**Selenium WebDriver-**

It is a API file which you need to download for web application testing. To work with webdriver we need to download the Library jar files from http://seleniumhq.org

Import Packages

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.By;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium..ie.InternetExplorerDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.

**Syntax**

webdriver is an interface and d is the object of class firefox driver in which all methods of webdriver interface has been implemented.

Following syntax will launch Firefox browser

public classWebDFP

{

**public** **static** **void** main(String[] args)

{

WebDriver d = new FireFoxDriver ();

d.get("www.google.com");

d.clese();

System.exit(0); //this closes or terminates the JVM machine

}

}

**Mouse Movements in Selenium:**

**import** org.openqa.selenium.interactions.Actions; // Used for single mouse movements

**import** org.openqa.selenium.interactions.Action; // Used for single multiple mouse movements

//Creating object of Actions class

Actions act = new Actions (driver);

// used to move the mouse cursor to the specified web element. This syntax doesn’t require semi colon until finished

**Action dimag = act.movetoElement(webelement name)**

**.moveByOffset(x,y)**

**.clickAndHold(webelement name)** // will click and hold the specific web element with mouse

**.release();** // This command releases left mouse button

**.release(web element name)**

**.dragAndDrop(Source,Destionation)** // Will drag and drop the web element

**.dragAndDrop(Source,x,y)** // picks up from source and drops at x and y

**.sendKeys(web element name,”key sequence”)**

**.contectClick(web element name)** // will goto web element and right click on it.

**.click(web element name)** // Go and click on the specific web element

**.build();** // This is the concluding command to complete the Action Build

// Calling the Action:

**dimag.perform(); // This is used to perform series of Action**

int x = webelementname.getLocation().getX(); //finding x axis of web element

int y = webelementname.getLocation().getY(); //finding x axis of web element

**KeyBoard Events:**

act.keyUp(Keys.ALT); // This releases the ALT key

act.keyUp(Keys.TAB) // This releases the TAB key

act.keyUp(Keys.SHIFT) // This releases the Shift key

act.keyUp(Keys.CONTROL) // This releases the Control key

act.keyDown(modifier keys) // to press the keys (ALT,SHIFT,)

**ASSIGNMENT:**

1. Login to flipkart.com and add number of objects in cart.
2. WAP which opens Hindustantimes.com and count the number of links present in it.

**Hint**: Create weh element list

**Syntax**: List<WebElement> countoflink = d.findElements(By.tagName(“a”));

Now click on each link and increment the count.

Program:

List<WebElement> nooflinks = driver.findElements(By.tagName("a"));

System.out.println("Total No of Links are " +nooflinks.size());

For (WebElement x : nooflinks)

{

String S = x.getText();

WebElement pqr = d.findElement(By.LinkText(s));

pqr.click();

}

**08-10-2016**

**Action**

Program to login to newtours.demoaut.com

**package** mousemovementsPckg;

**import** java.util.List;

**import** java.util.concurrent.TimeUnit;

**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.support.ui.Select;

**import** org.openqa.selenium.interactions.Actions;

**import** org.openqa.selenium.interactions.Action;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** MouseClass {

**public** **static** **void** main(String[] args) **throws** InterruptedException

{

System.*setProperty*("webdriver.chrome.driver","D:\\Vivek\\chromedriver.exe");

WebDriver d=**new** ChromeDriver();

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

d.manage().timeouts().implicitlyWait(120,TimeUnit.***SECONDS***);

d.get("http://newtours.demoaut.com");

d.manage().window().maximize();

WebElement un = d.findElement(By.*name*("UserName"));

WebElement pw = d.findElement(By.*name*("password"));

WebElement signin = d.findElement(By.*name*("login"));

WebDriverWait w = **new** WebDriverWait (d,220);

Thread.*sleep*(9000);

**int** x = un.getLocation().getX(); //finding x axis of web element

**int** y = un.getLocation().getY(); //finding x axis of web element

Thread.*sleep*(4000);

//Action p1 = act.moveByOffset(x,y)

Action p = act.moveByOffset(x,y)

.click()

.sendKeys("Tutorial1")

.build();

Action p1 = act.moveToElement(pw)

.click()

.sendKeys("Tutorial1")

.build();

Action signInClick = act.moveToElement(signin)

.click()

.build();

Thread.*sleep*(3000);

p.perform();

