Software Testing Assignment Rupali Barchha

**Module 3 (Testing On Live Application)**

1. **What is RDBMS?**

RDBMS stands for Relational Database Management System.

It’s most common type of DBMS used for working with data stored in multiple tables related to each other by means of shared keys.

The software used to store, manage, query and retrieve data stored in a relational database is called a relational database management system.

1. **What is SQL**

* SQL stands for Structured Query Language. SQL is a standard language for accessing and manipulating database.
* SQL lets you access and manipulate databases
* SQL became a standard of the American National Standards Institute (ANSI) IN 1986 and of the International Organization for standardization (ISO) in 1987

1. **Write SQL Commands**

SQL commands are the instruction used to communicate with a database to perform tasks, functions and queries with data.

**There are four types of SQL commands:**

1. DDL (Data Definition Language)
2. DML ( Data Manipulation Language)
3. DCL (Data Control Language)
4. TCL (Transaction Control Language)

Here is the list of basic SQL Commands: Select and From, Create, Alter table ,Check ,Where (and , or, In, between and like) ,Update , Group by , Having ,Average ,As ,Order by , Count ,Delete ,Join , Insert , Like

1. **What is join?**

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

1. **Write type of joins.**

Here are the different types of join:

* **Inner Join**: Returns records that have matching values in both tables.
* **Left outer join**: Returns all the records from left table, and the matched records form the right table.
* **Right outer join**: Returns all records form the right table, and the matched records for the left table
* **Full outer join**: Returns all records when there is a match in either left or right table.

1. **How many constraint and describes it self**

**Seven constraint are there in SQL**

1. **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

1. **Unique**

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

1. **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

1. **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

1. **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

1. **Default**

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

1. **Create INDEX**

* The CREATE INDEX constraint is used to make it easier for a database system to quickly retrieve data.
* This works like an index in a book where each page has its number or heading and you can find information faster by just looking at the numbers instead of reading through every single page one by one.

1. **Difference between RDBMS vs DBMS**

|  |  |
| --- | --- |
| **DBMS** | **RDBMS** |
| **DBMS** stores data as file. | **RDBMS** stores data in tabular form. |
| Only a single user is supported by DBMS | It may be used by numerous people |
| 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. |
| 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 corresponding values. |
| It deals with small quantity of data. | It deals with large amount of data. |
| Data redundancy is common in this model. | Keys and indexes do not allow Data redundancy. |
| It is used for small organization and deal with small data. | It is used to handle large amount of data. |
| Security is less | More security measures provided. |
| Data fetching is slower for the large amount of data. | Data fetching is fast because of relational approach. |
| Low software and hardware necessities. | Higher software and hardware necessities. |
| Examples:[XML](https://www.geeksforgeeks.org/xml-basics/), Window Registry, Forxpro, dbaseIIIplus etc. | Examples: [MySQL](https://www.geeksforgeeks.org/architecture-of-mysql/), [PostgreSQL](https://www.geeksforgeeks.org/what-is-postgresql-introduction/), [SQL](https://www.geeksforgeeks.org/what-is-sql/) Server, Oracle, Microsoft Access etc. |

1. **What is API testing?**

API testing is a type of software testing that analyzes an application program interface (API) to verify that it fulfills its expected functionality, security, performance and reliability. The tests are performed either directly on the API or as part of integration testing.

Or

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

Or

API (Application Programming Interface) is a computing interface which enables communication and data exchange between two separate software systems. The purpose of API Testing is to check the functionality, reliability, performance, and security of the programming interfaces.

1. **Types of API testing**

**There are mainly 3 types of API testing:**

1. **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.

1. **Partner APIs:**

Specific rights or licenses to access this type of API because they are not available to the public.

1. **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.

1. **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.

1. **Which types of tools are available for responsive testing?**

**Following tools are available for responsive testing:**

* LT Browser
* Lembda Testing
* Google Resizer
* am I responsive
* Pixel tuner

1. **What is the full form of .ipa , .apk**

* **.**IPA stands for iOS AppStore Package
* .APK stands for Android Application Package

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

**Steps to open the developer option mode on:**

1. Go to settings
2. Tap about device or about phone
3. Tap software information
4. Tap Build number seven times
5. Enter your pattern, PIN or password to enable the Developer options menu
6. The "Developer options" menu will now appear in your Settings menu. Or popup will come you are now an developer.