Introduction to MySQL

Relevel
by Unacademy

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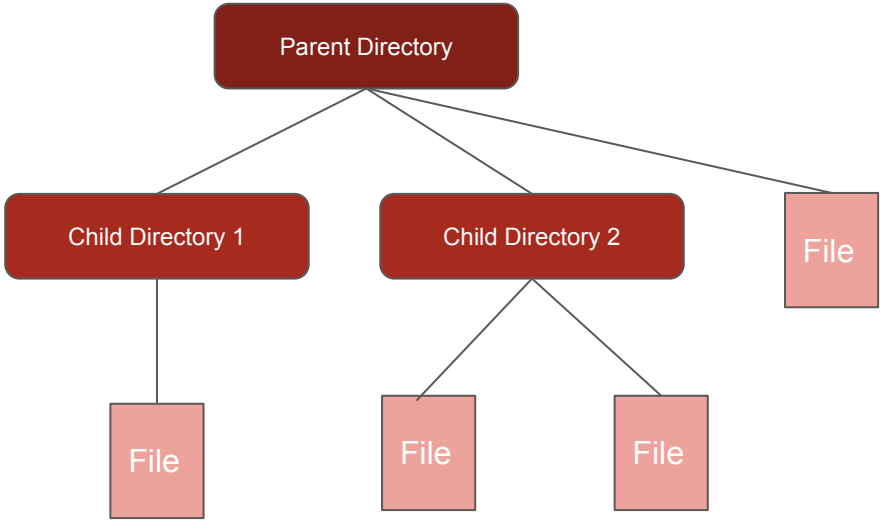
  - Data Control Language (DCL)
  - Transaction Control Language (TCL)

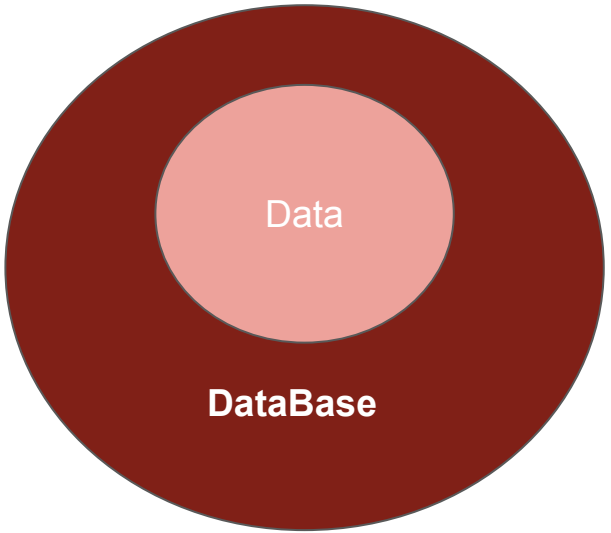
FileSystem

- to retrieve the files from the storage device and store them in an organized manner
- consisted of different files which were grouped in directories and the directories had subfolders as well

