Mousemovement,drag and drop,implicitly wait:

Mouse-over:

To do,mouse over for a particular element,we have to actions class and pass the driver to it.

Use action.movetoelement(pass the webelement).build.perform();

We shd not use click here,instead we are using build.perform();

Note: if need to click any option after displaying the menu in the mouse over ,we need to wait for few seconds to get the menu displayed,so we need to give implicitly wait or thread.sleep

Actions act=**new** Actions(driver);//class to perform mouse-over

Thread.*sleep*(5000);

act.moveToElement(driver.findElement(By.*id*("highlight-addons"))).build().perform();//control shd be moved to webelement

Thread.*sleep*(5000);

driver.findElement(By.*linkText*("You 1st")).click();

Drag and Drop:

Note:

3 actions has to be performed for dragand drop:

1.click and hold

2.move to target

3.drop or release

driver.get("https://jqueryui.com/droppable/");

driver.manage().window().maximize();

driver.manage().deleteAllCookies();

driver.switchTo().frame(0);

Actions act=**new** Actions(driver);

WebElement drag=driver.findElement(By.*id*("draggable"));

WebElement drop=driver.findElement(By.*id*("droppable"));

act.clickAndHold(drag).moveToElement(drop).release().build().perform();

Thread.*sleep*(5000);

driver.quit();

// act.clickAndHold(drag).moveToElement(drop).release().build().perform();

Pageloadtimeout:

It is for the page to be loaded.

We can give the max time for the page to be loaded fully.for e.g.40 s

If the page gets loaded in 2 s,then the rest of the time will be ignored,and next action will be performed by selenium.

If the page s heavy,and takes more than 40s,then exception will be thrown .

driver.manage().timeouts().pageLoadTimeout(40, TimeUnit.***SECONDS***);//selenium waits for 40s

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Implicitly wait:

Similar to pageloadtimeout,but It is for all the webelements to be loaded.

driver.manage().timeouts().implicitlyWait(30, TimeUnit.***SECONDS***);

Thread.sleep:

Static way

e.g.thread.sleep(30000);

selenium will wait for 30 s,even if the page and webelement gets loaded within 5s,it will not ignore the rest of the time,

script will be paused for 30s

so,better to avoid thread.sleep and use( implivitly wait and pageload timeout)🡪dynamic wait

How to simulate back and forward buttons in browser?

We cannot spy forward and back arrpws in browsers since they are browser elements,not web elements.

*driver*.get("https://www.google.com/");

Thread.*sleep*(3000);

*driver*.navigate().to("https://www.amazon.ca/");

Thread.*sleep*(3000);

*driver*.navigate().back();

Thread.*sleep*(3000);

*driver*.navigate().forward();

*driver*.navigate().refresh();

difference between driver.get and navigate() method?

Both are used to launch a URL,but navigate is used to launch external URL

Screenshot:

File src=((TakesScreenshot) *driver*).getScreenshotAs(OutputType.***FILE***);

FileUtils.*copyFile*

(src, **new** File("C:\\jansi\_javafiles\_2\\Seleniumpractice\\src\\util\\google4.jpeg"));

Note:

Cast driver to takescreenshot interface

Give o/p type in getscreenshotas method

Import file utils jar

Give the location where the file shd be copied and saved.either in workspace or in local drive

Explicitlywait:

It is for a specific webelement to be loaded. Or to wait for certain conditions

WebDriverWait wait=**new** WebDriverWait(*driver*,30);

WebElement e1=wait.until(ExpectedConditions.*visibilityOf*(*driver*.findElement

(By.*id* "))));