**Selenium Architecture**

**WebDriver**

**Remote WebDriver**

**Search Context**

(Super Interface)

Extends

(Sub Interface)

Implements

( Class )

Extends Extends Extends

ChromeDriver FirfoxDriver InternetExplorerDriver (Class)

1. Search context is super interface which is extended by WebDriver which is sub interface of Search Context
2. Search context contains incomplete methods (i.e. abstract methods) these incomplete methods are extended by WebDriver so WebDriver contain its own incomplete method as well as incomplete method of search context.
3. Remote WebDriver is implement class which provide definition to the incomplete methods of search context and WebDriver.
4. Remote WebDriver:

i)Remote WebDriver class is extended by different browsers like: ChromeDriver, InternetExplorerDriver, FirefoxDriver.

ii)We write a script for a browser but we can run that script for multiple browser.

iii)But to run the test scripts we need functions of WebDriver so we do up casting.

Ex: We have to run Script for google chrome, then we have to create object of ChromeDriver with reference to WebDriver.

WebDriver driver = new ChromeDriver ();

5)WebDriver:

WebDriver is an interface which perform action on browser like: open , close ,maximize , get , navigate.

**WebDriver vs Web Elements**

|  |  |
| --- | --- |
| WebDriver | Web Elements |
| 1.It is an interface which perform action on browser. | 1.It is an interface which perform action on Elements of browser |
| 2.Ex:open,close,get,navigate,maximize,minimize. | 2.Ex:dropdown,radiobutton,checkbox,table.  Text box,link text,scrollbar,image link. |