Software Testing Assignment

* Module 05
* **Which components have you used in load runner?**

=> The key components of a load runner are load generators.

* **What is correlation?**

=> Correlation test is used to evaluate the association between two or more variables.

* **How do you identify the performance bottlenecks?**

=> Identifying performance bottlenecks lists hardware classes according to relative access speed, implying that sloe access points, such as disks, are more likely to be the source of bottlenecks.

* **What is elapsed time in load runner?**

=> Elapsed time is measured from the moments you hit ‘start scenario’ or ‘initialize vuser.

* **What is the difference between load, performance testing?**

=> Performance testing is the process of determining the system’s performance that includes speed, and reliability under loads. Load testing is the process of determining the behavior of the system when multiple users access it at the same time.

* **Which web protocol recording level generates the web\_submit\_form\_function?**

=>

* **What is load testing?**

=> Load testing is the process of putting simulated demand on software, an application or website in a way that tests or demonstrates its behavior under various conditions.

* **What is think time?**

=> Think time is the time difference between each action of a single user.

* **What is the process for developing a vuser script?**

=> There are 5(five) steps for developing a vuser script.

1) recording the vuser script.

2) edit the vuser script.

3) runtime setting.

4) incorporate the vuser script into a load runner scenario.

* **Why do you create parameter?**

=> Parameters are freely configurable input velus that can be assigned to different test types and used in a variety of ways. They help to define tests by defining test dates.

* **How can we debug a loadrunner script?**

=> The debug setting in the options dialog box allows determining the extent in order to trace the performance during scenario execution.

* **What is the load runner testing process?**

=> LoadRunner is a software testing tool from Micro Focus. It is used to test applications, measuring system behavior and performance under load. LoadRunner can simulate thousands of users concurrently using application software, recording and later analyzing the performance of key components of the application.

* **How many vuser are required for load testing?**

=> In the above scenario, if after 10 mins, a virtual user is made to make multiple iterations and thus make 6 iterations in an hour the number of concurrent users required can be substantially reduced to 100 vusers.

* **What is the significance of “Vuser-init”?**

=> The userinit.exe is a program that is launched directly after a user logs into Windows. This program restores your profile, fonts, colors, etc for your username. This startup is a required and important system file for Windows. This program starts by appending itself to the Userinit registry key.

* **How will you divide your script into multiple actions?why?**

=> I will divide the script into Actions based on the functionality. For example, Once Action for Logging into Application, another Action for booking and so on. Actions increase code reusability, reduce maintenance time and hence, decrease costs.

* **What is the difference between response time and throughput?**

=> Response time and throughput are related. The response time for an average transaction tends to decrease as you increase overall throughput. However, you can decrease the response time for a specific query, at the expense of overall throughput, by allocating a disproportionate amount of resources to that query.

* **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 requests the vuser will request from the server.

* **How many types of graphs are available in loadrunner?**

=> Loadrunner analysis tools have 3 types of merging graph options which are: Overlay, Correlate, Tile.

* **What is automation testing?**

=> Automation testing is the process of testing software and other tech products to ensure it meets strict requirements.

* **What are the capabilities of selenium ide?**

=> Selenium IDE provides you with a GUI for easily recording your interactions with the website. Selenium IDE allows a user or a test case developer to create the test cases and test suites and edit it later as per their requirements.

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

=> Selenium is an open - source automation testing tool and it is free of cost to use. Selenium provides high tester flexibility to write advanced and complex test cases. Supports test scripts written in any user - preferred languages such as C #, Java, Perl, PHP, Python, and Ruby.

* **Why should testers opt for selenium and not qtp?**

=> Selenium supports multiple languages whereas QTP is mostly a VB scripting environment. With QTP, it supports VB scripting language whereas Selenium offers more power and flexibility. Therefore, those using Java, .net, Python and Ruby can use Selenium since it accommodates all these scripting languages.

* **How to insert a start point in selenium ide?**

=> To select the Start Point in Selenium IDE right - click on any command and choose the option ' Play to this point, or you can also use the shortcut key ' S ' from the keyboard. To deselect the start point, repeat the same step.

* **How to insert a breakpoint in selenium ide?**

=> use breakpoints in debugging, select the line of the code and press F9, select Debug > Toggle Breakpoint, or you can also right - click and select Breakpoint > Insert Breakpoint.

* **What are the challenges with selenium ide?**

=> You cannot test the windows application.

- Selenium doesn't support windows based applications .... .

- Mobile testing is not permitted ....

- Limited reporting ....

- Handling dynamic Elements . ...

- Handling pop up windows . …

* **How to debug the tests in selenium ide?**

=> There are two ways to debug Selenium WebDriver Right - click on the Java class and then select Debug As > Java Application. You can also use Keyboard shortcut keys to run the code in debug mode.

* **Which are the Browsers supported by selenium rc?**

=> It mainly supports browsers like Firefox, Chrome, Safari and Internet Explorer. It also permits you to execute cross - browser testing.

* **Why should selenium be selected as a test tool?**

=> Selenium is the most popularly used freeware and open source automation tool. The benefits of Selenium for Test Automation are immense. Importantly, it enables record and playback for testing web applications and can run multiple scripts across various browsers.

* **List out the test types that are supported by selenium.**

=> Compatibility Testing : Done by QA professionals/Testers to ensure that the app meets performance benchmarks on different browser - OS combinations ....

• Performance Testing Integration Testing

• System Testing

• End - to - end Testing

• Regression Testing

* **Explain what is assertion in selenium and what is the type of assertion?**

=> In Selenium, Asserts are validations or checkpoints for an application. Assertions state confidently that application behavior is working as expected.

**Types of Assertions**

• Basic Assertion

• Emphatic Assertion

• Escalating Assertion

• I-Language Assertions

* **What is the difference between verify and assert commands?**

=> In the case of the " Assert " command, as soon as the validation fails the execution of that particular test method is stopped. Following that the test method is marked as failed. Whereas, in the case of " Verify ", the test method continues execution even after the failure of an assertion statement.

* **What are the four parameter you have to pass in selenium?**

=> In total , there are four parameters for Selenium to pass a test. These are as follows: **URL**, **host**, **browse**r and **port number**.

* **How to insert a comment in selenium ide?**

=> In the case of Selenium IDE, we can insert comments in two ways. The first method is to Right click on the command in Selenium IDE and select " Insert New Comment ". Then space will be created above the command line we can enter the comment in that command field.