINCT
- Using Column and Table Aliases
- Writing Simple CASE Expressions

Module 4: Querying Multiple Tables

- Understanding Joins
- Querying with Inner Joins
- Querying with Outer Joins
- Querying with Cross Joins and Self Joins

Module 5: Sorting and Filtering Data

- Sorting Data
- Filtering Data with Predicates
- Filtering with TOP and OFFSET-FETCH
- Working with Unknown Values

Module 6: Working with SQL Server 2016 Data Types

- Introducing SQL Server 2016 Data Types
- Working with Character Data
- Working with Date and Time Data

Module 7: Using DML to Modify Data

- Inserting Data
- Modifying and Deleting Data

Module 8: Using Built-In Functions

- Writing Queries with Built-In Functions
- Using Conversion Functions
- Using Logical Functions
- Using Functions to Work with NULL

Module 9: Grouping and Aggregating Data

- Using Aggregate Functions
- Using the GROUP BY Clause
- Filtering Groups with HAVING

Consulting Solutions

Consulting is about trust, service and accountability. Our consulting division is one of the fastest-growing around. Why? Clients trust us to provide excellent service and expertise. Visit our consulting section for more information.

Classroom and Computer Rentals

Need space and equipment to conduct specialized presentations or classes? We can help. With our world class classrooms and state of the art projection and presentation equipment, we take care of the details so you can have a successful presentation.

Module 10: Using Subqueries

- Writing Self-Contained Subqueries
- Writing Correlated Subqueries
- Using the EXISTS Predicate with Subqueries

Module 11: Using Table Expressions

- Using Views
- Using Inline Table-Valued Functions
- Using Derived Tables
- Using Common Table Expressions

Module 12: Using Set Operations

- Writing Queries with the UNION Operator
- Using EXCEPT and INTERSECT
- Using APPLY

Module 13: Using Windows Ranking, Offset, and Aggregate Functions

- Creating Windows with OVER
- Exploring Window Functions

Module 14: Pivoting and Grouping Sets

- Writing Queries with PIVOT and UNPIVOT
- Working with Grouping Sets

Module 15: Executing Stored Procedures

- Querying Data with Stored Procedures
- Passing Parameters to Stored procedures
- Creating Simple Stored Procedures
- Working with Dynamic SQL

Module 16: Programming with T-SQL

- T-SQL Programming Elements
- Controlling Program Flow

Module 17: Implementing Error Handling

- Implementing T-SQL error handling
- Implementing structured exception handling

Module 18: Implementing Transactions

- Transactions and the database engines
- Controlling transactions