

MYSQL:

Database: It is an application which stores a collection of data.

MYSQL:

- Mysql is an open-source relational database management system(RDBMS) that is widely used to store, retrieve and manage data.
- It is one of the most popular database systems, especially used in web development, due to its reliability, speed and ease of use.
- MySQL uses the SQL language to manage database and perform the tasks.
- MySQL is free and open-source.
- Ideal for both small and larger projects.
- MySQL was first released in 1995.
- MySQL is compliant with the ANSI SQL standard.
- It is a part of LAMP(Linux,Apache,MySQL,Perl/Python/PHP).

Features of MySQL:

- Open-Source: MySQL is an open-source, and it's source code is available for modification.
- Cross-Platform: It works on different platforms.
- Speed and Reliability: Known for fast data handling.
- Scalability: Can be able to handle small-large projects.

Folder: Collection of multiple files.

File: Stores single structured data.

Excel:

- Secured way to store the data.
- Used before the database.

DBMS VS RDBMS:

<u>DBMS</u>	<u>RDBMS</u>
<ul style="list-style-type: none">• Stores data in different formats.	<ul style="list-style-type: none">• Stores data in tables with rows and columns.
<ul style="list-style-type: none">• No relation between data.	<ul style="list-style-type: none">• Relation exists between tables using keys.
<ul style="list-style-type: none">• Doesn't support Normalization.	<ul style="list-style-type: none">• Supports Normalization.
<ul style="list-style-type: none">• May or may not use SQL.	<ul style="list-style-type: none">• Uses SQL as a standard.
<ul style="list-style-type: none">• Lack of Data Integrity.	<ul style="list-style-type: none">• Enforces data integrity.
<ul style="list-style-type: none">• Doesn't support transactions.	<ul style="list-style-type: none">• Supports ACID transactions.
<ul style="list-style-type: none">• Doesn't have a specific structure to the data.	<ul style="list-style-type: none">• Have a specific structure to the data - Schemas
<ul style="list-style-type: none">• Ex: File systems,IMS,DMS	<ul style="list-style-type: none">• Ex: MySQL,Oracle,SQL Server

Who Uses MySQL:

- Web Developers.
- Huge Organisations like Facebook,YouTube..,

Database Componenets:

- Client: It is an application that is used to gather customer information.
- Server: It is a type of hardware that runs the software.
 - It can be Online/ Offline.
- Databases: MySQL and Oracle.
- Interface: CLI-Command Line Interface
 - GUI-Graphical User Interface.

MySQL Data Types:

- Int
- Decimal
- Varchar
- Boolean
- Bit
- String
- Double
- Date
- Datetime