**Module 3 Assignment**

**What is RDBMS?**

**RDBMS** stands for Relational Database Management System.

All modern database management systems like SQL, MS SQL Server, IBM DB2, ORACLE, My-SQL, and Microsoft Access are based on RDBMS.

**What is SQL?**

SQL is a standard language for accessing and manipulating databases.

* SQL stands for Structured Query Language
* SQL lets you access and manipulate databases
* SQL became a standard of the American National Standards Institute (ANSI) in 1986, and of the International Organization for Standardization (ISO) in 1987

**Write SQL Commands?**

Structured Query Language(SQL) as we all know is the database language by the use of which we can perform certain operations on the existing database and also we can use this language to create a database. [SQL](https://www.geeksforgeeks.org/structured-query-language/) uses certain commands like Create, Drop, Insert, etc. to carry out the required tasks.

These [SQL](https://www.geeksforgeeks.org/sql-concepts-and-queries/)commands are mainly categorized into five categories as:

1. DDL – Data Definition Language
2. DQL – Data Query Language
3. DML – Data Manipulation Language

**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.

**Write type of joins.**

There are different types of joins available in SQL −

* [INNER JOIN](https://www.tutorialspoint.com/sql/sql-inner-joins.htm) − returns rows when there is a match in both tables.
* [LEFT JOIN](https://www.tutorialspoint.com/sql/sql-left-joins.htm) − returns all rows from the left table, even if there are no matches in the right table.
* [RIGHT JOIN](https://www.tutorialspoint.com/sql/sql-right-joins.htm) − returns all rows from the right table, even if there are no matches in the left table

**How Many constraint and describes it self**

SQL constraints are used to specify rules for the data in a table.

Constraints are used to limit the type of data that can go into a table. This ensures the accuracy and reliability of the data in the table. If there is any violation between the constraint and the data action, the action is aborted.

Constraints can be column level or table level. Column level constraints apply to a column, and table level constraints apply to the whole table.

The following constraints are commonly used in SQL:

* [NOT NULL](https://www.w3schools.com/sql/sql_notnull.asp) - Ensures that a column cannot have a NULL value
* [UNIQUE](https://www.w3schools.com/sql/sql_unique.asp) - Ensures that all values in a column are different
* [PRIMARY KEY](https://www.w3schools.com/sql/sql_primarykey.asp) - A combination of a NOT NULL and UNIQUE. Uniquely identifies each row in a table
* [FOREIGN KEY](https://www.w3schools.com/sql/sql_foreignkey.asp) - Prevents actions that would destroy links between tables
* [CHECK](https://www.w3schools.com/sql/sql_check.asp) - Ensures that the values in a column satisfies a specific condition
* [DEFAULT](https://www.w3schools.com/sql/sql_default.asp) - Sets a default value for a column if no value is specified
* [CREATE INDEX](https://www.w3schools.com/sql/sql_create_index.asp) - Used to create and retrieve data from the database very quickly

**Difference between RDBMS vs DBMS**

|  |  |  |
| --- | --- | --- |
| **Key** | **DBMS** | **RDBMS** |
| Definition | DBMS stands for Database Management System. | RDBMS stands for Relational Database Management System. |
| Data Storage | Data is stored as file. | Data is stored as tables. |
| Data Access | In DBMS, each data elements are to be accessed individually. | In RDBMS, multiple data elements can be accessed at same time. |
| Relationship | There is no relationship between data in DBMS. | Data is present in multiple tables which can be related to each other. |
| Normalization | Normalization cannot be achieved. | Normalization can be achieved. |
| Distributed database | DBMS has no support for distributed databases. | RDBMS supports distributed databases. |
| Data Quantity | DBMS deals with small quantity of data. | RDBMS deals with large quantity of data. |
| Data Redundancy | Data Redundancy is common in DBMS. | Data Redundancy can be reduced using key and indexes in RDBMS. |
| User | DBMS supports single user at a time. | RDBMS supports multiple users at a time. |
| Security | DBMS provides low security during data manipulation. | RDBMS has multilayer security during data manipulation. |
| Example | File systems, XML, etc. | Oracle, SQL Server. |

**What is API Testing**

When we talk about API Testing, API testing is testing that APIs and its integration with the services. It is one of the most challenging type of testing, If we miss the certain cases in API Testing that can cause a very big problem in production after full integration and it will hard to debug in production environment. In this definite guide, We are basically discussing about the REST API Testing. Where we need to test the REST APIs for the validation, error codes and load testing.

**Types of API Testing**

An output of API could be

1. Any type of data
2. Status (say Pass or Fail)
3. Call another API function.

What is 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.

**Which types of tools are available for Responsive Testing**

[7 Responsive Web Design Testing Tools](https://testsigma.com/blog/7-top-tools-for-responsive-web-design-testing/#7_Responsive_Web_Design_Testing_Tools)

* + [1. Testsigma:](https://testsigma.com/blog/7-top-tools-for-responsive-web-design-testing/#1_Testsigma)
  + [2. Responsinator:](https://testsigma.com/blog/7-top-tools-for-responsive-web-design-testing/#2_Responsinator)
  + [3. Screenfly:](https://testsigma.com/blog/7-top-tools-for-responsive-web-design-testing/#3_Screenfly)
  + [4. LambdaTest:](https://testsigma.com/blog/7-top-tools-for-responsive-web-design-testing/#4_LambdaTest)
  + [5. Am I Responsive?:](https://testsigma.com/blog/7-top-tools-for-responsive-web-design-testing/#5_Am_I_Responsive)
  + [6. CrossBrowserTesting:](https://testsigma.com/blog/7-top-tools-for-responsive-web-design-testing/#6_CrossBrowserTesting)
  + [7. Browserstack:](https://testsigma.com/blog/7-top-tools-for-responsive-web-design-testing/#7_Browserstack)

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

APK: Android Application Package

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

On your device, find the Build number option. The following table shows the settings location of the Build number on various devices: ...

Tap the Build Number option seven times until you see the message You are now a developer! ...

Return to the previous screen to find Developer options at the bottom.