

Seminar & Workshop: Relational Databases and Data Querying

Summary

- ✓ Course dates: December 06 – 07, 2024 and December 13 – 14, 2024
- ✓ Course duration: 3 days
- ✓ Language: English
- ✓ Location: Online
- ✓ Certificate: Certificate of Participation
- ✓ Format: Online
- ✓ Lecturer: Dr. Dina Deifallah
- ✓ Price: 1400 €

Course overview

Data fuels the contemporary world, serving as a cornerstone for virtually every business, be it an emerging startup or an established multinational corporation. The organization and utilization of this data in relational databases hinges on a particular programming language known as Structured Query Language or SQL. Mastering the ability to manipulate and retrieve data from databases using SQL is a crucial skill in data-centric roles and beyond.

Course content

Introduction to Relational Databases

- ✓ Definition of an RDB and applications
- ✓ MySQL Server and Workbench installation
- ✓ Difference between a RDB Server and RDB Management System
- ✓ Entity Relationship Model (ERM) and Cardinality
- ✓ Primary and Foreign Keys
- ✓ RDB Normalization

Fundamental SQL Queries

- ✓ Create, update and delete databases and tables
- ✓ Basic structure of an SQL query
- ✓ Limiting and Sorting
- ✓ Filtering
- ✓ Joining tables
- ✓ Aggregation functions
- ✓ Saving results in flat files

Advanced SQL Queries

- ✓ CASE statements
- ✓ Correlated Subqueries
- ✓ Nested Subqueries
- ✓ Common Table Expressions
- ✓ Window functions
- ✓ Saving results in Views

Throughout the course, participants will use the Northwind Traders database as a case study. The primary software tools used in this course will be MySQL Server and MySQL Workbench.

Dates

December 06 – 07, 2024 and December 13 – 14, 2024 (virtual classroom sessions).
Expected hours on Fridays from 15:00 - 19:00 (CET) and on Saturdays from 10:00 - 18:00 (CET).

Booking and contact

Register here: <https://www.academy-tu.berlin/en/courses/short-courses>

Should you have any questions, please contact the TU Berlin Academy Team at: +49 30 4472 0232 or via email: info@academy-tu.berlin. We hope to see you in Berlin - or online - very soon!