Using SQL for Developers

Who would benefit?

The course is aimed at web and other developers who are using SQL Server for data-driven applications. This course is also applicable, and can be customised for, Microsoft Access or mySQL server .

This one day course provides an introduction to the SQL language, with an emphasis on the use of SQL in Microsoft SQL Server. By course completion, delegates should be confident to use SQL to write common queries to retrieve, input and update date in a multi-table, relational database such as SQL server.

Objective

The course also provides an explanation of common database concepts and tasks. It is not intended as a full introduction to database administration, but gives the information necessary for developers to use SQL for data-driven projects.

Content

- Relational Database Systems
    - Normalizing a Database
    - Overview of the SQL language
    - Overview of Transact-SQL
- Introduction to Microsoft SQL Server
    - Components of SQL Server
    - SQL Server database structure
    - Requirements for installing SQL Server
    - SQL Server management tasks
    - Enterprise Manager
- Designing and implementing databases
    - Database design issues
    - Create and maintain databases
    - Create and manage tables
- Using SQL Server Querying Tools
    - SQL Query Analyzer
    - Using the Object Browser Tool in SQL Query Analyzer
- Retrieving Data
    - Retrieve data by Using the SELECT Statement
    - Filter and search data
    - How queries are processed

- Grouping and Summarizing Data
    - TOP ten Values
    - Use aggregate functions
    - GROUP BY Fundamentals
    - Generate aggregate values within result sets
    - Group and summarize Data
- Joining Multiple Tables
    - Use aliases for table names
    - Combine data from multiple tables
    - Combine multiple result sets
    - Querying multiple tables
- Modifying Data
    - Insert, delete, update Data
    - Use transactions
- Introduction to Stored Procedures
    - Advantages of stored procedures
    - Introduction to stored procedures
- Backing up SQL Server databases
    - Plan and perform backups
    - Methods to restore databases
    - Restoring databases and transaction logs

Duration

One day