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❖ <u>Subject: - Module 5 Assignment Load Runner Up and Selenium IDE,</u>

Que.1- Which components have you used in Load Runner?

Ans. There are mainly five types of components used. 1) Load generator, 2) VuGen, 3) Controller, 4) Agent process, 5) Analysis.

1) Load Generator - It is used to generate the load against the application by running the script.

2) VuGen - It is used for generating and editing scripts.

3) Controller - It is used to control, launch, and sequence the instance of a Load Generator.

4) Agent Process - It is used to manage the connection between the Controller and Load Generator instances.

5) Analysis - It assembles the logs from different load generators and formats the reports for visualization of results and monitoring data.

Que. 2– How can you set the number of Vusers in Load Runner?

Ans. We 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.

Que. 3 – What is Correlation?

Ans. Correlation, as the name suggests, is a mechanism of defining a relationship between two variables.

Que. 4 –What is the process for developing a Vusers Script?

Ans. 1) Record the Script: Usually, this is the first step of scripting where every user action is recorded into a script.

2) Replay and Verify: Once the script is recorded, reply the script to ensure its working right. Verify any impact through application frontend or database.

3) Enhance the Script: Once recording has been verified, enhance script by adding checkpoints, validating data, adding transactions and rendezvous points.

4) Replay and Verify: As earlier, re-play your script and verify that everything is working as intended.

5) Configure Runtime Settings: Configure and control pacing duration, think time variation, proxy settings and whether you wish to ignore any external resources.

6) Use for Load Scenarios: Formulate load scenarios based on test objectives. Use load distribution and geo-wide agents to make real like scenarios.

Que. 5 – How Load Runner interacts with the application?

Ans. Load Runner works on the concept of recording and replaying the user activities and generating the desired load on the server. It simply simulates the real world user's actions and helps to identify the performance of the software application by generating virtual load. There cannot be any generic value for Vusers.

Que. 6 – How many Vusers are required for load testing?

Ans. 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 cannot be any generic value for Vusers.

Que. 7 – What is the relationship between Response Time and Throughput?

Ans. The time in between the start and till the completion of the job is called response time the amount of work done in a given time is called through put.

Que. 8 – What is the difference between hits/second and requests/second?

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

Que. 9 – 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 Vusers on this website 3. save all (Script, Design, Graph)

Ans. Done.

Que. 10 – Create a normal script of above website with correlate using hp default website.

Ans. Done.

Que. 11 – What is Automation Testing?

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

Que. 12 – Which Are The Browsers Supported By Selenium IDE?

Ans. Latest version of Selenium IDE can be support both Firefox Browser and Chrome Browser.

Que. 13 – What are the benefits of Automation Testing?

Ans. There are many 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.

Que. 14 – What are the advantages of Selenium?

Ans. There are following advantages of selenium..

1) **Open Source:** One of the most important benefits of Selenium is its Open Source Accessibility. As it is an open-source tool, anyone can download the source code and use it.

2) **Multi-Language Support:** The most common languages testers normally use for writing Selenium code are, C#, Java, PHP, Perl, Python, and Ruby.

3) **Multi-Browser Support:** Chrome, Firefox, Safari, Internet Explorer, Opera, and Edge are the most commonly used browsers worldwide and are compatible with Selenium scripts.

4) **Platform Support:** Yes, one more advantage we get with Selenium! This empowers QA Engineers/Testers to effectively write the scripts without paying much attention on the platform.

5) **Framework Availability:** There are different frameworks like Data Driven Framework, Keyword Driven Framework, Hybrid Framework, etc.

6) **Remote Control/Parallel Text Execution:** Automated testing aims to save time and effort. Multiple test scripts should be executed in parallel, to reduce the test execution time.

7) **Flexibility:** There are a wide variety of frameworks that supports Selenium when compared to other test automation tools in the same class.

8) **Reusability:** As we know, Selenium test scripts can be executed in multiple browsers and operating systems.

9) **Integrations:** For Continuous Integration testing, it can be integrated with CI/CD tools like Jenkins, Maven, Dockers, etc. To perform image-based testing, the Sikuli tool is used to integrate with Selenium.

10) **Regular Updates:** Selenium is supported by an active community. The Selenium community regularly releases constant updates and upgrades.

Que.15 – Why testers should opt for Selenium and not QTP?

Ans. Here are the reason why Testers choose Selenium over QTP:

➢ Selenium is more widely used than QTP.

➢ Selenium is an open-source tool whereas QTP is a profitable tool.

➢ Selenium supports multiple browsers like Firefox, IE, Opera, Safari, etc. and has multiple operating systems compatibility too. Supported OS platforms are Windows, Mac, Linux, etc. Whereas, QTP is limited to Internet Explorer on Windows.

➢ Selenium supports multi-programming language compatibility. Languages supported are Python, Ruby, Perl, etc. Whereas, QTP supports only VBScript.

➢ In Market no. of Jobs in Selenium are more as comparatively many companies are using Selenium over QTP.

Que. 16 – To validate the tops technologies website Contact us page and enter your friend detail at last "Guest Call Back" https://www.tops-int.com/contact-us/

Ans. Done.

Que. 17 – To validate the tops technologies website Contact us page and enter your friend detail at last "Guest Call Back" https://www.tops-int.com/contact-us/ 1. To use assert 2. To use click and wait 3. To use locators 4. To use other command.

Ans. Done.