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Assignment topic:- Module-4/5 automation core testing (load runner up and selenium IDE)

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1. Which components have you used in load runner ?

Vuser generator - for genrating scripts
Controller - for creating and executing scenario
Analyzer- to analyze result

2. How canyou set the number of vuser in load runner ?

You can set the number of vusers in the controller section while creating your scenarios.
Many other advanced options like eamps-up ramp-down of vuser are also available in the controller section

3. What is correlation ?

Correlation Is used to obtain data which in unique for each run of your test scripts (ex: session ids ). while recording, these dynamic values are hard-codes in your scrips causingthe script to fall during the playback. Correlation is a tecmique where dynamic values arenot haed-coded in your scripts but are extracted at run-time to avoid failure

4. What is process for developing a vuser scripts ?

There are four steps for developing a vuser scripts.

1. Record the vuser scripts .
2. Playback / enhance the recorded vuser scripts.
3. Define the various run-time setting & check
4. Incorporate the scripts in a load runner scenario

5. How load runner interect with the application ?

Protocol is used in load runner to interact with the application.

6. How many vuser are required for load testing?

The goal of load testing is to find problems before they impact users. The more realistic your simulation, the more likely you'll catch bottlenecks that lead to a bad user experience.

While many variables affect accuracy, the number of concurrent virtual users is one of the most important. Ideally, you could test with as many virtual users as you need. In practice, this may be too expensive because load testing software is priced on the number of concurrent virtual users.

So how accurate do you need your performance testing to be? How many concurrent users is "good enough"Now let's look at some numbers. Here's the basic calculation:

(concurrent users) x (requests per user per minute) = total requests per minute

For example, 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.

As you can see in the calculation above, you can decrease the number of users and increase the number of requests per minute per user and still have the same requests per minute. For example, here are a few scenarios that all generate 30,000 requests per minute:

(10,000) x (3) = 30,000
(5,000) x (6) = 30,000
(1,000) x (30) = 30,000
(10) x (3,000) = 30,000

Considering that cost is often proportional to the number of concurrent virtual users, the question arises: Instead of testing with 10,000 virtual users and 3 requests per minute, can you test with fewer users and more requests per second and get the same test results? After all, you're hitting the back end with the same total number of requests per minute.

7. What is the relation between response time and and throughput?

The throught put shows the amount of data in bytes that the vusers recived from the server In a second . when it is compared with transaction responsetime getvdrcreased. The peak thoughput and highest response time would occur approximately at the same time.

8. To test the performance testing on ‘’top technologies website” :-https://www.tops-int.com/

1. To record all top level menu
2. To record minimum 10 Vuser on this website
3. Save all (script,design,graph)

9. Create a normal scripts of above website with correlateusing hp defects website.

LoadRunner VuGen Script Recording, Replay and Handling Dynamic Values with Correlation Technique:

In this Intensive LoadRunner Training Series, we learned more about LoadRunner Recording Options in detail.

In this tutorial, we will discuss the following:

Script replay
Handling of dynamic values using 'Correlation' (and Recording Options part 2)
In the previous tutorial, we saw how to create the script. So now, let's replay the script that we created in the last tutorial.

10. What is automation testing?

>Automation testing Is a type of software testing that involves automated test case execution using an automation tool

11. Which are the browsers supported by selenium ide?

Selenium IDE (Integrated Development Environment) is primarily a record/run tool that a test case developer uses to develop Selenium Test cases. Selenium IDE is an easy-to-use tool from the Selenium Test Suite and can even be used by someone new to developing automated test cases for their web applications. One does not require any special setup to get started with Selenium IDE. You just need to add the extension of your specific browser. Selenium IDE provides you with a GUI (Graphical User Interface) for easily recording your interactions with the website.

12. What are the benefits of automation testing?

1. Save time and money
2. 
3. Increase test coverage
4. Improve accurancy
5. Help acchives continuous testing
6. Enable reusability
7. Offers faster feedback
8. Improve team's morale
9. Promises information security
10. Easy reporting makes life easier
11. Offers scalability

13. What are the advantage of selenium?

- Selenium is open source and free to use without any licensing cost.
- It support multiple language like java, ruby oython,etc.
- Selenium supports multi-browser testing.
- It has vast resources and helping-community over the internet

- Using the selenium IDE component ,non -programmers can also write automation scripts.
- Using the selenium grid component , distributes testing can carried out on remote machines.

14. Why tester should opt for selenium and not Qtp?

Selenium:-

=>Selenium is an open-source tool.

Selenium supports cross-browser and cross-platform testing.

The configuration of the Selenium WebDriver is very easy. You just need to import its libraries.

Selenium communicates directly with browsers in the browser's native language.

There are many programming languages which are supported by Selenium such as Java, C#, Python, Ruby, Perl, PHP, and Javascript.

A separate class for different browsers for a better organization than RC.

Selenium supports automating only Web Application Under Test (WAUT). Automating desktop applications are not supported.

AutoIt can work with Selenium to automate interactions with Windows GUI.

With Selenium, you can easily build Data Driven and Keyword Driven automation framework.

Selenium WebDriver runs faster than Selenium RC.

It supports executing test on headless browsers.

Selenium also supports iOS and Android platform.

=>Talking about, QTP:

Its is just a commercial tool, which is not free.

QTP uses only one language that is VBScript.

It only Windows platform.