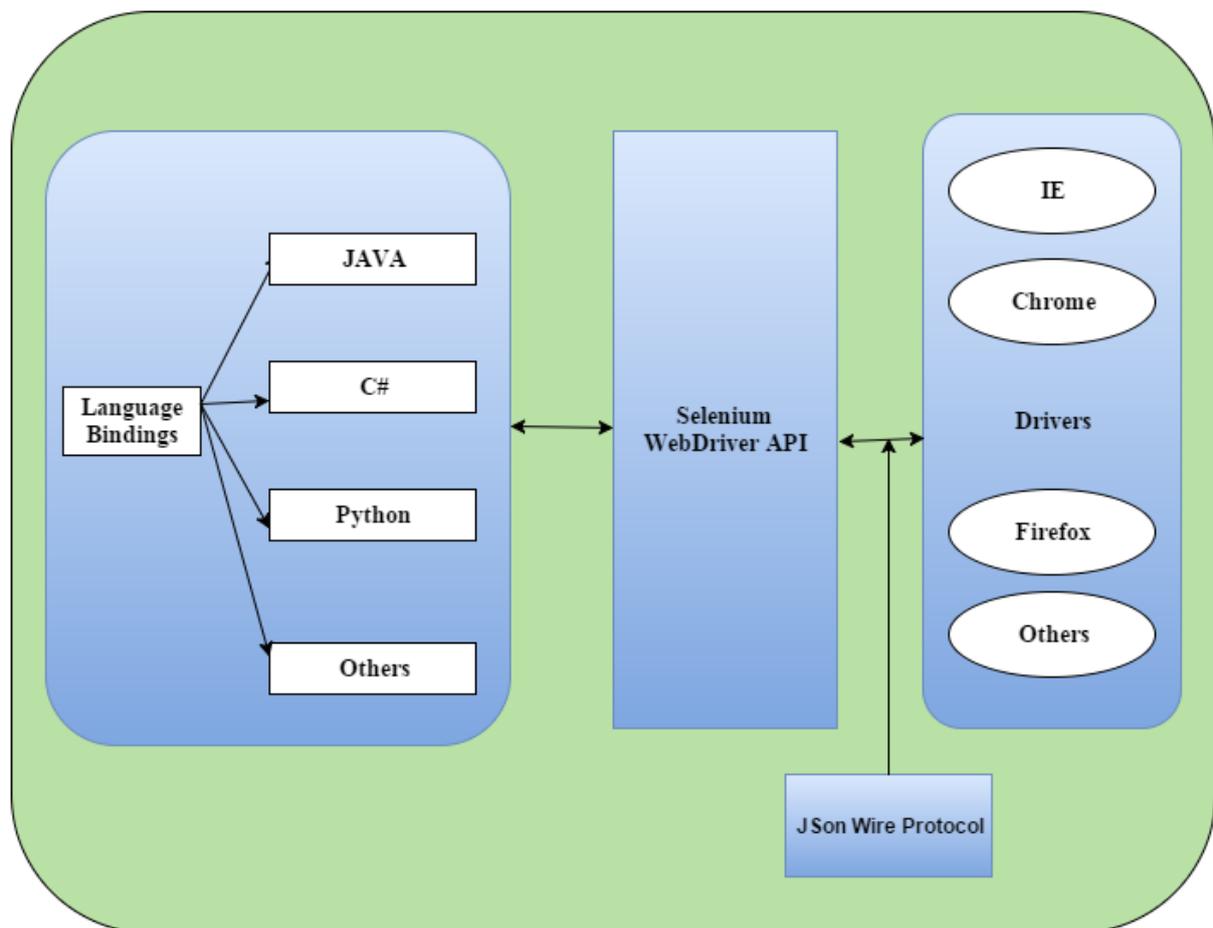


WebDriver Architecture:

WebDriver itself is an interface and the Selenium WebDriver API communicates between the written script/commands using the respective language bindings and the Browser engine to automate the Application, It uses a protocol called JSON wire Protocol and referred as WebDriver Protocol, Please find the image for the basic architecture of the WebDriver:



Internal Flows of WebDriver functionality and how it interacts with WebElements:

Selenium-WebDriver makes direct calls to the browser using each browser's native support for automation and its JS-Engine. How these direct calls are made, and the features they support depends on the browser you are using.

It does not inject Javascript like Selenium-RC at the time of loading the browser.

The following incidents are occurred while execution of the Webdriver script:

1. Basically we write the script using any language binding (Java/C# etc) and it hits the WebDriver API.
2. The script/commands (ex : driver.findElement(By.Id("xyz"))) gets converted into Javascript.
3. By the help of Browser Engine it again gets converted into the JSon, which is kind of key-value pair .
4. After getting the respective value for the respective key it identifies the respective WebElements and performs the respective user actions(like click,sendkeys etc etc..).
5. All the communications are happened by using a protocol call JSon-Wire Protocol, which is also called WebDriver protocol.

Find the below image :

