



KIDS & TEENS FREELANCING TRAINING INSTITUTE

MySQL Course Outline

Module 1: What is MySQL?

- Introduction to MySQL as a popular relational database
 - Real-life example: Managing an online store's product catalog
 - How MySQL is used in websites and apps
 - Setting up MySQL on your computer
 - Activity: Install MySQL and explore the interface
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Module 2: Creating and Managing Databases

- Creating a database and understanding database structure
 - Real-life example: Creating a database for a school
 - Creating tables, defining columns and data types
 - Activity: Create a new database and table in MySQL
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Module 3: Inserting and Viewing Data

- Adding new data using INSERT statements
 - Viewing data using SELECT statements
 - Real-life example: Storing customer orders and viewing purchase history
 - Activity: Insert data into tables and view using SELECT
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Module 4: Filtering and Sorting in MySQL

- Using WHERE, ORDER BY, AND, OR, NOT
- Sorting data for better analysis
- Real-life example: Find all orders above \$100 and sort by date
- Activity: Write filtered and sorted queries in MySQL

Module 5: Updating and Deleting Data

- Making changes to existing data with UPDATE
 - Removing records using DELETE
 - Real-life example: Updating prices or deleting outdated records
 - Activity: Practice updating and deleting sample entries
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Module 6: Using Joins for Multiple Tables

- Connecting tables with JOINS
 - Real-life example: Linking customers to their orders
 - Using INNER, LEFT, RIGHT JOIN in MySQL
 - Activity: Write JOIN queries using multiple tables
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Module 7: Functions and Data Analysis

- Using MySQL functions (SUM, COUNT, AVG, MAX, MIN)
 - GROUP BY and HAVING for grouped analysis
 - Real-life example: Find total sales per month
 - Activity: Analyze data using aggregation functions
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Module 8: MySQL Security and Administration

- Setting up users and permissions
 - Real-life example: Giving different access to staff and admins
 - Backups, data recovery, and managing large databases
 - Activity: Create a new user and assign permissions
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Bonus Materials

- MySQL Workbench and PHPMysqlAdmin guide
- Real-world sample projects (inventory, blog, booking system)
- Quick reference sheet for SQL commands
- Certificate of Completion for MySQL Fundamentals

