



MySQL for Beginners

Duration: 4 days

Course description:

This instructor led, hands-on class covers the fundamentals of SQL and relational databases, using MySQL as a teaching tool. Students who can benefit from this course are new or existing users of MySQL, who have little or no previous experience with a relational database management system.

Course topics:

Introduction

- MySQL Product
- MySQL Services and Support
- MySQL Resources
- Example Databases

MySQL Server and Client

- The client/server model overview
- Communication protocols
- Connectors and MySQL
- The LAMP Stack
- Installation of the MySQL server
- MySQL Server and Client Startup



Database Basics

- Basics of Relational Databases
- SQL Language and MySQL

Database Design

- Database Modeling
- Keys
- Normalization

Table Data Types

- Data Types
- Numeric Data Types
- Temporal Data Types
- Character String Data Types
- The Meaning of Null

Database and Table Creation

- Database Structure Creation
- Database Creation
- Table Creation

Basic Queries

- The SELECT Statement
- MySQL Workbench for SQL Development
- Troubleshooting

Database and Table Maintenance

- Deleting an Entire Database
- Maintaining Tables
- Maintaining Columns
- Indexes and Constraints



Table Data Manipulation

- Delete/Modify Table Row Data
- The INSERT Statement
- The REPLACE Statement
- The UPDATE Statement
- The DELETE Statement

Functions

- Simple Functions
- Grouping with Functions

Joining Tables

- Combining Multiple Tables
- Inner Joins
- Outer Joins

Table Queries

- What is a Subquery
- Categories of Subqueries
- Subquery Types
- Placing Subqueries
- Other Subquery Uses
- Converting Subqueries to Joins

Exporting and Importing Data

- Exporting Data
- Importing Data

MySQL GUIs

- MySQL Enterprise Monitor
- MySQL Workbench



Supplemental Information

- Creating Views
- Transaction
- Storage Engines
- Retrieving Metadata
- Performance Schema
- MySQL Enterprise Backup