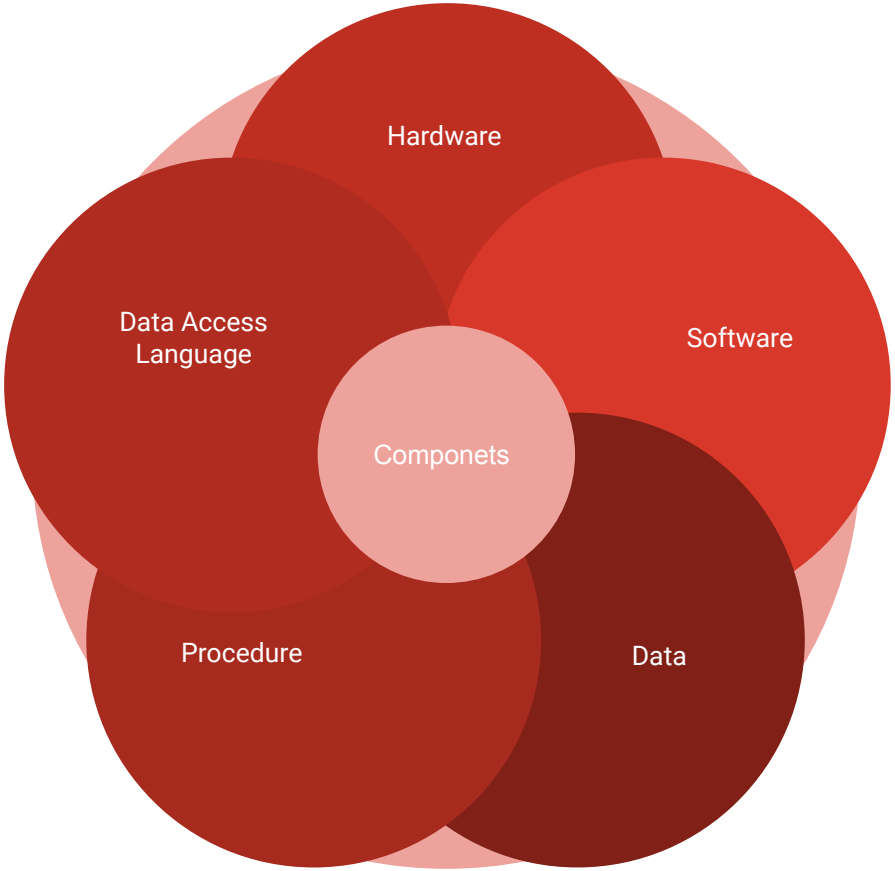


Introduction Database

Database is the collection of data in an organized manner, allowing us to manage and access them with ease. These data can be facts related to any object such as name, age, date of birth, address, etc. of type bytes, numbers, text, media, etc.

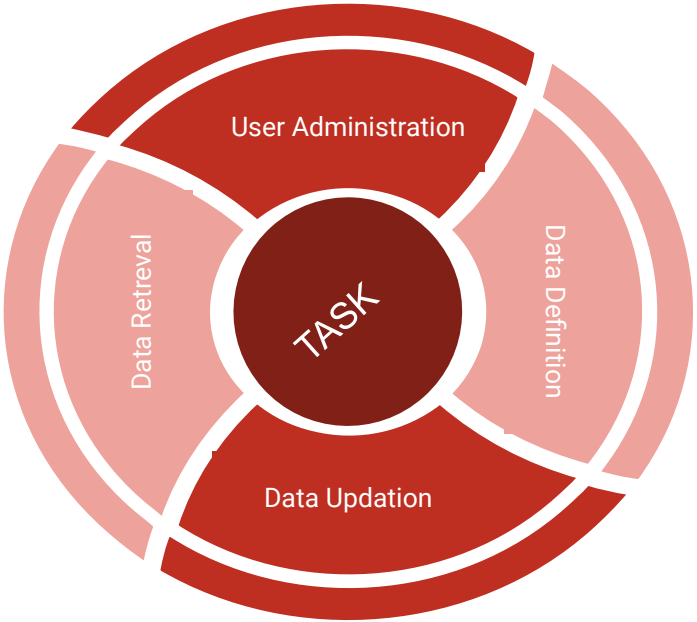


Component of Database



DBMS: Database Management System

It's a collection of programs that allows the user to access databases and perform manipulation on data efficiently as it organizes these data in the form of Schema, table, reports, etc, and provides security and consistency to the data.



Types of Database

- Centralized Database: Has one database with multiple users
- Distributed Database : Has multiple database with multiple users
- Personal Database : Single database with single user
- End User Database: Specific to the role of the user accessing the database
- Commercial Database: User needs to pay in order to access the data.
- Relational Database: Multiple tables with relations between them.
- Cloud Database: It is stored on the cloud for virtual environments.
- Object Oriented Database: Combination of OOPs and relational database.

