l ab 1

Al-Mustaqbal University

Database Management Systems

**College of Sciences** Intelligent Medical Systems Department

# **Overview & MySQL Installation**

# **Introduction:**

This lecture provides an introduction to Structured Query Language (SQL) and MySQL, focusing on their significance, basic concepts, and key features.

## **Understanding SQL:**

Definition: SQL is a standardized programming language used for managing and manipulating relational databases.

Importance: SQL is essential for interacting with databases, enabling users to perform various operations such as querying, updating, and managing data.

Types of SQL Commands: SELECT, INSERT, UPDATE, DELETE, CREATE, DROP, etc. WINERSIT

#### **Introduction to MySQL:**

Definition: MySQL is an open-source relational database management system (RDBMS) that uses SQL as its query language.

Features: Scalability, reliability, ease of use, platform independence, and extensive community support.

Asst. Lect. Mustafa Yousuf Saed

Programmer Fatima Thaer Sachit

**Application:** Widely used in web development, enterprise applications, and datadriven projects.

### **Basic Concepts of Databases:**

**Definition:** A database is an organized collection of structured data stored electronically.

**Components:** Tables, rows, columns, keys (primary, foreign), indexes, and constraints.

**Relational Databases:** Data stored in tables with defined relationships between them.

# **MySQL Installation and Setup:**

Downloading and installing MySQL Server and MySQL Workbench.

CTAOBAL UNIVERSIT

Asst. Lect. Mustafa Yousuf Saed

Programmer Fatima Thaer Sachit