Software Testing Assignment

Module-3

- 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.

- What is SQL?
  SQL(Structured Query Language) is a language of database, it includes database creation, deletion, fetching rows and modifying rows etc.
  a computer language for storing, manipulating and retrieving data stored in relational database.

- Write SQL Commands
  DDL – Data Definition Language
  DML – Data Manipulation Language
  DCL – Data Control Language
  DQL – Data Query Language

- What is join?
  A `JOIN` clause is used to combine rows from two or more tables, based on a related column between them.
  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

- Write type of joins.

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.
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FULL JOIN: returns rows when there is a match in one of the tables

- How Many constraint and describes it self

1.A NOT NULL -NOT NULL constraints prevent null values from being entered into a column.

2.A unique constraint (also referred to as a unique key constraint)-Unique constraints ensure that the values in a set of columns are unique and not null for all rows in the table. The columns specified in a unique constraint must be defined as NOT NULL. The database manager uses a unique index to enforce the uniqueness of the key during changes to the columns of the unique constraint.
3.A primary key constraint -You can use primary key and foreign key constraints to define relationships between tables.
4.A foreign key constraint -Foreign key constraints (also known as referential constraints or referential integrity constraints) enable definition of required relationships between and within tables.
5.A table check constraint -A check constraint (also referred to as a table check constraint) is a database rule that specifies the values allowed in one or more columns of every row of a table. Specifying check constraints is done through a restricted form of a search condition.

- Difference between RDBMS vs DBMS

RDBMS	DBMS
Tables are used to store information	Data is stored in a database management system (DBMS) as a file
RDBMS employs a tabular format, with column names as headers and associated data as rows	Data is stored in a database management system (DBMS) in either a navigational or hierarchical format
It may be used by numerous people	Only a single user is supported by the DBMS
Relational databases are more difficult to create, but they are more consistent and organised	The data in a typical database may not be stored according to the ACID model
They follow the rules of ACID (Atomicity, Consistency, Isolation, Durability)	This can lead to database discrepancies
The database systems are used to keep track of the relationships between the tables	It is an application that is used to manage databases over computer networks as well as the system hard drives
Higher hardware and software requirements are required	Software and hardware requirements are minimal

- What is API Testing
  API TESTING is a software testing type that validates Application Programming Interfaces (APIs).

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

- Types of API Testing

1. Validation Testing
2.UI Testing
3.Functional Testing
4.Load Testing
5.Runtime and Error Detection
6.Penetration Testing
7.API Hacking
8.Security Testing
9.Fuzz Testing

- What is Responsive Testing?
  Responsive Design lets websites 'adapt' to different screen sizes without compromising usability and user experience. Text, UI elements, and images rescale and resize depending on the viewport.

- Which types of tools are available for Responsive Testing?
  Browser Developer Tools:
  Chrome DevTools & Firefox Developer Tools

  Online Responsive Design Testing Tools:
  BrowserStack , LambdaTest , CrossBrowserTesting

  Responsive Design Testing Extensions:
  Responsive Design Checker (Chrome Extension),
  Window Resizer (Chrome Extension)

  Mobile Emulators
  Android Studio Emulator ,Xcode Simulator

  Responsive Testing Frameworks
  Cypress ,TestCafe

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

.ipa = "iOS App Store Package."
.apk ="Android Package."

- How to create step for to open the developer option mode ON?
  Settings- - “About phone”- - “About Device” - - “Build Number” - -tap on it 7 times - - after that go back to settings - - developer option - -usb debugging.