MySQL

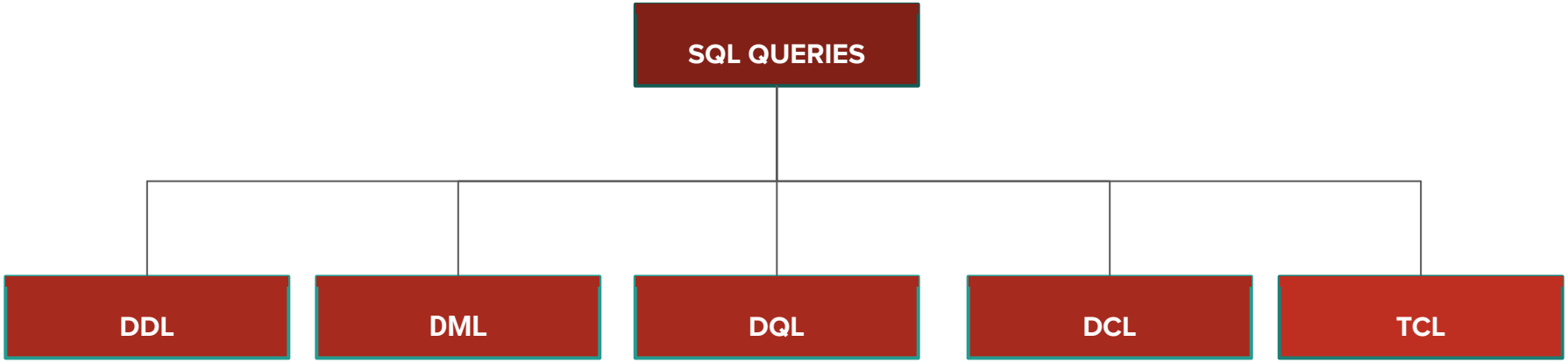
MySQL is an RDBMS that provides an implementation for the SQL database with tables, rows, columns and indexes. It's an open source software with a wide community support over the globe.

Characteristics

1. Highly Scalable and Flexible
2. Highly Available
3. Strong Data Protection
4. High Performance
5. Ease of maintenance
6. Cheaper compared to other database
7. Open Source

MySQL Queries

MySQL Queries are used for the creation of databases, tables, insertion/ modification/ removal of records, etc.

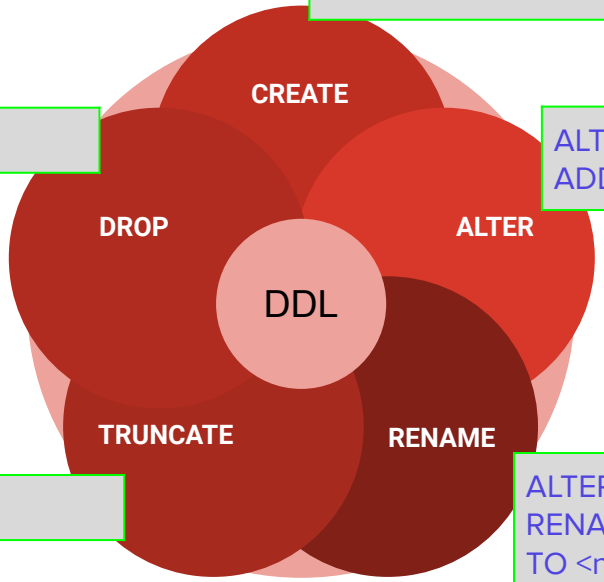


Data Definition Language (DDL)

CREATE TABLE <table_name>;

DROP TABLE IF EXISTS <table_name> ;

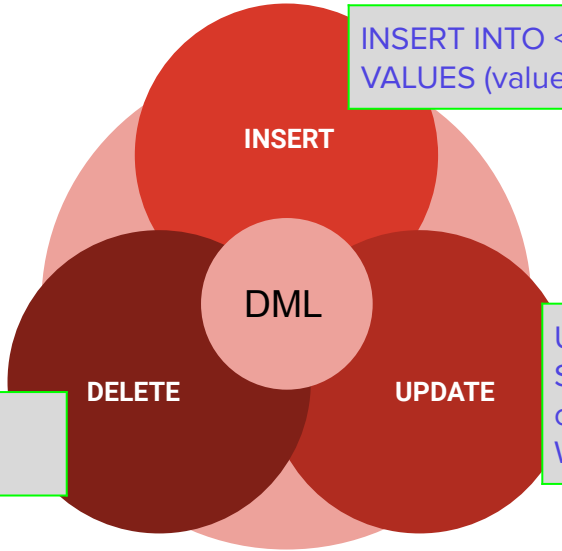
ALTER TABLE <table_name>
ADD COLUMN <column_name> ;



TRUNCATE TABLE <table_name> ;

ALTER TABLE <table_name>
RENAME COLUMN <column_name>
TO <new_column_name> ;

Data Manipulation Language (DML)



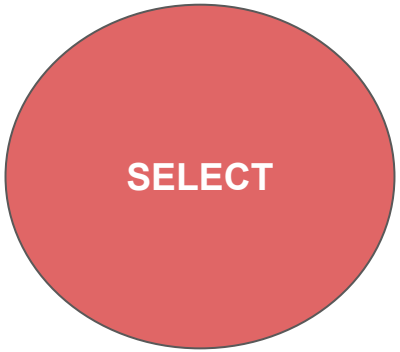
INSERT INTO <table_name> (column1, column2, ...);
VALUES (value1, value2, ...);

