

Selenium

“It is an open source web application test automation tool”

Opensource-→It means

We can download it

We can modify it

We can see the code

Webapplication-→Any application we can open/launch via browser

Eg: gmail.com, Facebook.com

Test automation-→Performing the testing of the application automatically without any manual intervention.

Tool-→It is a software/Application

Advantages /Why Selenium

1.Free-→we no need to purchase license and cost of the project is reduced.

2.Open source→We can see, download,customize

Customization cost is reduced

Customization-→Integrating selenium with third party tool.

3.Platform Independent →we can install selenium on any OS so we don't need to purchase license OS

Advantage→Easy to perform system compatibility testing.

4.It supports multiple programming language

- | | | | |
|----------|------------|-------------|-----|
| 1.java | JavaScript | Perl | TCL |
| 2.python | R | Haskell | PHP |
| 3.C# | Dart | Objective C | |

5.It supports multiple browsers

- | | |
|-----------|-------------------|
| 1.Chrome | 5.Edge |
| 2.Firefox | 6.Android(chrome) |
| 3.IE | 7.IOS(Safari) |
| 4.Opera | 8.Safari |

Drawbacks Of selenium

- 1.It supports only web based application
- 2.Person should aware of at least one programming language
- 3.It doesnot support
OTP,Captcha,Barcode,Audio,video,I am not robot
- 4.It takes the help of 3rd party tool

What are the components /Flavor of selenium

- 1.Selenium Core
- 2.Selenium IDE(Integrated Development Environment)
- 3.Selenium RC(remote control)

4.Selenium WebDriver

5.Selenium Grid---→Perform compatibility Testing/Parallel testing

6.Selendroid-----→Only android less than 4.0

7.Appium-----→Used for mobile automation(Android,IOS)

8.Winium-----→(windows)

Selenium RC(remote control)

Advantages: Its supports multiple programming languages

It also supports multiple browsers

Data driven testing

Disadvantages

Slower speed of the execution

Less scope for object orientation

Selenium IDE(Integrated Development Environment)

It is a record and replay tool

It is a plugin for the browser

Advantages:

1.Easy to use

2.No programming is required

3.Quickly create the test cases

Disadvantages

- 1.Verfication/Looping/Conditional statements
- 2.We cannot integrate any 3rd party tool
- 3.Limited browser tested

