

Practical No:-9.

Name:- Ishwari Rajiv Narkhede

PRN:- 1841034

Batch:- B4

class:- L.Y.BTech

Aim:- study of selenium Testing tool.

* Theory -

Selenium is a portable framework for testing web applications. selenium provides a playback tool for authoring functional tests without the need to learn a test scripting language.

It also provides a test domain specific language to write tests in several popular programming languages including C#, Groovy, Java, Perl, PHP, Ruby & scala.

selenium is an open-source, test automation tool that has become an important automation tool in the software quality assurance world. selenium testing tool is a lightweight tool and is developer-friendly. Commonly used for automating web applications.

* components of selenium -

There are various components of selenium tool which provide different features that support multiple browsers, deliver parallel test capabilities and can be executed on multiple

machines. It has a suite of tools which cater to different needs of businesses and has the following components:-

1) Selenium Remote-Control (RC) -

Selenium RC supports all major web browsers and this tool interprets commands to convert them into javascript and further these scripts are injected into the browser.

2) Selenium IDE -

Selenium IDE is a simple record and playback kind of tool which is available as an add-on for firefox only.

3) Selenium WebDriver -

It is one of the vital tools of the selenium suite and it does not require any manual process like selenium server and has direct communication between code and browser.

4) Selenium Grid -

The selenium grid is the last component of selenium suite and is used for parallel testing and sometimes even supports distributive testing.

* Steps for selenium Testing:—

- 1) Automate a smoke test or any functional test.
- 2) Develop the test automation framework
- 3) Develop the test case.
- 4) Integrate the test case into a CI environment
- 5) Establish proper logging and reporting for the developed test case.
- 6) Run the test cases through a continuous integration environment using Jenkins or any other CI tool.
- 7) When once test scripts are run and if they pass then the particular feature is developed and can be integrated into the product or application.

Conclusion :-

Selenium is the most effective test automation tool for qa due to its wide range of features such as open source, supports many languages, integrates easily with many platforms, has cross browser support and is best suited to test web-application. Hence, businesses need to prefer selenium tool as a promising test automation tool for web-application testing.