Thread.*sleep*(3000);

p1.perform();

Thread.*sleep*(3000);

signInClick.perform();

}

}

**15-10-16**

**Implicit and Explicit wait:**

There are 2 types of wait

**Implicit Wait:**

Implicit wait is the default wait time

Package Name:

import java.util.concurrent.TimeOut;

Example:

driver.manage().timeouts().implicitlyWait(60, TimeUnit.SECONDS);

driver.manage().timeouts().implicitlyWait(60, TimeUnit.MINUTES);

driver.manage().timeouts().implicitlyWait(60, TimeUnit.HOURS);

**Explicit Wait:**

* It requires 2 import packages of selenium :
* Should always be in seconds

import org.openqa.selenium.support.ui.ExpectedConditions;  
import org.openqa.selenium.support.ui.WebDriverWait;

**Example:**

WebDriverWait w = new WebDriverWait(d,120)

//The above command creates the object of webdriverwait which waits for the time (in seconds) given in the command.

**Using Implicit Wait commands:**

1. w.until(ExpectedConditions.visibilityOfElementLocated(By.locator());

// The above command waits till the locator is the visible on the screen.

1. w.until(ExpectedConditions.invisibilityOfElementLocated(By.locator());

// The above command waits till the locator/Element is the invisible from the screen.

1. w.until(ExpectedConditions.alertIsPresent());

// This commands waits till alert appears on the screen.

1. w.until(ExpectedConditions.frameToBeAvailableAndSwitchToIt(“frame Name”);

//This command will wait till the frame is available ad once its available it will switch to that frame

1. w.until(ExpectedConditions.presenceOfElementLocated(By.locator());

// Will wait till the element is present

**Alert Handling:**

**Use the package:**

**import** org.openqa.selenium.Alert;

**Creating Object of Alert:**

Alert al = d.switchTo().alert(); // Use to create an alert.

String S = al.getText(); //To Catch the text present in the alert box.

al.accept(); // Use to accept the alert

al.dismiss(); // Use to close the alert

Assignment:

WAP to launch the web site <http://jsbin.com/usidix/1> & wait till the alert appears.

**package** alertHandlingpckg;

**import** java.util.List;

**import** java.util.concurrent.TimeUnit;

**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.Alert;

**public** **class** AlertHandlingCLass {

**public** **static** **void** main(String[] args) **throws** InterruptedException {

System.*setProperty*("webdriver.chrome.driver","D://Pravin\_Ramteke//chromedriver.exe");

WebDriver d = **new** ChromeDriver();

d.manage().timeouts().implicitlyWait(60, TimeUnit.***SECONDS***);

d.get("http://jsbin.com/usidix/1");

WebElement Go = d.findElement(By.*xpath*("html/body/input"));

Go.click();

Alert al = d.switchTo().alert(); // Use to create an alert object.

Thread.*sleep*(5000);

String S = al.getText(); //To Catch the text present in the alert box.

System.***out***.println("Text in the alert Box is:\n" +S);

al.accept(); // Use to accept the alert

//al.dismiss(); // Use to close the alert

}

}

**Frame Switching:**

d.switchTo().frame(frame Index)

Or

d.switchTo().frame(“frame Name”)

WAP: to launch the website [www.snapdeal.com](http://www.snapdeal.com/) click on my account and try to register

package Snapdeal;  
  
import org.junit.rules.Timeout;  
import org.openqa.selenium.WebDriver;  
import org.openqa.selenium.WebElement;  
import [org.openqa.selenium.By](http://org.openqa.selenium.By/);  
import [org.openqa.selenium.ie](http://org.openqa.selenium.ie/).InternetExplorerDriver;  
import org.openqa.selenium.chrome.ChromeDriver;  
import org.openqa.selenium.interactions.Actions;  
import org.openqa.selenium.interactions.Action;  
  
import java.util.concurrent.TimeUnit;  
  
import org.openqa.selenium.support.ui.ExpectedConditions;  
import org.openqa.selenium.support.ui.WebDriverWait;  
import org.openqa.selenium.Alert;  
  
