

Software Testing Assignment

Module–4-5(Automation and Selenium)

1. Which components have you used in Load Runner?

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?

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.

3. What is Correlation?

Correlation is a statistical term describing the degree to which two variables move in coordination with one another. If the two variables move in the same direction, then those variables are said to have a positive correlation.

4. What is the process for developing a Vuser Script?

- Record the Vuser Script.
- Playback / Enhance the recorded vuser script.
- Define the various run-time settings & check.
- Incorporate the script in a LoadRunner scenario.

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?

if you run a load test with 10,000 virtual users, each making a request every 20 seconds (3 requests per minute), then you're making 30,000 requests per minute, which equals 500 requests per second.

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 user. Request per second is the number of request the 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 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.

11. What are the benefits of Automation Testing?

- 70% faster than the manual testing
- Wider test coverage of application features
- Reliable in results
- Ensure Consistency
- Saves Time and Cost
- Improves accuracy
- Human Intervention is not required while execution
- Increases Efficiency
- Better speed in executing tests
- Re-usable test scripts
- Test Frequently and thoroughly

- More cycle of execution can be achieved through automation
- Early time to market

12.What are the advantages of Selenium?

It plays a critical role in metabolism and thyroid function and helps protect your body from damage caused by oxidative stress. What's more, selenium may help boost your immune system, slow age-related mental decline, and even reduce your risk of heart disease.

13.Why testers should opt for Selenium and not QTP?

Selenium can run tests in parallel with Selenium Grid. QTP cannot run tests in parallel by itself, and another commercial tool called HP Quality Center or QC is needed. Selenium supports web applications only. QTP can run tests for both desktop and web applications.