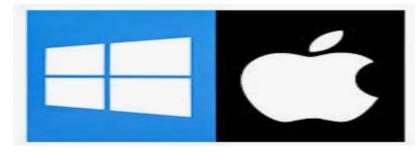
# Selenium

- Open Source Tool for Automating applications that run on browsers.
- Platform independent



Supports multiple languages

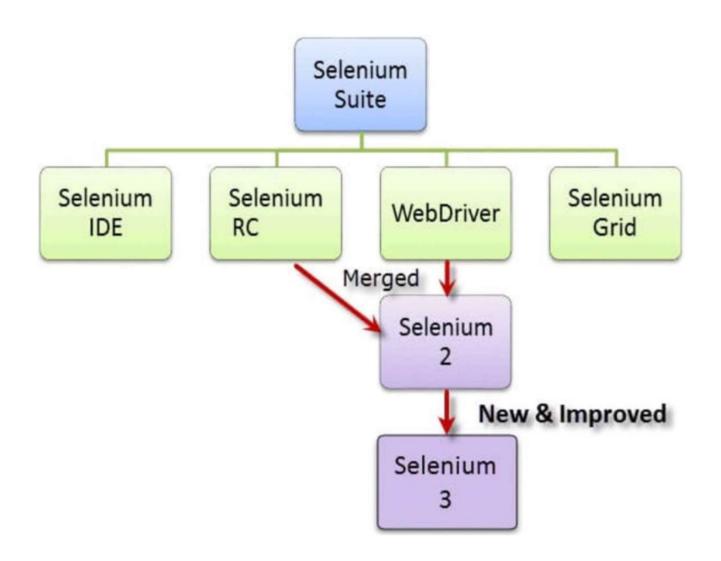






Multiple Browsers





## Selenium Components

### Selenium IDE: Integrated Development Environment

- Main Purpose is the Record & Play
- Cannot Support Large Projects
- Not suitable for Test Automation Frameworks

#### Selenium RC: Remote Control

- Deprecated: It is not supported by Selenium Community Anymore
- Legacy/Obsolete, Not in use anymore

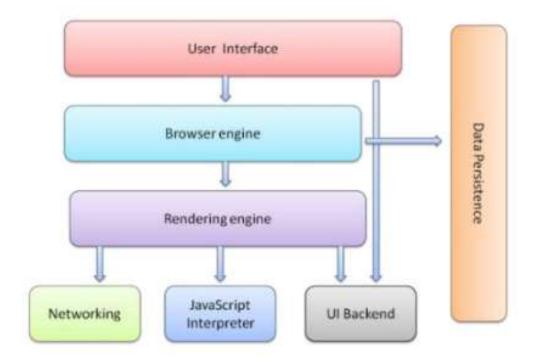
#### Selenium Webdriver:

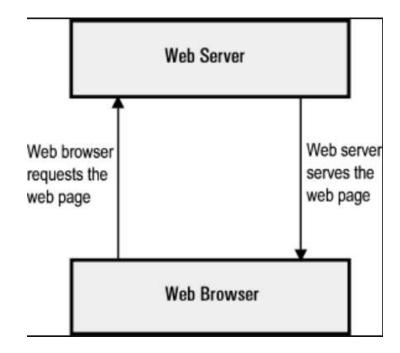
Future Of Selenium

#### Selenium Grid:

- Designed to run test automation on multiple systems(browsers/platforms) in parallel
- Designed to run automation on remote systems
- It is used with webdriver.
- eg: 200 test cases, 2 systems available. 100 test cases on both systems

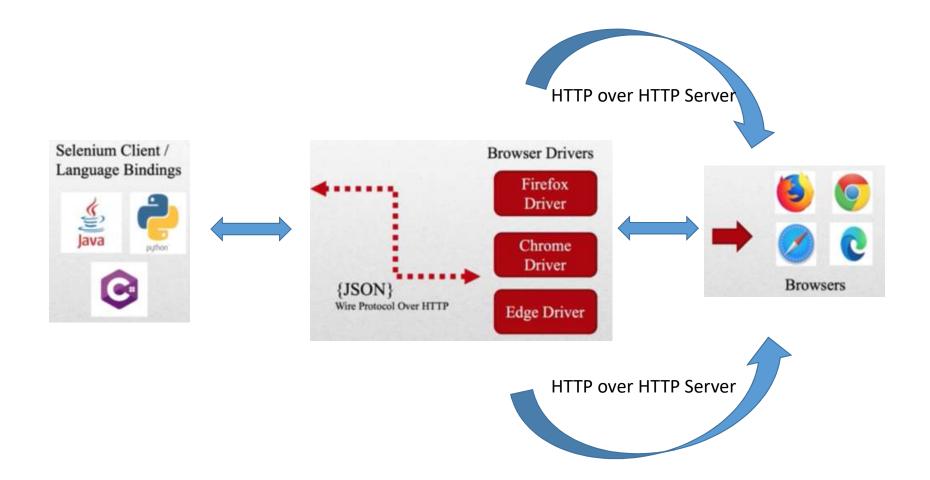






Browser Flow Web-Browser Flow

### Selenium Architecture



#### Workflow:

- When we run the automation, complete automation code will be converted to JSON.
- Generated JSON is sent to browser driver through JSON Wire Protocol Over HTTP.
- Browser Driver executes commands on the respective browser over HTTP
- Browser Driver gets response of the action back from the browser, which it sends back to the client.