

Testing On Live Application Assignment

(Module-4)

1. What is RDBMS?

Relational Database Management System is a program that maintains a relational database, which is a collection of organized tables that are linked together and can be easily accessed.

2. What is SQL?

SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in relational database.

3. Write SQL Commands.

There are four types of SQL Commands:

DDL- Data Definition Language

DML- Data Manipulation Language

DCL- Data Control Language

DQL- Data Query Language

4. What is join?

Joins in a Database (SQL) are mostly used for combining data or the rows of two or more table records that are based on the same or common attribute.

5. Write type of joins.

There are four types of joins in SQL:

- INNER JOIN: Returns rows when there is a match in both tables.
- LEFT JOIN: Returns all rows from the left table, even if there are no matches in the right table.
- RIGHT JOIN: Returns all rows from the right table, even if there are no matches in the left table.
- FULL JOIN: Returns rows when there is a match in one of the tables.

6. How Many constraints and describes itself.

6 Different Types of Constraints in SQL:

a) NOT NULL:

- Applied only on the column level
- By default, any column can have a NULL values
- It restricts the columns in a table from having NULL values

b) Unique:

- This applies on both table and column level
- It ensures that the column has only unique values

c) Default:

- This applies on both table and column level
- It provides a default value for a column if no value is assigned

d) Check:

- This applies on both table and column level

- It is used to restrict the value of a column between a range
 - It is similar to data validation in Excel
- e) Primary Key:
- This applies on both table and column level
 - The primary Key constraint is a combination of both UNIQUE and NOT NULL constraints.
 - It helps to retrieve query results from the table.
 - Only one PRIMARY KEY can be created per table
- f) Foreign Key:
- This applies on both table and column level
 - It is used to relate two or more tables and prevents the operation that destroys the link between the tables.
 - A foreign key can be a primary key if the table is connected by a one-to-one relationship, not a one-to-many relationship.
 - Multiple foreign keys can be created per table

7. Difference between RDBMS vs DBMS

DBMS	RDBMS
1.DBMS stores data as file	RDBMS stores data in tabular form
2. Data elements need to access individually.	Multiple data elements can be accessed at the same time
3. No relationship between data	Data is stored in the form of tables which are related to each other
4. DBMS does not support distributed database	RDBMS supports distributed database
5. 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 corresponding values
6. It deals with small quantity of data	It deals with large amount of data
7. Security is less	More security measures provided
8. It supports single user	It supports multiple users
9. Low software and hardware necessities	Higher software and hardware necessities.
10. Examples: XML, Window Registry, Forxpro, dbaseIIplus etc.	Examples: MySQL, PostgreSQL, SQL Server, Oracle, Microsoft Access etc.

8. What is API Testing?

Application Programming Interface (API) is a software interface that allows two applications to interact with each other without any user intervention.

9. Types of API Testing?

There are mainly 3 types of API Testing

- a) **Open API's:** 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 API's.

- b) **Partner APIs:** Specific rights or licenses to access this type of API because they are not available to the public.
- c) **Internal API's:** 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 are

- LT Browser
- Lambda Testing
- Google Resizer
- I am responsive
- Pixel Tuner

12. What is the full form of .ipa, .apk?

.ipa stands for iOS AppStore Package

.apk stands for Android Application Package

13. How to create step for to open the developer option mode ON?

Step 1: Go to Settings > About phone.

Step 2: Scroll down to All specs.

Step 3: Tap MIUI version seven times. After the first few taps, you should see the steps counting down until you unlock the developer options.

14. To Check

- This applies on both table and column level
- It is used to restrict the value of a column between a range
- It is similar to data validation in Excel

Code:

```
CREATE TABLE Student
(
  Name VARCHAR(100) NOT NULL,
  Age INT(2) CHECK (Age >= 21)
);
```