  
public class SnapdealRegsiter {  
  
        public static void main(String[] args) {  
                System.setProperty("webdriver.chorme.driver","D://Deepak//chromedriver\_win32(6)//chromedriver.exe");  
                WebDriver d =new ChromeDriver();  
                d.get("<https://www.snapdeal.com/>");  
                d.manage().window().maximize();  
                d.manage().timeouts().implicitlyWait(120, TimeUnit.SECONDS);  
                Actions act = new Actions(d);  
                WebElement wc =  
d.findElement(By.xpath("html/body/div[1]/div[4]/div[2]/div/div[3]/div[3]/div"));  
              //w.until(ExpectedConditions.visibilityOfElementLocated())  
                    Action P1 = act.moveToElement(wc)  
                                  .click()  
                                  .build();  
                      P1.perform();  
          WebDriverWait w= new WebDriverWait (d,120);  
          WebElement register =  
w.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("html/body/div[1]/div[4]/div[2]/div/div[3]/div[3]/div/div/div[2]/div[2]/span[1]")));  
          register.click();  
          d.switchTo().frame("iframeLogin");  
          WebElement mobile =d.findElement(By.name("username"));  
          mobile.sendKeys("9594023066");  
          WebElement contiune  
=d.findElement(By.xpath("html/body/div[1]/div/div/div[6]/form/button"));  
          contiune.click();  
          WebElement email  
=d.findElement(By.xpath("html/body/div[1]/div/div/div[10]/div[1]/form/div[1]/div[2]/input"));  
          email.sendKeys("[dsdeepakrash@gmail.com](mailto:dsdeepakrash@gmail.com)");  
          WebElement FName  
=d.findElement(By.xpath("html/body/div[1]/div/div/div[10]/div[1]/form/div[2]/input"));  
          FName.sendKeys("Deepak Shimpi");  
          WebElement pwd  
=d.findElement(By.xpath("html/body/div[1]/div/div/div[10]/div[1]/form/input[1]"));  
          pwd.sendKeys("nsdl@123");  
          WebElement contiune1  
=d.findElement(By.xpath("html/body/div[1]/div/div/div[10]/div[1]/form/button"));  
          contiune1.click();  
  
        }  
  
}

Program 2:

**package** snapdealregisterPckg;

**import** java.util.List;

**import** java.util.concurrent.TimeUnit;

**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.ie.InternetExplorerDriver;

**import** org.openqa.selenium.interactions.Actions;

**import** org.openqa.selenium.interactions.Action;

**import** org.openqa.selenium.Alert;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** snapdealregisterClass {

**public** **static** **void** main(String[] args) **throws** InterruptedException

{

System.*setProperty*("webdriver.chrome.driver","D:\\Vivek\\chromedriver.exe");

//System.setProperty("webdriver.ie.driver", "D:\\Ajyad Khan\\IEDriverServer.exe");

WebDriver d=**new** ChromeDriver();

//WebDriver d=new InternetExplorerDriver();

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

d.manage().timeouts().implicitlyWait(120,TimeUnit.***SECONDS***);

d.get("http://www.snapdeal.com");

d.manage().window().maximize();

WebElement Sigin = d.findElement(By.*xpath*(".//\*[@id='sdHeader']/div[4]/div[2]/div/div[3]/div[3]/div/span[1]"));

Sigin.click();

Thread.*sleep*(3000);

WebElement Reg = d.findElement(By.*xpath*(".//\*[@id='sdHeader']/div[4]/div[2]/div/div[3]/div[3]/div/div/div[2]/div[2]/span[1]"));

Reg.click();

Thread.*sleep*(3000);

d.switchTo().frame("iframeLogin");

WebElement email1 = d.findElement(By.*name*("username"));

email1.click();

email1.sendKeys("khanajyad@gmail.com");

// WebElement email =d.findElement(By.xpath("html/body/div[1]/div/div/div[10]/div[1]/form/div[1]/div[2]/input"));

// email.sendKeys("khanajyad@gmail.com");

WebElement continues = d.findElement(By.*xpath*(".//\*[@id='checkUser']"));

continues.click();

}

}

**Window Handling using “switchTo().window()”:**

d.switchTo().window(‘’window Handle ID”);

Program to close all unwanted extra windows/popup and be on the base page

ArrayList <String> wid = **new** ArrayList <String>(d.getWindowHandles());

String OroginalWindow = wid.get(0); // Storing the current window id

**int** winLen = wid.size();

**for** (**int** i = 0 ; i<winLen -1; i++)

{

d.switchTo().window(wid.get(i));

d.close();

}

d.switchTo().window(OroginalWindow);

**22-10-2015**

**Select drop down Object**

Import below packages

import org.openqa.selenium.ui.Select;

Select Objname = new Select (Locator of the drop down);

Commands:

Objname.selectByVisibleText(“Option of the drop down”);

Objname.selectByIndex(“number”);

Objname.selectByValue(“Value attribute of HTML”);

**Assignment WAP:**

To launch the website **http://www.rediffmail.com** and register the profile.

