Software Testing Assignment

Module 3(Testing On Live Application)

1) What is RDBMS

A Relational database management system (RDBMS) is a database management system (DBMS) that is based on the relational model as introduced by E. F. Codd.

2) What is SQL

SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in relational database.

3) Write SQL Commands

- DDL Data Definition Language
- DML Data Manipulation Language
- DCL Data Control Language
- DQL Data Query Language

4) What is join?

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

5) 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.
- 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. DDL Data Definition Language

6) How Many constraint and describes it self

6 type of constraint

- Primary Key: unique + not null, one primary key table
- Default :- Set default value
- Unique :- Not duplicate, null
- Check :-Validate the column
- Not null :- column cant be null

- Foreign :- refer the primary key of the other table

7) Difference between RDBMS vs DBMS

DBMS	RDBMS
DBMS stores data as file	RDBMS store data in tabular form
Normalization is not present	Normalization is present
It deals with small quantity of data	It deals with large amount of data
It supports single user	It support multiple users
Example :- XML, Window registry etc	Example :- MySQL,PostgreSQL,SQl server etc

8) What is API Testing

Testing technique similar to unit testing in that it targets the code level. API Testing differs from unit testing in that it is typically a QA task and not a developer task.

9) Types of API Testing

- Open APIs:- These type of APIs are publicly avalible to use like OAuth APIs from google
- Partner APIs :- specific rights or licences to access this type of API because they are not available to public
- Internal APIs :- These APIs are developed by companies to use internal system

10) 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.

11) Which types of tools are available for Responsive Testing

- LT Browser
- Lembda Testing
- Google Resizer
- I am responsive
- Pixel tuner

12) What is the full form of .ipa, .apk

.apk :- Android Package Kit .ipa :- IOS Package AppStore 13) How to create step for to open the developer option mode ON?

Settings > About phone > Software information > Build number

Module 4 Automation Core Testing

14) Which components have you used in Load Runner?

The key components of LoadRunner are:

- 1. Vuser generator For generating Scripts
- 2. Controller For creating and executing scenarios
- **3.** Analyzer To analyze results.
- 15) How you can set the number of Vusers in load Runner?

You can set the number of Vusers in the controller section while creating your scenarios. Many other advanced options like ramp-up, ramp-down of Vusers are also available in the Controller section.

16) What is correlation?

Correlation is used to obtain data which is unique for each run of your test script (ex: session ids). While recording, these dynamic values are hard-coded in your script causing the script to fail during playback. Correlation is a technique where dynamic values are not hard-coded in your script but are extracted at run-time to avoid failure.

17) What is process for developing a Vuser script?

There are four steps for developing a vuser script.

- 1- Record the Vuser Script.
- 2- Playback / Enhance the recorded vuser script.
- 3- Define the various run-time settings & check
- 4- Incorporate the script in a LoadRunner scenario
- 18) How load runner interacts with the application?

LoadRunner simulates user activity by generating messages between application components or by simulating interactions with the user interface such as key presses or mouse movements. The messages and interactions to be generated are stored in scripts.

19) How many Vuser are required for load testing

This is essentially a trick question.

The number of VUsers required depends on your system under test, network configurations, hardware settings, memory, operating system, software applications objective of a performance test. There can not be any generic value for Vuser.

20) What is a relationship between response time and throughput?

The Throughput shows the amount of data in bytes that the Vusers received from the server in a second. When It is compared with transaction response time, throughput and response time get decreased.

The peak throughput and highest response time would occur approximately at the same time.

21) What is difference between hits/second and request/second?

Hits per second mean 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.

22) To test the Performance testing on "Tops Technologies website": - https://www.topsint.com/ 1. to Record all top level menu 2. to Record minimum 10 Vuser on this website 3. save all (Script,Design,Graph) • create a normal script of above website with correlate using hp default website

https://drive.google.com/drive/folders/1dT28gz87P4P7JSIrrOsgEZZDBXfZw60g?usp=share link

23) What is Automation Testing?

Automation testing is the process of testing software and other tech products to ensure it meets strict requirements. Essentially, it's a test to double-check that the equipment or software does exactly what it was designed to do. It tests for bugs, defects, and any other issues that can arise with product development.

24) Which Are The Browsers Supported By Selenium Ide?

Selenium IDE has add-ons for Firefox and Chrome browsers. Selenium IDE comes with a rich set of commands that are powered by Selenese, and it allows you to record and test different interactions of a web application with the browser.

25) What are the benefits of Automation Testing?

- Enhanced Results
- Swifter Feedback system
- Brand Enhancement
- Cost-effective
- Efficiency Testing

26) What are the advantages of Selenium?

Supports simultaneous execution of test cases in multiple environments and browsers. Captures the screenshots of browsers at different stages of test case execution. Provides tools needed to diagnose the failures and rebuild a similar environment for new test execution.

Selenium Grid saves time extremely as it uses Hub-Node design.

27) Why testers should opt for Selenium and not QTP?

Selenium, however, supports a wide range of programming languages. QTP/UFT test scripts run only on the Windows environment. They cannot be run across all browsers. On the other hand, Selenium is OS independent and allows test scripts to run across all browsers.