Module-5 Selenium IDE

1. What is Automation Testing?

Automation testing is a software testing technique that uses specialized tools or scripts to automate the execution of test cases. Instead of manually testing an application, automation testing allows testers to create scripts that perform the same tests repeatedly, improving efficiency, accuracy, and speed.

2. Which Are the Browsers Supported by Selenium Ide?

Selenium IDE (Integrated Development Environment) is a browser automation tool that supports creating, editing, and debugging tests. As of the latest updates, Selenium IDE supports the following browsers:

1. Google Chrome

2. Mozilla Firefox

3. Microsoft Edge

3. What are the benefits of Automation Testing?

1. Speed–Automation Scripts run very fast when compared to human users.

2. Reliable–Tests perform precisely the same operations each time they are run, thereby eliminating human error.

3. Repeatable–We can test how the application reacts after repeated execution of the same operation.

4. Comprehensive–We can build a suite of tests that covers every feature in our application

5. Reusable–We can reuse tests on different versions of an application, even if the user interface changes.

6. Automate your testing procedure when you have lot of regression work.

7. Automate your load testing work for creating virtual users to check load capacity of your application.

4. What are the advantages of Selenium?

1. Very easy to use and install.
2. No programming experience is required, through knowledge of HTML and DOM are needed
3. Can export tests to formats usable in Selenium RC and WebDriver.
4. Has built-in help and test results reporting module.
5. Provides support for extensions.
6.

5. Why testers should opt for Selenium and not QTP?

1. Open Source vs. Commercial Licensing

- Selenium: Open-source and free to use, making it cost-effective for organizations and testers.

- QTP (UFT):). It requires purchasing a license, making it significantly more expensive.

2. Support for Multiple Browsers

- Selenium: Supports a wide range of browsers, including Chrome, Firefox, Safari, Edge, and Opera. It ensures cross-browser compatibility, which is crucial for modern web applications.

- QTP (UFT): Limited browser support. It primarily supports Internet Explorer and older versions of Firefox and Chrome.

3. Support for Multiple Programming Languages

- Selenium: Provides support for multiple programming languages such as Java, Python, C#, Ruby.

- QTP (UFT): Limited to VBScript for scripting, which is less versatile and less commonly used in modern development environments.

4. Platform Compatibility

- Selenium: Works on multiple operating systems (Windows, macOS, Linux).

- QTP (UFT): Primarily designed for Windows-based environments

5. Scalability with Parallel Testing

- Selenium: Supports grid functionality to perform parallel testing across multiple browsers and environments, increasing efficiency.

- QTP (UFT): Parallel execution is limited and less robust compared to Selenium Grid.

6. Ease of Use

- Selenium: While it requires some programming knowledge.

- QTP (UFT): Easier to use for non-programmers due to its record-and-playback feature.

Testers often choose Selenium for its cost-effectiveness, flexibility, cross-browser compatibility, multi-platform support, and integration with modern development workflows.