

WebDriver and WebElement

RAM SHARMA

WebDriver

- It is an interface and its implementation classes are browser specific:
 - ChromeDriver
 - FireFoxDriver
 - InternetExplorerDriver
 - OperaDriver
 - SafariDriver
- It actually drives the execution of script.

WebDriver API

- void get(String url)
- String getCurrentUrl()
- String getPageSource()
- String getTitle()

- void close()
- void quit()

- WebElement findElement(By by)
- List<WebElement> findElements(By by)

- WebDriver.TargetLocator switchTo()
- String getWindowHandle()
- Set<String> getWindowHandles()

- WebDriver.Options manage()
- WebDriver.Navigation navigate()

WebDriver API(contd.)

- **WebDriver.Navigation:**
 - void back()
 - void forward()
 - void refresh()
 - void to(String url)
- **WebDriver.Options**
 - void addCookie(Cookie cookie)
 - void deleteCookie(Cookie cookie)
 - Set<Cookie> getCookies()
 - WebDriver.Timeouts timeouts()
 - WebDriver.Window window()
- **WebDriver.TimeOuts**
 - WebDriver.Timeouts implicitlyWait(long time, TimeUnit unit)
 - WebDriver.Timeouts pageLoadTimeout(long time, TimeUnit unit)
 - WebDriver.Timeouts setScriptTimeout(long time, TimeUnit unit)
- **WebDriver.Window**
 - void fullscreen()
 - void maximize()

By API

- To Identify an element, we use By API. Below are methods:
 - static By `className(String className)`
 - static By `cssSelector(String selector)`
 - static By `id(String id)`
 - static By `linkText(String linkText)`
 - static By `name(String name)`
 - static By `partialLinkText(String linkText)`
 - static By `tagName(String name)`
 - static By `xpath(String xpathExpression)`

WebElement API

- To perform any operation on WebElement. We can use below methods:
 - void clear()
 - void click()
 - WebElement findElement(By by)
 - List<WebElement> findElements(By by)
 - String getAttribute(String name)
 - Point getLocation()
 - String getTagName()
 - String getText()
 - boolean isDisplayed()
 - boolean isEnabled()
 - boolean isSelected()
 - void sendKeys(CharSequence... keysToSend)
 - void submit()