**Assignment 3: Testing on Live Application**

**Q: What is RDBMS?**

A: RDBMS stands for Relational Database Management System. It provides an interface to modify and manage the database. All modern database systems are based on RDBMS.

**Q: What is SQL?**

A: SQL stands for Structured Query Language. It is a standard programming language of database. It includes database creation, deletion, fetching rows and modifying rows, etc.

**Q: Write SQL commands.**

A: There are 5 types of SQL commands:

1. DDL (Data Definition Language): Create, Drop, Alter, Truncate
2. DML (Data Manipulation Language): Insert, Update, Delete
3. DCL (Data Control Language): Grant, Revoke
4. TCL (Transaction Control Language): Commit, Rollback, Savepoint
5. DQL (Data Query Language): Select

**Q: What is join?**

A: Join command is used to join rows from two or more tables based on related column between them.

**Q: Write types of Joins.**

A: There are 4 types of joins:

1. Inner Join: Returns records that have matching values in both tables
2. Left Join: Returns all records from left table and matching records from right table
3. Right Join: Returns all records from right table and matching records from left table
4. Full Join: Returns all records when there is a match in either left table or right table

**Q: How many constraint and describes it self.**

A: There are 7 constraints in SQL:

1. NOT NULL : When a tables column is declared as NOT NULL then the values in that column cannot be empty. There must be some value into it.
2. UNIQUE : If UNIQUE command is declared for a column then the values in that column must be unique. Duplicate values cannot be entered in the column. UNIQUE command can be declared for one or more columns.
3. PRIMARY KEY : It is a combination of NOT NULL and PRIMARY constraints. The column which is declared by PRIMARY KEY must have unique values and will not allow null values.
4. FOREIGN KEY: When there are two tables and one table take reference from other table which means same column is present in both the tables and that column acts as primary key in one table. That particular column will act as foreign key in another table.
5. CHECK : If a CHECK constraint is applied to a column then when user wants to enter the value in the column then first it is checked with the conditions and if it is okay then only it can be entered. For example if the condition of a column naming age has condition that the age entered should not be less than 18, so when user enters the age, it is first verified with the condition and then it is entered.
6. DEFAULT : When a default constraint is applied to a tables column and the user has not specified the value to be inserted in it, then the default value which was specified while applying the default constraint will be inserted into that particular column.
7. CREATE INDEX : CREATE INDEX constraint is used to create an index on the table. Indexes are not visible to the user, but they help the user to speed up the searching speed or retrieval of data from the database.

**Q: Difference between RDBMS and DBMS.**

A:

|  |  |  |
| --- | --- | --- |
| No. | DBMS | RDBMS |
| 1 | DBMS stores data as file | RDBMS stores data in tabular form |
| 2 | No relationship between data | Data is stored in the form of tables which are related to each other |
| 3 | It does not support distributed database | It supports distributed database |
| 4 | It stores data in either a navigational or hierarchical form | It uses a tabular structure where the headers are the column names and the rows contain corresponding values |
| 5 | It deals with small quantity of data | It deals with large amount of data |
| 6 | Data redundancy is common in this model | Keys and indexes do not allow data redundancy |
| 7 | Security is less | More security measures provided |
| 8 | It supports single user | It supports multiple users |
| 9 | Data fetching is slower for large amount of data | Data fetching is faster due to relational approach |
| 10 | Examples: XML, Window registry, Forxpro, etc. | Example: MySQL, SQL Server, Oracle, Microsoft Access etc. |

**Q: What is API testing?**

A: API stands for Application Programming Interface. API testing is a type of software testing that analyzes an application program interface to verify that it fulfills its expected functionality, security, performance and reliability. The tests are performed either directly on API or as a part of integration testing.

**Q: Types of API testing.**

A: There are 4 types of API testing:

1. Open APIs: These type of APIs are publicly available
2. Partner APIs: They are not available to public and requires license to operate.
3. Internal APIs: These are the APIs which are built by the companies for internal use only. They are not publicly available and are internal and private.
4. Composite APIs: These are the combination of all the above APIs.

**Q: What is responsive testing?**

A: Responsive testing is a kind of testing in which the webpage is tested in different environment such as different devices, different browsers, different versions of browsers, different OS. The aim of responsive testing is to test the webpage on different environment so that it cannot create problems when it goes live.

**Q: Which types of tools are available for responsive testing?**

A: The various tools available for responsive testing are: LT Browser, Lambda testing, Google Resizer, I am Responsive, Pixel Tuner, etc.

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

A: The full form of .apk is Android Package Kit file and full form of .ipa is iOS App Storage Package.

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

A: There are different ways to turn on developer mode in android phone and iphone.

In android you have to find the build number in settings. It may be at different places depends on the company of mobile. After finding the build number, tap on it 7 times. You will get a message saying “you are now a developer”.

In an iphone, you have to go to the settings, and then into privacy and security, in it you will find developer mode option. It is off by default, you just have to toggle it on. After toggling it on you should have to restart your phone. In this way developer mode can be turned on.