

Software Testing Assignment

Assignment - 1

Module – 3(Testing on Live Application)

* What is RDBMS ?

- RDBMS stands for Relational Database Management System. It's a type of database management system (DBMS) that organizes data into structured tables with rows and columns. RDBMSs include MySQL, PostgreSQL, Oracle Database, SQL Server, and SQLite.

* What is Sql ?

- SQL (Structured Query Language) is a standard programming language designed for managing relational databases and performing various operations on the data stored in them. SQL is used with most relational database management systems (RDBMS), such as MySQL, PostgreSQL, Oracle Database, SQL Server, and SQLite.

* What is SQL Commands ?

• Data Querying Commands:

- **SELECT:** Retrieves data from one or more tables based on specified criteria.
- **FROM:** Specifies the table(s) from which to retrieve data.
- **WHERE:** Filters data based on specified conditions.
- **GROUP BY:** Groups rows that have the same values into summary rows.
- **HAVING:** Filters groups based on specified conditions.
- **ORDER BY:** Sorts the result set based on specified columns.

• Data Manipulation Commands:

- **INSERT INTO:** Inserts new records into a table.
- **UPDATE:** Modifies existing records in a table.
- **DELETE:** Deletes records from a table.
- **MERGE:** Combines insert, update, and delete operations into one statement for conditional operations.

• Data Definition Commands:

- **CREATE TABLE:** Creates a new table in the database.
- **ALTER TABLE:** Modifies the structure of an existing table (e.g., adding or dropping columns).
- **DROP TABLE:** Deletes a table and its data from the database.
- **CREATE INDEX:** Creates an index on a table to improve query performance.

• Data Control Commands:

- **GRANT:** Assigns privileges to database users.
- **REVOKE:** Removes privileges from database users.

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• Transaction Control Commands:

- **BEGIN TRANSACTION:** Starts a new transaction.
- **COMMIT:** Saves changes made during the current transaction.
- **ROLLBACK:** Undoes changes made during the current transaction.

* What is join ?

- A **join** is used to combine rows from two or more tables based on a related column between them. The purpose of a join is to retrieve data that spans multiple tables in order to obtain a complete view or to establish relationships between data elements.

- They allow for powerful and flexible data retrieval operations, enabling users to construct complex queries that extract meaningful insights from interconnected data sets.

* Write types of join.

- INNER JOIN
- LEFT (OUTER) JOIN
- RIGHT (OUTER) JOIN
- FULL (OUTER) JOIN
- CROSS JOIN
- SELF JOIN
- NATURAL JOIN

* What is object.

- Object is an instance of a class, a class is a collection of methods and properties. By object we can access the properties and methods of a class.

* How Many constraints and describes it self.

- Here are several common types of constraints: Six Types

Primary Key Constraint:

Foreign Key Constraint:

Unique Constraint:

Check Constraint:

NotNull Constraint:

Default Constraint:

* Difference between RDBMS vs DBMS.

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RDBMS	DBMS
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Organizes data into structured tables (rows and columns) following the relational model.	Can store data in various formats (files, tables, hierarchical structures, etc.), not necessarily relational.
Enforces referential integrity through constraints like primary keys, foreign keys, and other rules.	May or may not enforce referential integrity by default.
Uses SQL (Structured Query Language) as the standard for querying and managing data.	May have its own query language specific to the data model it supports.
MySQL, PostgreSQL, Oracle Database, SQL Server, SQLite	MongoDB, Redis, Berkeley DB, Microsoft Access
Performance and scalability capabilities may vary based on the specific DBMS implementation.	Performance and scalability capabilities may vary based on the specific DBMS implementation.

* What is API Testing.

- API testing is a type of software testing that focuses on verifying and validating the Application Programming Interfaces (APIs) that are exposed by an application. APIs allow different software systems to communicate and interact with each other by defining the methods and protocols for data exchange.

* Types of API Testing.

- API testing involves various types of testing to ensure the functionality, reliability, performance, and security of APIs. Here are the key types of API testing:

- 1) Unit Testing
- 2) Functional Testing
- 3) Integration Testing
- 4) Load Testing
- 5) Performance Testing
- 6) Security Testing
- 7) Stress Testing
- 8) Usability Testing

* What is Responsive Testing.

- The goal of responsive testing is to verify that the user interface (UI) and user experience (UX) remain consistent and optimized across a wide range of devices, including desktops, laptops, tablets, and smartphones.

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* Which types of tools are available for Responsive Testing.

- Browser Developer Tools (e.g., Chrome DevTools, Firefox DevTools)
- Responsive Design Checker
- Responsinator
- Am I Responsive?
- BrowserStack
- Sauce Labs
- CrossBrowserTesting
- Window Resizer (Chrome extension)
- Viewport Resizer (Chrome extension)
- Resizer (Firefox extension)

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

- **.ipa:** iOS App Store Package
- **.apk:** Android Application Package

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

- **Open Settings:** Unlock your Android device and go to the home screen.
- **Access System Settings:** Swipe down from the top of the screen (or up, depending on your device model) to open the notification shade. Tap on the gear icon (⚙️) to open the Settings app.
- **Navigate to About Phone:** Scroll down the Settings menu and look for an option usually labeled as "About phone" or "About device". This is typically located at the bottom of the Settings menu.
- **Find Build Number:** In the "About phone" section, scroll down until you find the "Build number" or a similar entry.
- **Tap Build Number:** Tap on the "Build number" entry repeatedly (usually 7 times) quickly. You may need to enter your device's lock screen PIN, pattern, or password to confirm.
- **Developer Options Enabled:** After tapping several times, you should see a message indicating that "Developer options" are now enabled.

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- **Access Developer Options:** Go back to the main Settings menu. You should now see a new menu item called "Developer options" or "System" with "Developer options" listed inside. Tap on it to access the Developer Options menu.
- **Customize Developer Options:** Inside Developer Options, you can toggle various settings related to development and debugging, such as USB debugging, mock locations, debugging over Wi-Fi, and more.