

# Selenium – Day1

Introduction

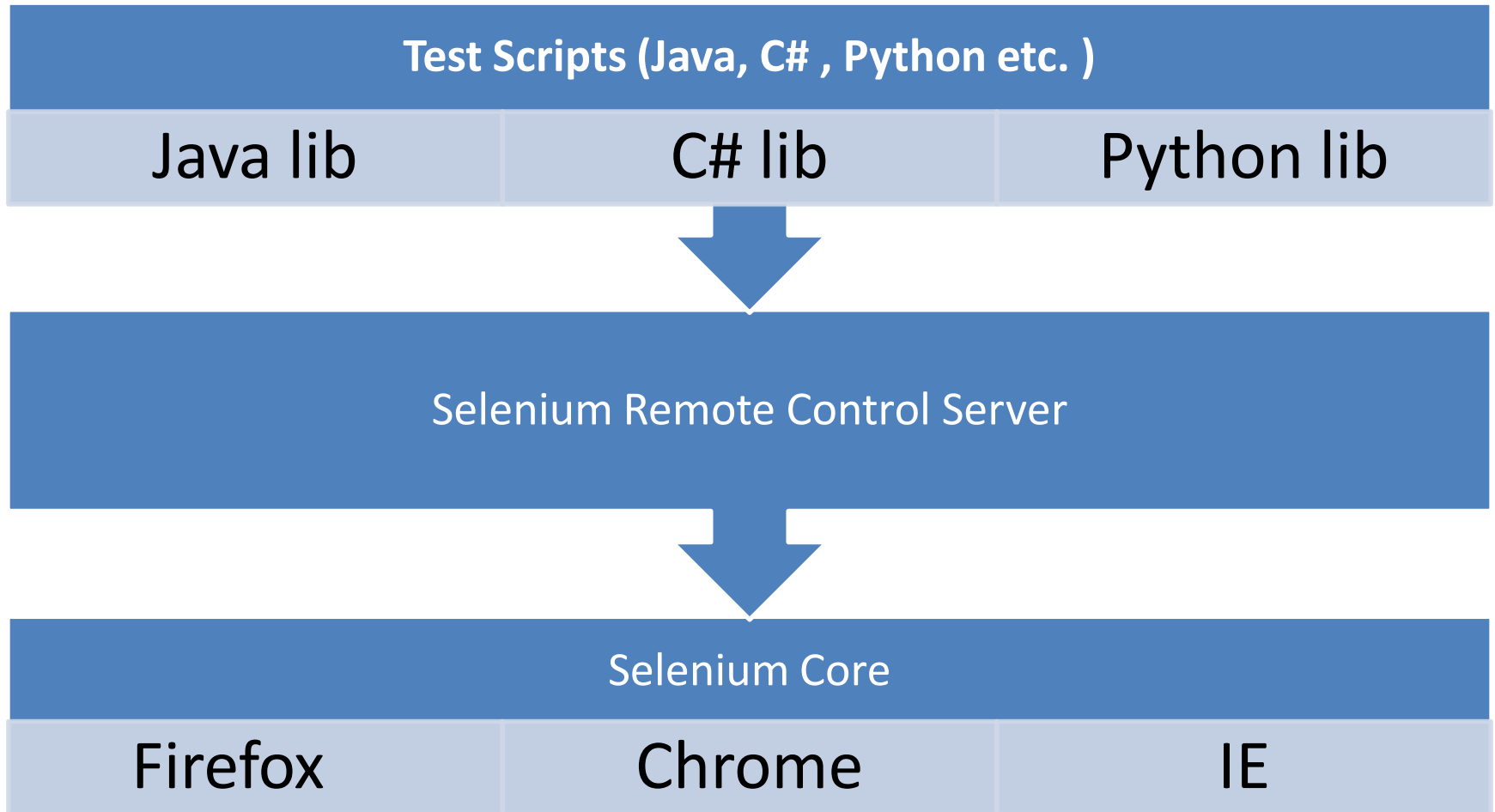
# Selenium

- Selenium is a package of several testing tools, so it is called as a suite.
- **Features:**
  - Supports **Cross Browser** Testing. The Selenium tests can be run on multiple browsers.
  - Allows scripting in several languages like Java, C#, PHP and Python.
  - Assertion statements provide an efficient way of comparing expected and actual results.

# Selenium Components

- Selenium IDE
- Selenium RC (Selenium 1)
- Selenium Grid
- Selenium WebDriver (Selenium 2)

# Selenium RC



- User creates test script in a desired programming language.
- For every language , there is a client library
- Library deports commands to Selenium RC server
- RC converts test commands into javascript commands and sends to browser
- Browser executes commands and sends result back to server
- Server delivers result back to client library.

# Grid

- Selenium grid is used to execute test suite on multiple platforms simultaneously.

# Webdriver – An Interface

- Selenium webdriver is an open source tool which was developed to overcome limitations of RC
- It directly communicates with browser , hence no need of intermediate server.
- A purely object oriented interface.
- There are utilities and classes to handle alerts, navigations, drop downs etc..
- Selenium2= selenium webdriver + selenium RC+ Selenium IDE (SIDE)

# Selenium IDE

- It is a firefox plugin.
- It is used for record and playback of a test script.
- The Script can be saved and exported to a source code file of desired language.



# To run First Selenium Script in firefox

- `package com.pack;`
- `import org.openqa.selenium.WebDriver;`
- `import org.openqa.selenium.firefox.FirefoxDriver;`
- `public class FirstTestScript {`
- `public static void main (String args[]) {`
- `// creating a driver`
- `WebDriver driver= new FirefoxDriver();`
- `// navigating to a url and maximizing window`
- `driver.navigate().to("http://www.google.com");`
- `driver.manage().window().maximize();`
- `// to get current url of webpage`
- `String url=driver.getCurrentUrl();`
- `System.out.println("Url opened is: "+url);`
- `// to get title of webpage`
- `String title= driver.getTitle();`
- `System.out.println("Title of page opened is: "+title );`
- `}`
- `}`

# To run a script in google chrome

We need to download chromedriver and set its path in the script by using.

- *System.setProperty("webdriver.chrome.driver", "C:\\Software and IDE\\chromedriver.exe");*
- **WebDriver driver = new ChromeDriver();**
- Path for chrome driver should be set before creating the ChromeDriver object.