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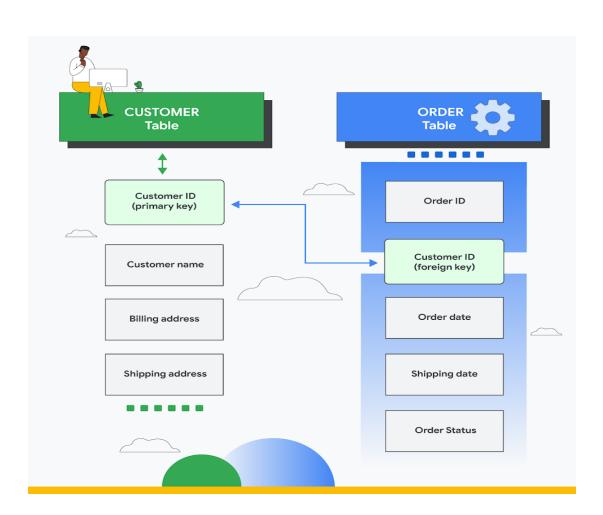
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**COURCE: Diploma in software testing** 

**ASSIGNMANT: Modul 3 (testing on live application)** 

#### 1. What is RDBMS?

RDBMS stands for Relational Database Management Systems. It is a program that allows us to create, delete, and update a relational database. A Relational Database is a database system that stores and retrieves data in a tabular format organized in the form of rows and columns. It is a smaller subset of DBMS which was designed by E.F Codd in the 1970s. The major DBMSs like SQL, MY-SQL and ORECAL are all based on the principles of relational DBMS.



### 2. What is SQL?

Structured query language (SQL) is a programming language for storing and processing information in a relational database. A relational database stores information in tabular form, with rows and columns representing different data attributes and the various relationships between the data values. You can use SQL statements to store, update, remove, search, and retrieve information from the database. You can also use SQL to maintain and optimize database performance.

#### Database

Table

Columns (Field)

Records(rows)

e.g.

Database: Employee\_db

Table: Employee

Emp id Emp Name Salary Dept

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### 3. Write SQL Commands?

SQL stands for Structured Query Language SQL is a standard language for storing, manipulating and retrieving data in databases. SQL

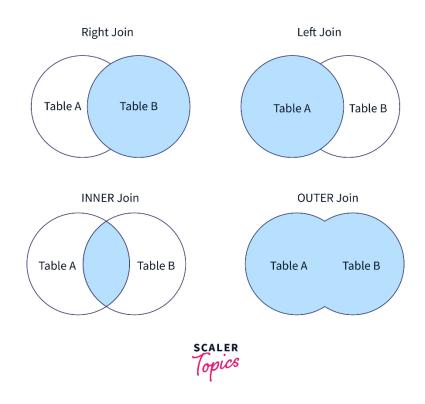
allows you to access and manipulate the databases. To use SQL in: MySQL, SQL Server, MS Access, Oracle, Sybase, Informix, Postgres, and other database systems.

These SQL commands are mainly categorized into five categories –

- 1. DDL Data Definition language
- 2. DQL Data Query Language
- 3. DML Data manipulation language
- 4. DCL Data Control language
- 5. TCL Transaction control language

## 4. What is join?

A JOIN clause is used to combine rows from two or more tables, based on a related column between them.



# 5. Write type of joins.

There are four main types of JOINs in SQL:

INNER JOIN,

OUTER JOIN,

CROSS JOIN,

SELF JOIN.

However, remember that OUTER JOINS have two subtypes: LEFT OUTER JOIN and RIGHT OUTER JOIN.

6. How Many constraints and describes itself.

Constraints are used to limit the type of data that can go into a table. This ensures the accuracy and reliability of the data in the table. If there is any violation between the constraint and the data action, the action is aborted.

Constraints can be column level or table level. Column level constraints apply to a column, and table level constraints apply to the whole table.

The following constraints are commonly used in SQL:

- NOT NULL Ensures that a column cannot have a NULL value
- UNIQUE Ensures that all values in a column are different

- PRIMARY KEY A combination of a NOT NULL and UNIQUE.
   Uniquely identifies each row in a table
- FOREIGN KEY Prevents actions that would destroy links between tables
- CHECK Ensures that the value in a column satisfies a specific condition
- DEFAULT Sets a default value for a column if no value is specified
- CREATE INDEX Used to create and retrieve data from the database very quickly

# 7. Difference between RDBMS vs DBMS:

DBMS	RDBMS
DBMS stores data as file.	RDBMS stores data in tabular form.
Data elements need to access individually.	Multiple data elements can be accessed at the same time.
No relationship between data.	Data is stored in the form of tables which are related to each other.
Normalization is not present.	Normalization is present.
DBMS does not support distributed database.	RDBMS supports distributed database.
It stores data in either a navigational or hierarchical form.	It uses a tabular structure where the headers are the column names, and the rows contain correspond values.

