Software Testing Assignment

Module.3 – Testing on live application

**Q-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.

**Q-2. What is SQL ?**

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

SQL is a language of database, it includes database creation, deletion, fetching rows and modifying rows etc. SQL is the standard programming language of relational DBs SQL is a standard computer language for accessing and manipulating databases.

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.

**Q-3. Write SQL Commands ?**

Ans: There are few commands in SQL ;

* DDL – Data Definition Language
* DML – Data Manipulation Language
* DCL – Data Control Language
* DQL – Data Query Language

**Q-4. what is join ?**

Ans: The SQL JOIN is a command clause that combines records from two or more tables in a database. It is a means of combining data in fields from two tables by using values common to each table.

**Q-5. Write types of join.**

Ans: SQL JOIN types;

* **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.

**Q-6. How Many constraint and describes it self**

Ans: Here are the different types of database constraints and their descriptions:

1. **DEFAULT Constraint**:
   * **Description**: The **DEFAULT** constraint specifies a default value for a column when no explicit value is provided during an **INSERT** operation.
   * **Usage**: It ensures that if no value is explicitly given, the column will take the specified default value.
2. **CHECK Constraint**:
   * **Description**: The **CHECK** constraint defines a condition that must be true for the data in a column.
   * **Usage**: It restricts the allowed values based on the specified condition.
3. **NOT NULL Constraint**:
   * **Description**: The **NOT NULL** constraint ensures that a column cannot contain null (missing) values.
   * **Usage**: It enforces data integrity by requiring non-null values.
4. **UNIQUE Constraint**:
   * **Description**: The **UNIQUE** constraint ensures that the values in a column are unique across all rows in the table.
   * **Usage**: It prevents duplicate values in the specified column.
5. **PRIMARY KEY Constraint**:
   * **Description**: The **PRIMARY KEY** constraint uniquely identifies each row in a table.
   * **Usage**: It combines the **UNIQUE** and **NOT NULL** constraints to create a unique identifier for each record.
6. **FOREIGN KEY Constraint**:
   * **Description**: The **FOREIGN KEY** constraint establishes a relationship between two tables based on a column.
   * **Usage**: It ensures referential integrity by linking the values in one table to the values in another table.

**Q-7. Difference between RDBMS vs DBMS**

Ans:

|  |  |  |
| --- | --- | --- |
| **POINTS** | **DBMS** | **RDBMS** |
| Definition | A Database Management System (DBMS) is software used to define, create, and maintain databases. It provides controlled access to data. | An RDBMS is a type of DBMS that deals specifically with relations (tables) and enforces key constraints. |
| Data storage | DBMS Stores data as files. | RDBMS: Stores data in tabular form (tables). |
| Accessing data | Requires accessing data elements individually. | Allows accessing multiple data elements simultaneously. |
| Data Relationship | No inherent relationship between data. | Data is stored in related tables (schema) with tuples (rows). |
| Security | Lower security measures | Provides more security features. |
| User support | DBMS Supports a single user. | RDBMS Supports multiple users. |
| Data Fetching Speed | Slower for large amounts of data. | Faster due to the relational approach. |
| Software and Hardware Requirements | Requires lower software and hardware resources. | Requires higher software and hardware resources. |
| Examples | XML, Window Registry, Forxpro, dbaseIIIplus, etc. | MySQL, PostgreSQL, SQL Server, Oracle, Microsoft Access, etc. |

**Q-8. What is API Testing**

Ans: API (Application Programming Interface) is a computing interface which enables communication and data exchange between two separate software systems.

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

**Q-9. Types of API Testing**

Ans: 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.
2. Partner APIs: Specific rights or licenses to access this type of API because they are not available to the public.
3. 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.

**Q-10. What is Responsive Testing?**

Ans: Responsive testing is a range of activities that involve checking whether a website or application behaves correctly after it is launched on different devices and screen sizes.

A responsive web design involves creating a flexible web page that is accessible from any device, starting from a mobile phone to a tablet.

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

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

Ans: Responsive Testing Tools

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

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

Ans: Here are full forms of;

* .ipa = iOS App Store Package
* .apk = Android Application Package

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

Ans: Certainly to enable developer mode on your Windows computer follow these steps:

* Remember that enabling developer mode allows you to side-load apps and run virtual studio apps in debug mode. However, be cautious as it may open your computer up to additional security risks. Proceed with care and only enable developer mode if you need it for development purposes.