WebDriver driver = new FirefoxDriver() – Why we write in Selenium Scripts

Let’s see why can’t we use the following statement.

**WebDriver driver = new WebDriver();**

We cannot write our code like this because we cannot create Object of an Interface. WebDriver is an interface.

But we can use any of the following statements in our script

FirefoxDriver driver = new FirefoxDriver();

or

WebDriver driver = new FirefoxDriver();

**FirefoxDriver driver = new FirefoxDriver();**

The FirefoxDriver instance which gets created based on above statement will be only able to invoke FirefoxDriver and supports Firefox Browser only. We know that FirefoxDriver is a **class** and it implements all the methods of WebDriver interface. Using this statement, we can run our scripts only on Firefox Browser.

To work with other browsers we have to specifically create individual objects as below:

ChromeDriver driver = new ChromeDriver();  
InternetExplorerDriver driver = new InternetExplorerDriver();

We don’t just run our scripts only on single browser. We use multiple browsers for [Cross Browser Compatibility](https://www.softwaretestingmaterial.com/cross-browser-testing/).  We need the flexibility to use other browsers like ChromeDriver() to run on Chrome Browser and InternetExplorerDriver() to run on IE Browser and so on.

So, once you initiate a Firefox browser using FirefoxDriver driver = new FirefoxDriver(); same object cannot be used to initiate Chrome Browser (you have to rename it)

ChromeDriver driver = new ChromeDriver();

To solve this we use “Webdriver driver = new FirefoxDriver();” here we just have to replace FirefoxDriver to InternetExplorerDriver OR ChromeDriver. It is more easy method. Hence we use ChromeDriver driver = new ChromeDriver();