

Module-3 (Testing On Live Application)

1. What is RDBMS?

- RDBMS stands for Relational Database Management System. RDBMS is the basis for SQL, and for all modern database systems like MS SQL Server, IBM DB2, Oracle, MySQL, and Microsoft Access.
- A Relational database management system (RDBMS) is a database management system (DBMS) that is based on the relational model as Introduced by E. F. Codd.

2. What is SQL?

- SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in relational database.
- SQL is the standard language for Relation Database System. All relational database management systems like MySQL, MS Access, Oracle, Sybase, Informix, postgres and SQL Server use SQL as standard database language.
- Also, they are using different dialects, such as:
 - a) MS SQL Server using T-SQL, ANSI SQL
 - b) Oracle using PL/SQL,
 - c) MS Access version of SQL is called JET SQL (native format) etc.

3. Write SQL Commands

- SQL has four commands

1. DDL – Data Definition Language

- a. Create : Creates a new table ,a view of table , or other object in database
- b. Alter : Modifies an existing database object , such as a table
- c. Drop : Deletes an entire table , a view of a table or other object in the database.

2. DQL – Data Query Language

- a. Select : Retrieves certain records from one or more tables

3. DML – Data Manipulation Language

- a. Insert : Creates a record
- b. Update : Modifies records
- c. Delete : Deletes record

4. DCL – Data Control Language

- a. Grant : Gives a privilege to user
- b. Revoke : Takes back privileges granted from user

4. What is join?

- As the name shows, join means to combine something. In case of SQL, join means "to combine two or more tables".
- The SQL join clause takes records from two or more tables in a database and combines it together.

5. Write type of joins.

Ans :

i. Inner Join

- The most frequently used and important of the joins is the INNER JOIN. They are also referred to as an EQUIJOIN.
- The INNER JOIN creates a new result table by combining column values of two tables (table1 and table2) based upon the join-predicate. The query compares each row of table1 with each row of table2 to find all pairs of rows which satisfy the join-predicate. When the join-predicate is satisfied, column values for each matched pair of rows of A and B are combined into a result row.

⇒ **Syntax**

- `SELECT table1.column1, table2.column2...FROM table1 INNER JOIN table2 ON table1.common_field = table2.common_field;`

ii. Left Join

- The SQL LEFT JOIN returns all rows from the left table, even if there are no matches in the right table. This means that if the ON clause matches

0(zero) records in right table, the join will still return a row in the result, but with NULL in each column from right table.

- This means that a left join returns all the values from the left table, plus matched values from the right table or NULL in case of no matching join predicate.

⇒ **Syntax**

- `SELECT table1.column1, table2.column2...FROM table1 LEFT JOIN table2 ON table1.common_field = table2.common_field;`

iii. Right join

- The SQL RIGHT JOIN returns all rows from the right table, even if there are no matches in the left table. This means that if the ON clause matches 0(zero) records in left table, the join will still return a row in the result, but with NULL in each column from left table.
- This means that a right join returns all the values from the right table, plus matched values from the left table or NULL in case of no matching join predicate.

⇒ **Syntax**

- `SELECT table1.column1, table2.column2...FROM table1 RIGHT JOIN table2 ON table1.common_field = table2.common_field;`

6. How many constraint and describe it self

- **Types of constraint are as below**
 - Primary key** - Unique+ not null, one primary key/table
 - Default** - Set Default value
 - UNIQUE** - Not Duplicate, null
 - Check** - Validate the column
 - NOT NULL** - Column can't be null
 - FORIEGN** - Refer the primary key of the other table

7. Difference between RDBMS vs DBMS

Sr No.	RDBMS	DBMS
1	Data store is in table format	Data stored in the file format
2	Multiple data elements are accessible together	Individual access of data elements
3	Data in the form of a table are link together	No connection between data
4	Normalization is not achievable	There is normalization present.
5	Support distributed database	No support for distributed database
6	Data is stored in a large amount	Data stored in small quantity
7	RDBMS supports multiple users	DBMS supports single user
8	Oracle , SQL Server	XML , Microsoft Access

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
- Another definition , 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.
- In API Testing, instead of using standard user inputs(keyboard) and outputs, you use software to send calls to the API, get output, and note down the system's response.
- API tests are very different from GUI Tests and won't concentrate on the look and feel of an application.

9. Types of API testing.

- There are mainly 3 types of API Testing
 - a) **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.
 - b) **Partner APIs:** Specific rights or licenses to access this type of API because they are not available to the public.
 - c) **Internal APIs:** Internal or private. These APIs are developed by companies to use in their internal

10. What is responsive testing?

- A responsive web design involves creating a flexible web page that is accessible from any device, starting from a mobile phone to a tablet.
- Furthermore, a responsive web design improves users' browsing experience.
- Considering this from a quality assurance perspective, a responsive web design requires thorough evaluation using a variety of devices before it is ready to go live.
- Software testers may find it challenging to perform responsive design testing as a variety of factors are to be looked into during the testing phase.

11. Which types of tools are available for responsive testing?

- Tools available for responsive testing are
 - a) LT Browser
 - b) Lambda Testing
 - c) Google Resizer
 - d) I am Responsive
 - e) Pixel Tuner

12. What is the full form of .ipa and .apk

- The full form of ipa is : ios APP Store Package
- The full form of apk is : Android Application Package

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

- Below are the steps to open developer option mode
 - I. Settings > About Phone > Software information > Build Number
 - II. Tap the Build Number option seven times until you see the message You are now a developer! This enables developer options on your device.
 - III. Return to the previous screen to find Developer options at the bottom.