

Module-5 Automation Core Testing

(Load Runner Up and Selenium IDE)

- Which components have you used in Load Runner?

- **Ans.** 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.

- How can you set the number of Vusers in Load Runner?

Ans. 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.

- What is Correlation?

Ans. A Correlation is a **Connection or Association**. For automated test scripts, in practical terms, it means that the application has associated some information or data which is specific to a particular user session.

- What is the process for developing a Vuser Script?

Ans. A vuser script may be created in four steps.

- Step 1- Record the Vuser Script.
- Step 2- Playback and improve the recorded vuser script.
- Step 3- Define and test the different run-time parameters.
- Step 4- Use the script in a LoadRunner scenario.

- How Load Runner interacts with the application?

Ans. 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.

- **How many VUsers are required for load testing?**

Ans. For instance, you can **start with 100 VCU and increase to 10,000 VCU** to see how your system scales. Cost-Effective: Instead of hiring thousands of real users to test a website, VCU provide an economical way to simulate high traffic. You can emulate thousands, even millions, of users with just a load testing tool.

- **What is the relationship between Response Time and Throughput?**

Ans. 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.

(Selenium IDE)

- **What is Automation Testing?**

Ans. Test Automation refers to the practice of using software tools and scripts to automate the execution of tests in software development and quality assurance processes. It involves creating scripts or test cases that can be run automatically, rather than requiring manual effort. Test automation aims to increase the **efficiency and effectiveness of testing** by reducing human errors, saving time, and improving test coverage.

- **Which Are The Browsers Supported By Selenium Ide?**

Ans. Currently, **Firefox, Chrome, Edge, IE, and Safari** are supported and the Selenium IDE has great documentation on how to configure your environment.

- **What are the benefits of Automation Testing?**

Ans. ● 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.

- **What are the advantages of Selenium?**

Ans.- Open source, free to use, and free ofcharge.

- Highly extensible.
- Can run tests across different browsers.
- Supports various operating systems.

- Supports mobile devices.
- Can execute tests while the browser is minimized to be visible on the desktop.
- Can execute tests in parallel.

- Why testers should opt for Selenium and not QTP?

Ans. Selenium is an open source testing tool whereas QTP is paid for to use. Why would people go for a paid too, whereas they can make use of the open source software? Therefore, most software testers will prefer using a solution that is free for use and can be downloaded multiple times.