Module 3 (Testing on Live Application)

1. What is RDBMS

Ans:

* 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.

* An RDBMS is a type of database management system (DBMS) that stores data in a row-based table structure which connects related data elements. An RDBMS includes functions that maintain the security, accuracy, integrity and consistency of the data. This is different than the file storage used in a DBMS.
* A relational database example
* Here’s a simple example of two tables a small business might use to process orders for its products. The first table is a customer info table, so each record includes a customer’s name, address, shipping and billing information, phone number, and other contact information. Each bit of information (each attribute) is in its own column, and the database assigns a unique ID (a key) to each row. In the second table—a customer order table—each record includes the ID of the customer that placed the order, the product ordered, the quantity, the selected size and color, and so on—but not the customer’s name or contact information.

2.What is SQL

Ans:

* SQL is structured query language ( my SQL, SQL server, oracl postgrey sql).

(Structured query language) is Domin specific language used in programming and design for managing data held in a relationship database mangement system

* 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.

3.Write SQL Commands

Ans:

DDL - Data Definition Language

Command:

CREATE: Creates a new table, a view of a table, or other object in database

ALTER:

Modifies an existing database object, such as a table.

DROP:

Deletes an entire table, a view of a table or other object in the database.

DQL – Data Query Language

Command:

SELECT:

Retrieves certain records from one or more tables

DML – Data Manipulation Language

Command:

INSERT: Creates a record

UPDATE: Modifies records

DELETE: Deletes records

DCL – Data Control Language

Command

GRANT: Gives a privilege to user

REVOKE : Takes back privileges granted from user

4.What is join?

Ans:

* joins are used to fetch or retrieve data from two or more data tables, based on a join condition. A join condition is a relationship among some columns in the data tables that take part in Sql join. Basically data tables are related to each other with keys. We use these keys relationship in Sql join.

5. Write type of joins.

Ans:

* Inner Join Syntax:

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:

The basic syntax of INNER JOIN is as follows:

SELECT table1.column1, table2.column2...FROM table1INNER JOIN table2ON

table1.common\_filed = table2.common\_field;

Left Join Syntax

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:

The basic syntax of LEFT JOIN is as follows:

SELECT table1.column1, table2.column2...FROM table1LEFT JOIN table2ON

table1.common\_filed = table2.common\_field;

Right Join Syntax

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:

The basic syntax of RIGHT JOIN is as follows:

SELECT table1.column1, table2.column2...FROM table1RIGHT JOIN table2ON

table1.common\_filed = table2.common\_field;

Full Join Syntax

The SQL FULL JOIN combines the results of both left and right outer joins.

The joined table will contain all records from both tables, and fill in NULLs for

missing matches on either side.

* SYNTAX:

The basic syntax of FULL JOIN is as follows:

SELECT table1.column1, table2.column2...FROM table1FULL JOIN table2ON

table1.common\_filed = table2.common\_field;

6 How Many constraint and describes it self

Ans:

* Constraints are the rules that we can apply on the type of data in a table. That is, we can specify the limit on the type of data that can be stored in a particular column in a table using constraints.
* We can specify constraints at the time of creating the table using CREATE TABLE statement. We can also specify the constraints after creating a table using ALTER TABLE statement.

7.Difference between RDBMS vs DBMS

Ans:

|  |  |
| --- | --- |
| RDBMS | DBMS |
| RDBMS applications store **data in a tabular form**. | DBMS applications store **data as file** |
| in RDBMS, data values are stored in the form of tables, so a **relationship** between these data values will be stored in the form of a table as well. | DBMS uses file system to store data, so there will be **no relation between the tables** |
| RDBMS **supports distributed database**. | DBMS **does not support distributed database**. |
| Example of RDBMS are **mysql**, **postgre**, **sql server**, **oracle** etc. | Examples of DBMS are file systems, **xml** etc. |
| Data elements need to access individually. | Multiple data elements can be accessed at the same time |

8.What is API Testing

Ans:

* 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

Ans:

There are 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.

⚫ Tools for API Testing

PostMan

SoapUI

Jmeter

VRest

10.What is Responsive Testing?

Ans:

* 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.

Some points to be understand for Responsive Testing.

The challenges involved in testing a responsive website

How website testing differs from a mobile device to a computer

Rules and guidelines to be followed during responsive design testing and

Lastly, various tools available to perform 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

Ans:

LT Browser

Lembda Testing

Google Resizer

I am responsive

Pixel tuner

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

Ans:

* A file IPA document is used to test iOS applications even before it is a fully functional app, whereas an APK (Android Application Package) software is installed on Android devices.
* An APK file (Android Package Kit file format) is the file format for applications used on the Android operating system (OS). An APK file contains all the data an app needs, including all of the software program's code, assets and resources.

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

Ans:

1 .Go to "Settings"

2. Tap "About device" or "About phone"

About phone selected in Settings menu

3. Tap “Software information

4. Tap “Build number” seven times

5. The "Developer options" menu will now appear in your Settings menu

6. To disable the Developer options menu, tap the switch