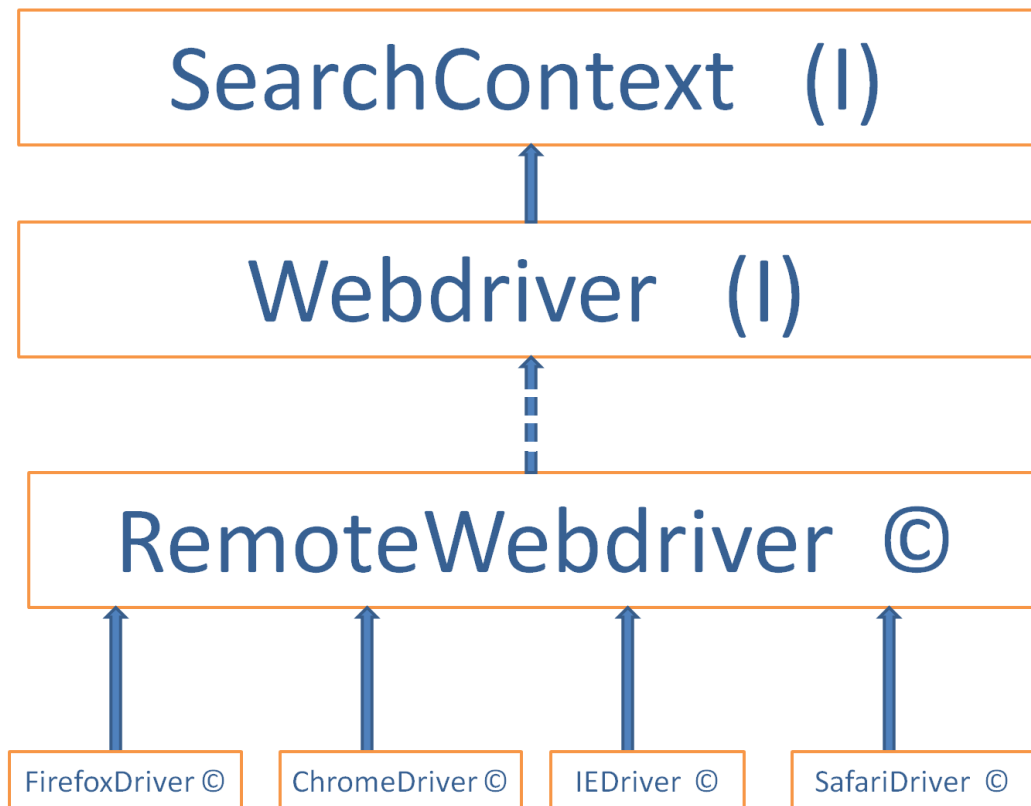


Architecture of Selenium Webdriver

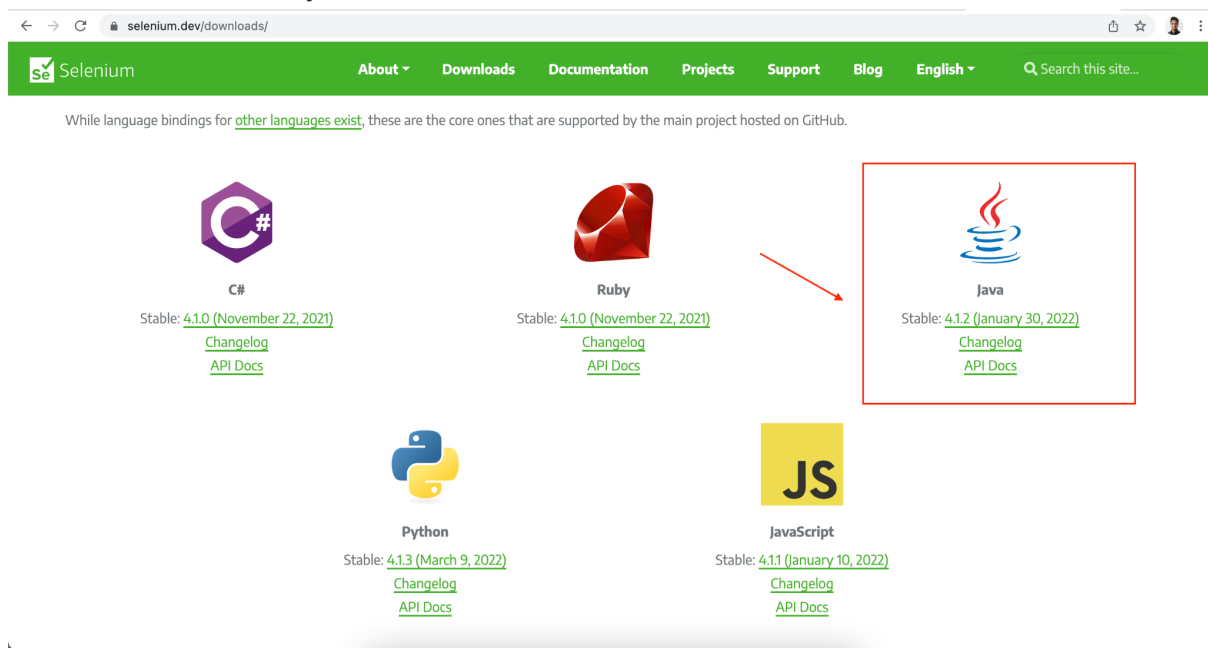
=====



- The SearchContext is a topmost interface present in the Selenium WebDriver hierarchy. It has two abstract methods which are the **findElement()** and **findElements()**.
- WebDriver Interface extends the Search Context, it has many useful and required methods like **get()**, **getTitle()**, **close()**, **quit()**, **switchTo()**, etc.
- Remote WebDriver class implements the WebDriver Interface and executes test scripts through the RemoteWebDriver server on a remote machine.
- Browser classes (FirefoxDriver, ChromeDriver..) extends the Remote WebDriver Class which are used to handle the specific browser.

Prerequisite for automation testing

1. Download Selenium library
 - a. Go to browser and search for “download selenium jar file”
 - b. Click on first link “https://www.selenium.dev › downloads”
 - c. Click on java for selenium



2. One zip file get downloaded saying “selenium-java-4.1.2.zip”
3. Export that zip file and you will get multiple jar files.
4. Import the jar files into eclipse project.
 - a. Right click on the project.
 - b. Click on “build path” option
 - c. Click on “configure build path” option
 - d. Select “libraries” option.
 - e. Click on “add external jar” option
 - f. Select all downloaded jar files which are inside “selenium-java-4.1.2.zip”
 - g. Click on apply and close.
5. Download Chromedriver.exe
 - a. Go to the browser and search for “download chromedriver for selenium”.
 - b. Click on the first link “ https://chromedriver.chromium.org › downloads”.
 - c. Check browser version and download the chromedriver file accordingly

chrome driver.chromium.org/downloads

ChromeDriver - WebDriver for Chro... ChromeDriver Capabilities & ChromeOptions Chrome Extensions ChromeDriver Canary More

Downloads

Current Releases

- If you are using Chrome version 100, please download [ChromeDriver 100.0.4896.20](#)
- If you are using Chrome version 99, please download [ChromeDriver 99.0.4844.51](#)
- If you are using Chrome version 98, please download [ChromeDriver 98.0.4758.102](#)
