

webdriver interface :

- This is the main interface of selenium.
 - It is used to represent the actual browser.
 - Its methods falls under three category.
1. control of browser itself.
 2. selection of webElements.
 3. debugging aids.

category wise list of methods:

1. control of the browser.

- **get(string url)** : this method is used to open the specified url in browser window represented by webdriver instance.
E.g `WebDriver driver = new ChromeDriver ();`
`driver.get("url.");`
- **String getCurrentUrl()**: this method returns string url of page which is currently open.
- **String getTitle()**: This method will return title of the currently opened web page.
- **String getPageSource()**: this method returns the entire source code of the web page in string.
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- **void close ()**: this method is used to close the current browser window opened by driver instance. it will not close previous browser window opened by WebDriver instance.
- **void quit()**: this method will quit all the browser window opened by webdriver instance.
- **String getWindowHandle()**: It is a unique 'Hexadecimal String 'ID of the window.
- -It return String handle of currently opened window.
- **set<String>getWindowHandles()**: Return set of window handles which can be used to iterate over all open windows open of this WebDriver instance.
- **TargetLocator switchTo()**: It is used to switch to the window or frame specified by TargetLocator.
- **Navigation navigate()**: It is used to navigate back , forward , refresh on current page.
 - navigation is an **inner interface** of WebDriver interface.
 - It has methods like back(), forward (), to(String url), to(Url url),refresh().
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2. Selection of webElements:

- **WebElement findElement(By by)**: it is used to select WebElement specified by 'By class instance'. if element is not found in specified time then this method will throw '**NoSuchElementException**'.
- **List<WebElements> findElements(By by)**: This method will return list of webElements specified by 'By instance'. It will return empty list if NO matching element found.

Implementation classes of WebDriver:

- 1.ChromeDriver:
- 2.InternetExplorerDriver;
- 3.FirefoxDriver
- 4.SafariDriver.
- 5.OperaDriver
- 6.Android Driver
- 7.HTML UnitDriver
- 8.OperaDriver.