DELETE TABLE <table_name>

DELETE FROM <table_name> WHERE condition;

UPDATE <table_name>
SET column1=value1,
column2=value2,....
WHERE condition;

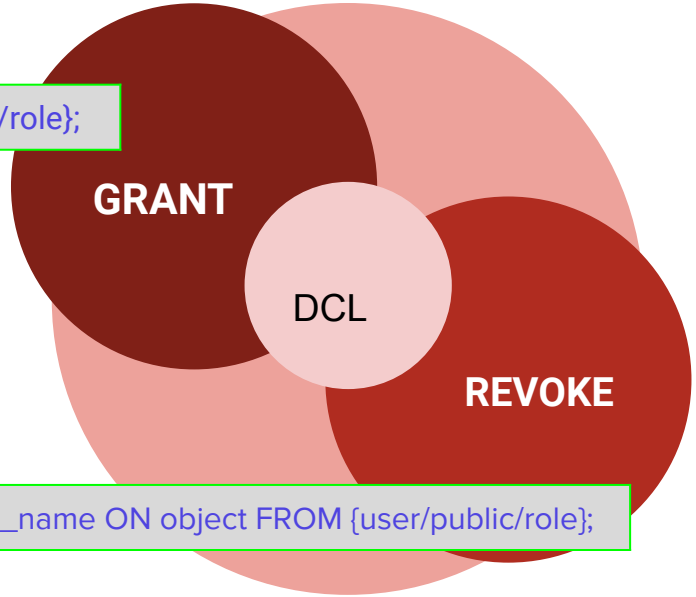
Data Query Language (DQL)




```
SELECT * FROM <table_name>;
```

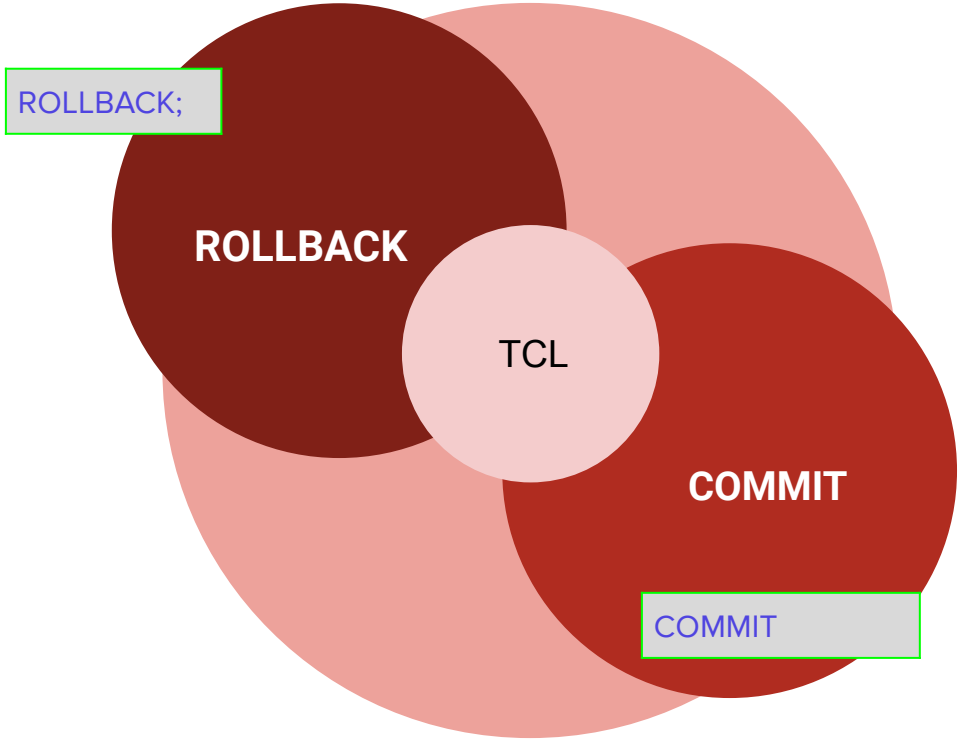
Data Control Language (DCL)

GRANT privilige_name ON object TO {user/public/role};



REVOKE privilige_name ON object FROM {user/public/role};

Transaction Control Language (TCL)



Thank You