Module-3

Assignment

- ## What is RDBMS

  RDBMS stand for Relational Database Management System.
  A Relational Database Management System(RDBMS) is a Database Management System(DBMS) that based on the relation model.
  Most of today's database are relational:
  - *Database contains one or more tables.*
  - *Table contains one or more records.*
  - *Records contains one or more fields.*
  - *Field contain the data.*

- ## What is SQL.

  SQL is Structured Query Language, which is a Computer Language for storing, manipulating and retrieving data stored in Relational database.
  SQL allows you to access a database.
  SQL can execute queries against database.
  SQL can retrieve data from database.
  SQL can update the record in 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.

- ## Write types of Joins.

  Here are the different types of the JOINs in SQL:

  (INNER) JOIN: Returns records that have matching values in both tables

LEFT (OUTER) JOIN: Returns all records from the left table, and the matched records from the right table

RIGHT (OUTER) JOIN: Returns all records from the right table, and the matched records from the left table

FULL (OUTER) JOIN: Returns all records when there is a match in either left or right table

- **How many constraint and describes it self.**
  Primary Key: unique+ not null
  Foreign key : its depends on primary table
  Unique key : only unique value : blank allow
  Check : condition you should apply
  not null : no to be blank
  default : fixed value
  index : when you searching some record at that time apply indexing.

- **Difference between RDBMS and DBMS.**

DBMS	RDBMS
DBMS stores data as file	RDBMS stores data in tabular form.
No relationship between data.	Data is stored in forms of table, which are related to each other.
DBMS does not support distributed database	RDBMS supported distributed database.
It deals with small quantity of data.	It deals with large quantity of data.
It supports single user	It supports multiple user.

- **What is API Testing.**

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

Or we could say computing or Data exchange between two different Software Programme.

API tests are very different from GUI testing, In API testing we don't concentrate on look and feel of application. We consider the functionality and security checking in API.

- **Types of API Testing**

  There are mainly three types of API Testing
  1) *Open API: These types of APIs are publically available. It has not given any restrictions to use them, so it is known as Public API.*
  2) *Partner API: Specific rights or license access this type of API because such APIs are not publically available.*
  3) *Internal API: Internal or Private API, these type of API are developed by companies to user internally.*

- **What is Responsive Testing.**

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

  Furthermore, a Responsive web design improves users browsing experience.

  Considering in terms of Quality Assurance, a responsive web design needs thoroughly evaluation using a variety of devices before it is ready to go live.

- **Which types of tools are available for Responsive Testing.**
  - *LT Browser*
  - *Lembda Testing*
  - *Google resizer*
  - *I am Responsive*
  - *Pixel tuner*

- **What is the full form of .ipk, .apk**

  .ipk = Iphone Packages
  .apk = Android Application Packages

- **How to create step for open the developer option mode ON.**
  1. *Go to settings.*
  2. *Tap "About Device".*
  3. *Tap "Version".*
  4. *Seven times tap on Build Number.*

- **To check which component have you used in Load Runner?**
  - *Design studio*

- *Recording*
- *Replay*

- **How can you set the number of Vusers in Load Runner?**
  - *Open virtual user generator*
  - *Click on file, select add new script.*
  - *Select Web-HTTP/HTML in VuGen*
  - *Start Recording*
  - *Copy the URL.*
  - *Start Recording.*
  - *Access the site*
  - *Stop recording.*
  - *Reply*
  - *Correlate*
  - *Click on Tools from Toolbar, select Create Controller Scenario.*
  - *Set number of Vuser in selection as per requirement.*

- **What is Correlation?**

  Correlation is the capturing of dynamic values passed from the server to the client and back. We save this captured value into a LoadRunner parameter, and then use this parameter in the script in place of the original value.

- **What is the process of developing a Vuser Script?**
  - *Open virtual user generator*
  - *Click on file, select add new script.*
  - *Select Web-HTTP/HTML in VuGen*
  - *Start Recording*
  - *Copy the URL.*
  - *Start Recording.*
  - *Access the site*
  - *Stop recording.*

- **How Load Runner interact with the application?**

  Load runner is a Performance Testing tool that interacts with the application in 2 ways:

  1. *Recording: LoadRunner uses a protocol specific recorder to capture the interaction between the client and the server. During recording, the tool captures the requests and responses exchanged between the client and the server and generates a script.*

2. *Scripting: Once the recording is done, the script can be modified and enhanced as per the requirements. The script contains the user actions, such as clicking buttons, typing data into fields, etc.*

- **How many Vusers are required for Load testing?**

Maximum:50

- **What is relationship between response time and Throughput?**

Response Time: It is the time calculated when user send the request till request gets finished.

Throughput: It is server property that number of transaction or request can be made during certain amount of time.

- **What is the difference between hits/second and requests/second?**

Hits per second *means the number of hits the server receives in one second from the vuser.*
Request per second *is the number of request the vuser will request from the server.*

- **To test the Performance testing on "Tops Technologies website" :-**
  https://www.tops-int.com/
  1. To Record all top level menu
  2. To Record minimum 10 Vusers on this website
  3. Save all (Script, Design, Graph)

  Site can't reach

- **Create a normal script of above website with correlate using hp default website.**

  https://github.com/alpachavda76/alpa-testing/blob/main/HP%20web%20tour%20application-Load%20runner.rar

- **What is Automation Testing?**

  Test Automation is the use of Software to control the execution of tests, the comparison of actual outcome with the expected outcome, to setting up the test preconditions. In general words Test automation automate the manual testing process.

- **Which are the Browsers supported by Selenium Ide?**
  Chrome
  Firefox
  Microsoft Edge

- **What are the benefits of Automation Testing?**

  - *Faster than manual testing.*
  - *Reliable in results*
  - *Effecting in repeated test cases.*
  - *Saves time and cost*
  - *Increased efficiency*
  - *Re-usable test scripts.*
  - *Ensure consistency*
  - *Improves accuracy.*
  - *Human intervention is not required while executing.*

- **What are the advantages of selenium?**

  - *Very easy to use and install.*
  - *No programming experience is required, through knowledge of HTML and DOM are needed.*
  - *Has built in help and test results reporting schedule.*
  - *Provide supports for extensions.*

- **Why testers should opt for Selenium and not QTP?**

Selenium	QTP
Open source, Free to use, and free of charge	Commercial
Highly extensive	Limited add-ons
Can run tests across different browsers.	Can only run tests in firefox, Internet Explorer, and chrome.
Support various operating system.	Can only be used in Windows.

Support Mobile devices	Support mobile devices using 3rd Party Software.