



SQL – Advanced Queries

Description

SQL Training: Master Advanced Database Management Techniques

Do you want to learn SQL and master advanced techniques to optimize your databases? Our SQL training guides you step by step through the key features of SQL Server. From developing views to managing partitions, including stored procedures and user-defined functions, this course provides all the skills you need to tackle complex data challenges.

With a practical and detailed approach, you will learn how to manage SQL transactions, implement triggers, and optimize performance through query plan analysis. Join us to build solid and lasting expertise, allowing you to handle your databases with efficiency and precision.

Course Content

Module 1 : Views

- Creating a new view
- Listing views in SQL Server
- Removing a view
- Creating an indexed view

Module 2 : Triggers

- Creating a trigger in SQL Server
- Creating a DDL trigger
- Disabling triggers
- Viewing the definition of a trigger
- Listing all triggers in SQL Server
- Removing triggers

Module 3 : Computed Columns

- Introduction to SQL Computed Columns
- Persisted computed columns
- Adding computed columns to a table

Module 4 : Stored Procedures

- Introduction to stored procedures
- Parameters
- Variables
- Output Parameters

Module 5 : User Defined Functions

- Introduction to SQL User Defined Functions
- Scalar Functions
- Table-Valued Functions
- System Functions

Module 6 : Transactions and Error Handling

- Introduction to SQL Transactions and Error Handling
- How to handle exceptions gracefully in stored procedures
- How to generate user-defined error messages
- Raising an exception and transferring the execution

Module 7 : SQL Grouping Sets and Common Table Expressions

- SQL Grouping Functions
- Introduction to SQL Ranking Functions
- What is a Common Table Expression?
- Non-Recursive CTEs
- Recursive CTE
- Multiple CTE

Module 8 : Partitions

- Introduction to SQL Partitions
- Creating Table Partitions
- Removing Table Partitions

Module 9 : Optimization

- Describe SQL Server query plans
- Explain estimated and actual query plans
- Identify problematic query plans
- Identify issues with a database design

Documentation

- Digital courseware included

Participant profiles

- Developers, administrators, and advanced users who have to implement complex queries with SQL Server

Prerequisites

- SQL user with a few years of experience in SQL or having taken the following course: [SQL - Fundamentals and Queries](#)

Objectives

- Use decisional grouping functions
- Implement analytical and windowing functions
- Use complex update commands with the MERGE instruction
- Insert, modify and delete data with INSERT, UPDATE, DELETE statements

Description

SQL Training - Advanced Queries

Niveau

Avancé

Classroom Registration Price (CHF)

2300

Virtual Classroom Registration Price (CHF)

2150

Duration (in Days)

3

Reference

SQL-02