### 8. What is API Testing?

Application Programming Interface testing, is a software testing process that verifies the functionality, security, performance, and reliability of an API:

#### What it does

API testing involves sending requests to an API and checking the responses to ensure they match the expected results.

### • Why it's important

API testing is critical for automating testing because APIs are the primary interface to application logic. It can also help improve the efficiency of your testing strategy and deliver software faster.

### How it works

API testing can be performed directly on the API or as part of integration testing.

## Types of API

testing There are many types of API testing, including validation testing and UI testing.



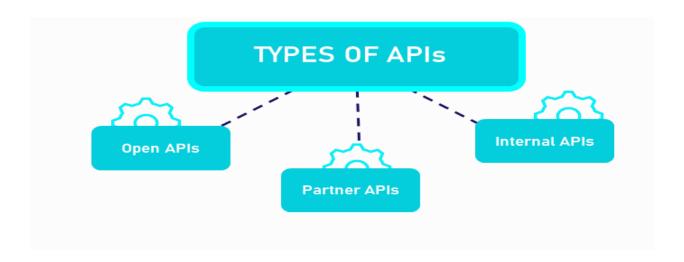
# 9. Types of API Testing?

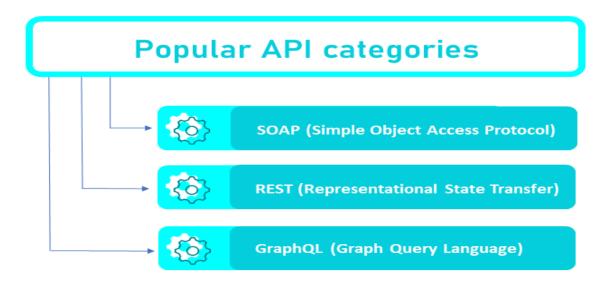
Mainly 3 types of API Testing:

# ➤ Open APIs:

These types of APIs are publicly available to use like OAuth APIs from Google. It has also not given any restriction to use them. So, they are also known as Public APIs.

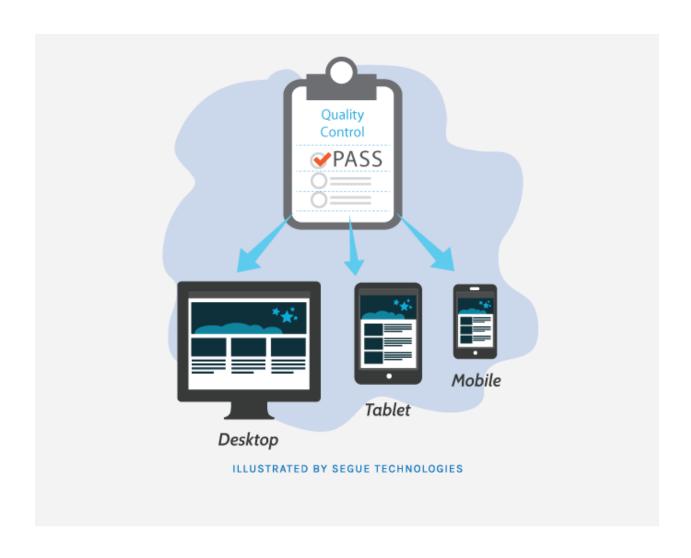
- ➤ Partner APIs: Specific rights or licenses to access this type of API because they are not available to the public.
- ➤ Internal APIs: Internal or private. These APIs are developed by companies to use in their internal systems. It helps you to enhance the productivity of your teams.





### 10. What is Responsive Testing?

Responsive testing involves how a website or web application looks and behaves on different devices, screen sizes, and resolutions. The goal of responsive testing is to ensure that the website or web application can be used effectively on various devices, including desktops, laptops, tablets, and smartphones.



- 11. Which types of tools are available for Responsive Testing?

  Responsive Testing Tools -
  - > LT Browser
  - > Lambda Testing
  - ➤ Google Resizer
  - > am I responsive
  - > Pixel tuner
- 12. What is the full form of. ipa, .apk?
  - ipa iOS package App, international phonetic alphabet
  - apk Android Application Package
- 13. How to create step for to open the developer option mode ON?
- Step 1: Go to Settings >my Phone.
- Step 2: Tap Software Info > Build Number.
- Step 3: Tap Build Number seven times. After the first few taps, you should see the steps counting down until you unlock the developer options. You may also have to tap in your PIN for verification.

Step 4: Once developer options are activated, you will see a message that reads, you are now a developer.

Step 5: Go back to the Settings pane, where you will now find Developer options as an entry.

Step 6: Tap it and toggle (USB debugging) the switch on if it is not already, and from there, you can proceed to make adjustments to your phone.

