Selenium Webdriver API Commands

**Basic and most commonly used functions of  WebDriver with Java.**

**Handle Form Elements:**

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| **Element** | **Command** | **Description** | **Example Code** |
| Input Box | sendKeys(); | To enter values onto text boxes | driver.findElement(By.id(“xyz”).sendKeys(“admin”) |
|  | clear(); | To clear text boxes of its current value | driver.findElement(By.id(“xyz”).clear(); |
| Button, Radio Button, Check Box | Click(); | To toggle the element on/off | driver.findElement(By.id(“xyz”).click(); |
| Link | Click(); | To click on link | driver.findElement(By.linkText(“linkname”).click(); |
| Submit Button | Submit(); | To click on submit button | driver.findElement(By.id(“xyz”).submit(); |
| Drop-Down Box | selectByVisibleText();  deselectByVisibleText(); | To selects or deselects an option by its displayed text | Select fruits = new Select(driver.findElement(By.id("fruits")));  fruits.selectByVisibleText("Apple"); |
|  | selectByValue();  deselectByValue(); | To selects or deselects an option by the value of its "value" attribute | Select fruits = new Select(driver.findElement(By.id("fruits")));  fruits.selectByValue("2"); |
|  | selectByIndex();  deselectByIndex(); | To selects or deselects an option by its index | Select fruits = new Select(driver.findElement(By.id("fruits")));  fruits.selectByIndex(1); |
|  | isMultiple() | returns TRUE if the drop-down element allows multiple selection at a time; FALSE if otherwise | Select fruits = new Select(driver.findElement(By.id("fruits")));  boolean b1 = fruits.isMultiple(); |
|  | deselectAll(); | deselects all previously selected options | Select fruits = new Select(driver.findElement(By.id("fruits")));  fruits.deselectAll(); |
| Web Element | findElement(); | To find single web element in UI | driver.findElement(By.id("fruits")); |
|  | findElements(); | To find no. of web element in UI at once | List<WebElement> linkElements= driver.findElements(By.tagName("a")); |
| Alert Box | switchTo(); | To switch to Alert Box | Alert alt = driver.switchTo().alert(); |
|  | accept(); | To click on Yes/OK button on Alert | alt.accept(); |
|  | dismiss(); | To click on No/Cancel button on alert | alt.dismiss(); |
| Browser | Close(); | To closes only a single window that is being accessed by the WebDriver instance currently | Driver.close(); |
|  | Quit(); | To closes all the windows that were opened by the WebDriver instance | Driver.quit(); |

**Get Methods:**

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| **Command** | **Description** | **Example code** |
| get(); | To navigate to an application in open browser. | driver.get("https://google.com"); |
| getClass(); | To retrieve the Class object | driver.getClass(); |
| getCurrentUrl(); | To retrieve the URL of the webpage | driver.getCurrentUrl(); |
| getPageSource(); | to retrieve the page source of the webpage | driver. getPageSource();  OR  boolean result = driver.getPageSource().contains("String to find"); |
| getTitle(); | To retrieve the title of the webpage | String title = driver.getTitle(); |
| getText(); | To retrieve the inner text  of the specified web element | String Text = driver.findElement(By.id("Text")).getText(); |
| getAttribute() | to retrieve the value of the specified attribute of an web element | driver.findElement(By.id("findID")). getAttribute("value"); |
| getWindowHandle() | to handle windows | driver.getWindowHandle(); |
| getWindowHandles() | To handle the situation when we have more than one window to deal with. | Set<String> s1= driver.getWindowHandles(); |

**Navigate Commands:**

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| **Command** | **Description** | **Example Code** |
| navigate() | To navigate to an application URL | driver.navigate().to("http://www.google.com"); |
| back(); | To navigate backward in browser | driver.navigate().back(); |
| forward(); | To navigate forward in browser | driver.navigate().forward(); |
| refresh(); | To refresh the current page | driver.navigate().refresh(); |

**Wait Commands:**

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| **Command** | **Example Code** |
| Implicit Wait | driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS); |
| Explicit Wait | WebDriverWait wait = new WebDriverWait(driver,10);  wait.until(ExpectedConditions.alertIsPresent()); |
| PageLoadTimeout | driver.manage().timeouts().pageLoadTimeout(100, SECONDS); |
| Sleep | Thread.sleep(1000); |