

# OMYS-3 - MYSQL 8.0 FOR DEVELOPERS

Categoria: **MySQL**

## INFORMAZIONI SUL CORSO



**Durata:**  
5 Giorni



**Categoria:**  
MySQL



**Qualifica Istruttore:**  
Oracle Certified  
Professional



**Dedicato a:**  
Sviluppatore



**Produttore:**  
Oracle

## OBIETTIVI

- Capire le misure necessarie per invocare programmi client MySQL
- Utilizzare il generico programma client mysql e il MySQL Query Browser interfaccia utente grafica (GUI) per eseguire query e recuperare i risultati
- Selezionare il miglior tipo di dati per rappresentare informazioni in MySQL
- Gestire le caratteristiche strutturali dei database e le tabelle nel database
- Utilizzare l'istruzione SELECT per recuperare informazioni da tabelle di database
- Utilizzare espressioni nelle query SQL per ottenere informazioni piÃ¹ dettagliate
- Utilizzare le istruzioni SQL per modificare i contenuti delle tabelle del database
- Scrivi unire espressioni nelle istruzioni SQL per ottenere informazioni da piÃ¹ tabelle
- Utilizzare subquery nelle istruzioni SQL
- Creare viste utilizzando istruzioni SELECT per produrre tavoli virtuali di dati specifici
- Eseguire l'importazione di massa di dati e le operazioni di esportazione
- Creare variabili definite dall'utente, istruzioni preparate e routine memorizzate
- Creare e gestire trigger
- Utilizzare il database INFORMATION\_SCHEMA per accedere ai metadati
- Debug di applicazioni MySQL
- Configurare e ottimizzare MySQL

## PREREQUISITI

Some experience with Relational Databases and SQL

## CONTENUTI

### 1: Introduction to MySQL

- Introduction to MySQL
- Practice 0-1: Course Overview Environment
- Practice 1-1: Course Environment

### 2: Connectors and APIs

- Connectors and APIs
- Practice 2-1: Quiz

### **3: Using Connectors**

- Using Connectors
- Connection Pooling
- Practice 3-1: Connecting to the MySQL Server in a Web Environment with PHP/PDO
- Practice 3-2: Connecting to the MySQL Server in a Web Environment with Connector/J
- Practice 3-3: Connecting to the MySQL Server in a Web Environment with Connector/Python
- Practice 3-4: Executing SQL in a Web Environment with PHP/PDO
- Practice 3-5: Executing SQL in a Web Environment with Connector/J
- Practice 3-6: Executing SQL in a Web Environment with Connector/Python

### **4: Prepared Statements**

- Prepared Statements
- Practice 4-1: Preparing Statements in MySQL
- Practice 4-2: Using Prepared Statements with PHP/PDO
- Practice 4-3: Using Prepared Statements with Connector/J
- Practice 4-4: Using Prepared Statements with Connector/Python

### **5: Handling Errors and Warnings**

- Handling Errors and Warnings
- Practice 5-1: Quiz – Handling Errors
- Practice 5-2: Identifying Errors and Warnings with the mysql Command-Line Client
- Practice 5-3: Handling Errors and Warnings When Coding with PHP/PDO
- Practice 5-4: Handling Errors and Warnings When Coding with Connector/J
- Practice 5-5: Handling Errors and Warnings When Coding with Connector/Python

### **6: Creating Database-Driven Web Applications**

- Creating Database-Driven Web Applications
- Web Forms
- Practice 6-1: Displaying Query Results in a Table Using PHP/PDO
- Practice 6-2: Displaying Query Results in a Table Using Java/JSP
- Practice 6-3: Displaying Query Results in a Table Using Python
- Practice 6-4: Paging Query Results Using PHP/PDO
- Practice 6-5: Paging Query Results Using Java/JSP
- Practice 6-6: Paging Query Results Using Python
- Practice 6-7: Enabling Sorting of Query Results Using PHP/PDO
- Practice 6-8: Enabling Sorting of Query Results Using Java/JSP
- Practice 6-9: Enabling Sorting of Query Results Using Python

