**Module-4 Automation Core Testing**

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

**Ans**. Common components used in LoadRunner

* Virtual User Generator (VUGen)
* Controller
* Load Generators
* Analysis
* Protocols
* Vuser Scripts
* Scenarios
* Runtime Settings
* Monitoring
* Results Repository

1. **How can you set the number of Vusers in Load Runner?**

**Ans.** Following stap for Vusers in Load Runner

1. Open LoadRunner Controller
2. Create or Open a Scenario
3. Define Vuser Groups
4. Set the Number of Vusers
5. Configure Load Distribution
6. Configure Other Runtime Settings
7. Save the Scenario
8. Run the Scenario
9. **What is Correlation?**

**Ans.** Correlation is a critical step in script preparation for performance testing. It ensures that virtual users in a performance test emulate real-world scenarios accurately by handling dynamic values appropriately. Effective correlation contributes to the reliability and accuracy of performance test results.

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

**Ans.** Below is a general guideline for the process of developing a Vuser script:

Define Test Objectives

Identify Vuser Actions

Launch Vuser Generator (VUGen)

Select Protocol

Start Recording

Perform User Actions

Stop Recording

Inspect and Enhance the Script

Parameterization and Correlation

Insert Checkpoints (Optional)

Define Runtime Settings

Verify Script Execution

Save the Script

Repeat for Additional Scenarios

Integrate with LoadRunner Controller

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

**Ans**. LoadRunner interacts with the application under test by simulating virtual users that emulate the actions of real users. LoadRunner is a performance testing tool that allows testers to assess the performance, scalability, and reliability of applications under various load conditions.

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

**Ans.** Minimum 10 Vusers are required for load testing.

1. **What is the relationship between Response Time and Throughput?**

**Ans.** Inverse Relationship: In general, there is an inverse relationship between response time and throughput. When throughput increases, response time tends to decrease, and vice versa. However, this relationship is not strictly linear and can be influenced by various factors.

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

**Ans.**  Hits/Second:

Definition: A "hit" generally refers to any request made to the server. It includes all types of requests, such as HTML page requests, image requests, CSS requests, JavaScript requests, etc. Hits are a broader measure that encompasses all elements requested from the server.

Metric Usage: Hits/second is often used to describe the overall load on the server, including the number of requests for various types of content.

Requests/Second:

Definition: A "request" specifically refers to an individual HTTP request made to the server. This could be a request for an HTML page, an image, a CSS file, or any other resource. Each distinct resource requested is counted as a separate request.

Metric Usage: Requests/second is a more specific metric that focuses on the number of individual HTTP requests made to the server within a given time frame.

1. **To test the Performance testing on “Tops Technologies website”: -** [**https://www.tops-int.com/**](https://www.tops-int.com/)

* **to Record all top-level menu**
* **to Record minimum 10 Vuser on this website**
* **save all (Script, Design, Graph)**
* **Create a normal script of above website with correlate using hp default website.**

**Ans.** 

1. **What is Automation Testing?**

**Ans.** Automation testing is a software testing technique that uses automated tools to execute pre-scripted tests on a software application before it is released into production. The main goal of automation testing is to increase the efficiency, effectiveness, and coverage of the testing process while minimizing manual intervention.

1. **Which Are the Browsers Supported by Selenium Ide?**

**Ans.** Google Chrome and Mozilla Firefox both browsers are supported Selenium IDE.

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

**Ans.**  Saves Time and Money

* Increases Test Coverage
* Improves Accuracy
* Easy Reporting Makes Life Easier
* Re-usable test scripts
* Human Intervention is not required while execution

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

**Ans**. Open source, free to use, and free of charge.

* Highly extensible
* Can run tests across different browsers
* Supports various operating systems
* Supports mobile devices
* Can execute tests while the browser is minimized
* Can execute tests in parallel.

1. **Why testers should opt for Selenium and not QTP?**

**Ans.**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Selenium** | **QTP** |
|  | It’s open source and free to use. | It’s not open source. |
| 2. | It’s highly extensible. | It’s limited add-ons. |
| 3. | It’s support in all browsers. | It’s support chrome, Mozilla and  explorer. |
| 4. | It’s work in various operating  system. | It’s work in only windows OS. |
| 5. | Can execute tests while the browser is minimized | Needs to have the application under test to be  visible on the desktop |
| 6. | Supports mobile devices | Supports mobile devise using 3rd party software |

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**1. To use assert**

**2. To use click and wait**

**3. To use locators**

**4. To use other command**

**Ans.** 

