



# Selenium





## What is selenium ?

Selenium is a browser automation tool. it is for automating web applications for testing purposes



## Selenium WebDriver

If you want to create robust, browser-based regression automation suites and tests, scale and distribute scripts across many environments, then you want to use Selenium WebDriver, a collection of language specific bindings to drive a browser - the way it is meant to be driven.



## Selenium IDE

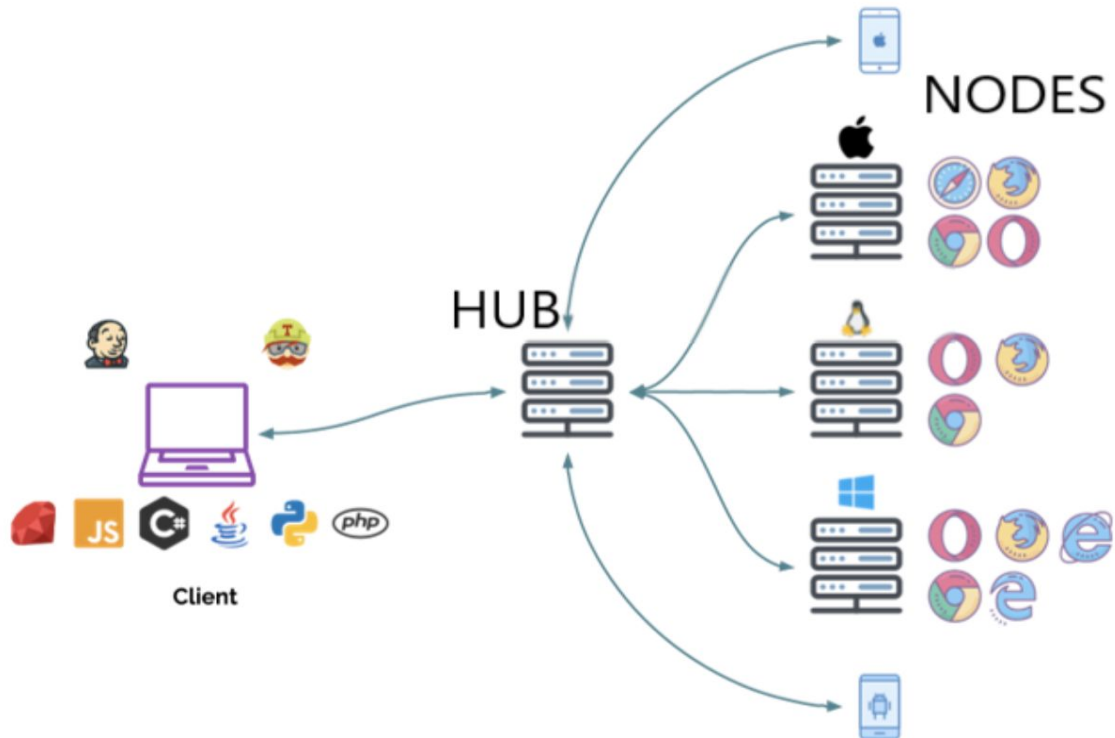
If you want to create quick bug reproduction scripts, create scripts to aid in automation-aided exploratory testing, then you want to use Selenium IDE; a Chrome, Firefox and Edge add-on that will do simple record-and-playback of interactions with the browser.



## Selenium Grid

If you want to scale by distributing and running tests on several machines and manage multiple environments from a central point, making it easy to run the tests against a vast combination of browsers/OS, then you want to use Selenium Grid.

# Selenium Grid





# Advantages of Selenium

- **Selenium is an Open Source Software.**
- **Selenium supports various programming languages to write programs (Test scripts)**
- **Selenium supports various operating systems (MS Windows, Linux, Macintosh etc...)**
- **Selenium supports various Browsers (Mozilla Firefox, Google Chrome, IE, Opera, Safari etc...)**
- **Selenium supports Parallel Test Execution (With Grid)**
- **Selenium uses fewer Hardware resources.**



## Disadvantages of Selenium

- **No reliable Technical Support**
- **It supports Web-based applications only.**
- **Difficult to Setup Test Environment when it compares to Vendor Tools like Browserstack, Saucelabs**
- **Limited support for Image Testing.**
- **New features may not work properly.**
- **No Test Tool integration for Test Management.**
- **No Built-in Reporting facility.**





## Assignment

Create a simple selenium webdriver script for browser / programming language of your choice

Step 1 : Install selenium and its language binding of your choice

Step 3 : Create a simple test which launches the URL and then does a click somewhere