### **7: Working with Views**

- Working with Views
- Practice 7-1: Creating a View
- Practice 7-2: Updating a View
- Practice 7-3: Checking a View
- Practice 7-4: Obtaining View Metadata
- Practice 7-5: Creating, Updating, and Querying Multiple-table Views

## 8: Working with Strings

- Working with Strings
- Practice 8-1: Manipulating String Data with MySQL Expressions
- Practice 8-2: Matching Patterns in Strings
- Practice 8-3: Using Full-Text Searches

## 9: Working with Numeric and Temporal Data

- Working with Numeric and Temporal Data
- Practice 9-1: Using Numeric Data in SQL Expressions
- Practice 9-2: Using Temporal Data in SQL Expressions
- Practice 9-3: Using Control Flow Functions in SQL Expressions

## 10: Transactions

- Transactions
- Consistency Issues
- Practice 10-1: Quiz—Transactions, Isolation Levels, and Locking
- Practice 10-2: Examining the Effect of Isolation Levels in Concurrent Transactions
- Practice 10-3: Using Transactional Statements with PHP/PDO
- Practice 10-4: Using Transactional Statements with Connector/J
- Practice 10-5: Using Transactional Statements with Connector/Python

## 11: Optimizing Queries

- Optimizing Queries
- Using EXPLAIN to Analyze Queries
- Practice 11-1: Quiz – Optimization
- Practice 11-2: Managing Table Indexes
- Practice 11-3: Optimizing Queries Using Indexes
- Practice 11-4: Rewriting Queries for Optimization
- Practice 11-5: Identifying and Fixing Slow Queries with MySQL Enterprise Monitor Query Analyzer

## 12: Stored Routines

- Stored Routines
- Control Flow Statements
- Practice 12-1: Creating Simple Stored Routines
- Practice 12-2: Creating Stored Routines with Compound Statements
- Practice 12-3: Creating Stored Routines with Parameters
- Practice 12-4: Examining Stored Routines Metadata
- Practice 12-5: Deleting and Recreating a Stored Routine
- Practice 12-6: Creating Stored Routines with Control Flow Statements
- Practice 12-7: Working with Conditions and Handler in Stored Routines
- Practice 12-8: Working with Cursors in Stored Routines
- Practice 12-9: Creating a Functional Library

## 13: Triggers and Scheduled Events

- Triggers and Scheduled Events
- Using OLD and NEW Qualifiers
- Practice 13-1: Creating and Dropping Triggers
- Practice 13-2: Investigating Triggers in the sakila Database
- Practice 13-3: Creating a Scheduled Event

## 14: Reporting

- Reporting
- Materialized Views
- Practice 14-1: Aggregating Data
- Practice 14-2: Grouping Aggregated Data
- Practice 14-3: Using Window Functions
- Practice 14-4: Creating a Crosstab Report with a Bar Chart

## 15: Spatial Data

- Spatial Data
- Practice 15-1: Creating Spatial Data
- Practice 15-2: Using Spatial Indexes for Analysis

## 16: JSON Data

- JSON Data
- Practice 16-1: Creating and Querying JSON Data
- Practice 16-2: Updating JSON Data
- Practice 16-3: Indexing JSON Data

## 17: Document Store

- Document Store
- Using X DevAPI with Connector/J to Access a Document Store
- Practice 17-1: Accessing JSON in MySQL Shell
- Practice 17-2: Accessing JSON by Using X DevAPI with PHP
- Practice 17-3: Accessing JSON by Using X DevAPI with Connector/J
- Practice 17-4: Accessing JSON by Using X DevAPI with Connector/Python
- Practice 17-5: Accessing JSON by Using Python Statements in MySQL Shell

## INFO

**Materiale didattico:** Materiale didattico ufficiale Oracle in formato digitale. Il materiale didattico è compreso nel prezzo sia per i corsi a Calendario sia per quelli Dedicati.

**Costo materiale didattico:** incluso nel prezzo del corso a Calendario

**Natura del corso:** Operativo (previsti lab su PC)