<https://toolsqa.com/selenium-webdriver/actions-class-in-selenium/>

**Methods in Actions class of Selenium**

There are a lot of methods in this class which can be categorized into two main categories:

* ***Keyboard Events***
* ***Mouse Events***

***Different Methods for performing Keyboard Events:***

* ***keyDown(modifier key): Performs a modifier key press.***
* ***sendKeys(keys to send ): Sends keys to the active web element.***
* ***keyUp(modifier key): Performs a modifier key release.***

***Different Methods for performing Mouse Events:***

* ***click():****Clicks at the current mouse location.*
* ***doubleClick():****Performs a double-click at the current mouse location.*
* ***contextClick() :****Performs a context-click at middle of the given element.*
* ***clickAndHold():****Clicks (without releasing) in the middle of the given element.*
* ***dragAndDrop(source, target):****Click-and-hold at the location of the source element, moves to the location of the target element*
* ***dragAndDropBy(source, xOffset, yOffset):****Click-and-hold at the location of the source element, moves by a given offset*
* ***moveByOffset(x-offset, y-offset):****Moves the mouse from its current position (or 0,0) by the given offset*
* ***moveToElement(toElement):****Moves the mouse to the middle of the element*
* ***release():****Releases the depressed left mouse button at the current mouse location*

|  |
| --- |
| import org.openqa.selenium.By; |
|  | import org.openqa.selenium.WebDriver; |
|  | import org.openqa.selenium.WebElement; |
|  | import org.openqa.selenium.chrome.ChromeDriver; |
|  | import org.openqa.selenium.interactions.Actions; |
|  |  |
|  | public class sendKeysDemo { |
|  |  |
|  | public static void main(String[] args) { |
|  |  |
|  | //specify the driver location |
|  | System.setProperty("webdriver.chrome.driver", "C:\\Users\\Shalini\\Downloads\\Driver\\chromedriver.exe"); |
|  |  |
|  | //instantiate the driver |
|  | WebDriver driver = new ChromeDriver(); |
|  |  |
|  | //specify the URL of the webpage |
|  | driver.get("https://www.google.com/"); |
|  |  |
|  | //maximise the window |
|  | driver.manage().window().maximize(); |
|  |  |
|  | //specify the locator of the search box |
|  | WebElement element = driver.findElement(By.xpath("//\*[@id=\"tsf\"]/div[2]/div[1]/div[1]/div/div[2]/input")); |
|  |  |
|  | //create an object for the Actions class and pass the driver argument |
|  | Actions action = new Actions(driver); |
|  |  |
|  | //pass the product name that has to be searched in the website |
|  | action.sendKeys(element, "iphone").build().perform(); |
|  |  |
|  | driver.quit(); |
|  | } |

***How to select a value from a dropdown in Selenium?***

As highlighted in the above figure, the *Select class* of *Selenium WebDriver*  provides the following methods to select an option/value from a drop-down *(as highlighted by marker 1 in the above image):*

* *selectByIndex*
* *selectByValue*
* *selectByVisibleText*

Select oSel = new Select(driver.findElement(By.xpath(//\*[@id='cars']);

if(oSel.isMultiple()){

//Selecting multiple values by index

oSel.selectByIndex(1);

oSel.selectByIndex(2);

//Or selecting by values

oSel.selectByValue("volvo");

oSel.selectByValue("audi");

//Or selecting by visible text

oSel.selectByVisibleText("Volvo");

oSel.selectByVisibleText("Opel");

}