**Software Testing Assignment**

**Module – 4 & 5**

1. **Which components have you used in Load Runner?**

* **Virtual user generator (VUGEN:** It records Vuser scripts that emulate the step of real users using the application.
* **Controller:** it is an administrative center for creating, maintaining, and executing scenarios .starts and stops load tests, and perform other ad ministrative tasks
* **Analyser:** uses the load test results to create graphs and reports that are used to correlate system information and identify both bottlenecks and performance issues.

1. **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.

1. **What is Correlation?**

* Correlation, as the name suggests, is a mechanism of defining a relationship between two variables or entities. A Dictionary defines it as “statistical relation between two or more variables such that systematic changes in the other accompany systematic changes in the value of one variable”.

1. **What is the process for developing a Vuser Script?**

* There are four steps 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.

1. **How Load Runner interacts with the application?**

* Load Runner can simulate thousands of users concurrently using application software, recording and later analyzing the performance of key components of the application.

1. **How many VUsers are required for load testing?**

* 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 Vuser.

1. **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.

1. **What is the difference between hits/second and requests/second?**

* Hits per second mean the number of hits the server receives in one second from the vuser.
* Request per second is the number of request the vuser will request from the server.

1. **What is Automation Testing?**

* Test automation is a process of writing a computer program to do testing that would otherwise need to be done manually.

1. **Which Are The Browsers Supported By Selenium Ide?**

* The browser supported by Selenium IDE are Google Chrome, Internet Explorer 7 onwards, safari, Opera and Firefox.

1. **What are the benefits of Automation Testing?**

* **Benefits of Automation Testing**
* Saves Time and Money: Testing applications is a continuous process.
* Increases Test Coverage
* Improves Accuracy
* Helps Achieve Continuous Testing
* Enables Reusability
* Offers Faster Feedback
* Improves Team's Morale
* Promises Information Security

1. **What are the advantages of Selenium?**

* Advantages of Selenium

1. Open-Source:
2. Supports Operating Systems:
3. Support across browsers:
4. Tests across devices.
5. Constant updates.
6. Ease of implementation.
7. Reusability and Add-ons
8. **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.