- For older version of Chrome, please see below for the version of ChromeDriver that supports it.

If you are using Chrome from Dev or Canary channel, please following instructions on the [ChromeDriver Canary](#) page.

For more information on selecting the right version of ChromeDriver, please see the [Version Selection](#) page.

ChromeDriver 100.0.4896.20

Supports Chrome version 100

- Resolved issue 4002: Support Fenced Frames [Pri-]

6. Suppose the Chrome version is Version 99.0.4844.51 then download the chrome driver of the same version.

chromedriver.storage.googleapis.com/index.html?path=/101.0.4951.41/

Index of /101.0.4951.41/

Name	Last modified	Size	ETag
Parent Directory	-	-	-
chromedriver_linux64.zip	2022-04-27 07:02:29	5.92MB	57fc88db21f5d009cdf526480378cbf9
chromedriver_mac64.zip	2022-04-27 07:02:31	7.88MB	1589eb6b65c5a6848d44dd43c88f1e73
chromedriver_mac64_m1.zip	2022-04-27 07:02:34	7.19MB	d6d6cfbd06ca5139f3663d2e68a88c64
chromedriver_win32.zip	2022-04-27 07:02:37	6.05MB	594669544f54e61c3762252d1a85f3d8
notes.txt	2022-04-27 07:02:42	0.00MB	c63873505b72aa1911a152618e25c9f4

7. Download the chromedriver according to the Operating System , Suppose the Operating System is Windows then download chromedriver_win32.zip file.
-

Basic Browser launch program

=====

```
package testJava;
```

```
import org.openqa.selenium.WebDriver;
```

```
import org.openqa.selenium.chrome.ChromeDriver;
```

```
public class aclass
```

```
{
```

```
    public static void main(String[] args) throws InterruptedException
```

```
    {
```

```
        System.setProperty("webdriver.chrome.driver",  
"/Users/amitparate/Downloads/chromedriver.exe");
```

```
        // this is used to set the specific browser properties to open the browser
```

```
        WebDriver driver = new ChromeDriver();
```

```
        //Upcasting to call the webdriver specific methods
```

```
        driver.get("https://www.facebook.com/"); // to open the url using get method
```

```
        Thread.sleep(2000); // to increase the delay time
```

```
        driver.navigate().to("https://www.google.com/"); // to open the url by  
navigate method
```