MYSQL Database

1.Database

DEFINITION/WHAT

The database is a collection of inter-related data which is used to retrieve, insert and delete the data efficiently. It is also used to organize the data in the form of a table, schema, views, and reports, etc.

NEED/WHY

- ✓ Need 1:To store in structured format
- ✓ It provides protection and security. In the case of multiple users, it also maintains data consistency

IMPLEMENTATION/HOW IT WORKS

Create database <<databasename>>

REAL TIME EXAMPLE

To Store employee information in employee DB

ADDITIONAL INFORMATION

Database management system is a software which is used to manage the database. For example: MySQL, Oracle, etc are a very popular commercial database which is used in different applications.

2. RDBMS

DEFINITION/WHAT

RDBMS stands for *Relational Database Management Systems* . Data is represented in terms of tuples (rows) in RDBMS. It contains number of tables and each table has its own primary key.

NEED/WHY

- ✓ Need 1: collection of organized set of tables, data can be accessed easily in RDBMS

REAL TIME EXAMPLE

Oracle,MYSQL, MS SQL Server, IBM DB2,etc.,

ADDITIONAL INFORMATION

RDBMS is an extension of DBMS

3. SQL

DEFINITION/WHAT

SQL stands for Structured Query Language

SQL is a standard language for storing, manipulating and retrieving data in databases

NEED/WHY

- ✓ Need 1: used to communicate with a database

4. SQL Commands

DEFINITION/WHAT

1. Data definition Language (DDL)-DDL changes the structure of the table like creating a table, deleting a table, altering a table, etc. All the command of DDL are auto-committed that means it permanently save all the changes in the database.Eg: create, alter, drop, truncate

2. Data Manipulation Language (DML)-DML commands are used to modify the database. It is responsible for all form of changes in the database. The command of DML is not auto-committed that means it cannot permanently save all the changes in the database. They can be rollback.Eg:insert,update,delete

3. Data Control Language(DCL)-DCL commands are used to grant and take back authority from any database user.Eg:grant,revoke

4.Transaction Control language(TCL)-TCL commands can only use with DML commands like INSERT, DELETE and UPDATE only.Eg:commit,rollback,savepoint.

5.Data Query language(DQL)- DQL is used to fetch the data from the database.Eg:select

NEED/WHY

- ✓ Need 1: It is also used to perform specific tasks, functions, and queries of data.