Software Testing Assignment

Module - 4

Automation Core Testing (Load Runner Up and Selenium IDE)

1.   Which components have you used in Load Runner?

The key components of LoadRunner are:

- **Load Generator** generates the load against the application by following scripts
- **VuGen** (Virtual User Generator) for generating and editing scripts
- **Controller** controls, launches and sequences instances of Load Generator - specifying which script to use, for how long etc. During runs the Controller receives real-time monitoring data and displays status.
- **Agent process** manages connection between Controller and Load Generator instances.
- **Analysis** assembles logs from various load generators and formats reports for visualization of run result data and monitoring data.

2.   How can you set the number of Vusers in Load Runner?
Step 1: Start HP web tours server
Step 2: Start HP web App
Step 3: Start Virtual user generator
Step 4: Click on file menu and select new option.
Step 5: Give script name and solution name then click on create.
Step 6: Click on record button.
Step 7: After generate script click on correlate option.
Step 8: Then after set V-users create in load runner.

3.   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.

4.   What is the process for developing a Vuser Script?
Step 1: Start HP web tours server
Step 2: Start HP web App
Step 3: Start Virtual user generator
Step 4: Click on file menu and select new option.
Step 5: Give script name and solution name then click on create.
Step 6: Click on record button.
Step 7: Then after generate script.

5.   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.

6.   How many VUsers are required for load testing?
      Minimum 10 Vusers are required for load testing.

7.   What is the relationship 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.

8.   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 v-user.
      Request per second is the number of request the v-user will request from the server.

9.   What is Automation Testing?
      Automation Testing is a software testing technique that performs using special automated testing software tools to execute a test case suite.

10.   Which Are The Browsers Supported By Selenium Ide?
      Selenium supports various Browsers (Mozilla Firefox, Google Chrome, IE, Opera, Safari etc...)

11.   What are the benefits of Automation Testing?
- ➔ Saves Time and Money
- ➔ Increases Test Coverage
- ➔ Improves Accuracy
- ➔ Easy Reporting Makes Life Easier

12.   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.
➔ Can export tests to formats usable in Selenium RC and WebDriver
➔ Has built-in help and test results reporting module. Provides support for extensions.
➔ Selenium uses fewer Hardware resources.
➔ Selenium Test Case Execution time is faster than other tools like UFT, RFT, TestComplete, SilkTest, etc.
➔ Test cases can be executed while the browser window is minimized.

13.   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.