**package** rediffmailpckg;

**import** java.util.List;

**import** java.util.concurrent.TimeUnit;

**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.support.ui.Select;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** rediffmailClass {

**public** **static** **void** main(String[] args) **throws** InterruptedException

{

System.*setProperty*("webdriver.chrome.driver","D:\\Vivek\\chromedriver.exe");

WebDriver d=**new** ChromeDriver();

//Actions act = new Actions(d);

d.manage().timeouts().implicitlyWait(120,TimeUnit.***SECONDS***);

d.get("http://www.rediff.com/");

d.manage().window().maximize();

//d.get("https://register.rediff.com/register/register.php?FormName=user\_details");

WebElement createAcc = d.findElement(By.*xpath*(".//\*[@id='signin\_info']/a[2]"));

createAcc.click();

WebElement fn = d.findElement(By.*xpath*(".//\*[@id='wrapper']/table[2]/tbody/tr[3]/td[3]/input"));

fn.sendKeys("Ajyad");

//WebElement ID = d.findElement(By.name("name1d0a9337"));

//ID.sendKeys("ajyad.khan@rediffmail.com");

Select day = **new** Select (d.findElement(By.*xpath*(".//\*[@id='wrapper']/table[2]/tbody/tr[24]/td[3]/select[1]")));

day.selectByValue("14");

Thread.*sleep*(2000);

Select month = **new** Select (d.findElement(By.*xpath*(".//\*[@id='wrapper']/table[2]/tbody/tr[24]/td[3]/select[2]")));

month.selectByValue("05");

}}

***Xpath:***

Types:

**Absolute Xpath**: It starts from root element

Eg: to check the “Globe” span text box element you can do with the below command:

<html><head>

<body>

<input ----->

<div>

<input ----->

<span --- name = “GLobe”, -->

<input ------>

**Command:** /html/body/input/div/input/span/input

**Relative Xpath**: It starts where use wants to start.

**Syntax:**

.//tagName[@attribute = value]

**Example:**

.//span[@name = “Globe”]

.//\*/span[1]

**Assignment**

Form the relative xpath of email ID and password of Facebook.com also form the relative xpath of sign in as well

**package** relativexpthpckg;

**import** java.util.List;

**import** java.util.concurrent.TimeUnit;

**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.support.ui.Select;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** relativexpthclass {

**public** **static** **void** main(String[] args) **throws** InterruptedException

{

System.*setProperty*("webdriver.chrome.driver","D:\\Vivek\\chromedriver.exe");

WebDriver d=**new** ChromeDriver();

//Actions act = new Actions(d);

d.manage().timeouts().implicitlyWait(120,TimeUnit.***SECONDS***);

d.get("https://www.facebook.com/");

d.manage().window().maximize();

WebElement email1 = d.findElement(By.*xpath*(".//\*/input[@name='email']"));

Thread.*sleep*(3000);

email1.sendKeys("ajyad.kha@n@gmail.com");

WebElement password = d.findElement(By.*xpath*(".//\*/input[@name='pass']"));

Thread.*sleep*(3000);

password.sendKeys("abc12345");

WebElement signin = d.findElement(By.*xpath*(".//\*/input[@id='u\_0\_l']"));

Thread.*sleep*(3000);

signin.click();

}

}

**Syntax:**

.//tagname[contains(attribute,’value’)];

**Example:**

.//img[contains(@src,’bapat’)];

**Assignment:**

Login with real user in the website http://newtours.demoaut.com/ and fill the form.

**package** findxpathpckg;

**import** java.util.List;

**import** java.util.concurrent.TimeUnit;

**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.support.ui.Select;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** findxpathclass {

**public** **static** **void** main(String[] args) **throws** InterruptedException

{

System.*setProperty*("webdriver.chrome.driver","D:\\Vivek\\chromedriver.exe");

WebDriver d=**new** ChromeDriver();

//Actions act = new Actions(d);

d.manage().timeouts().implicitlyWait(120,TimeUnit.***SECONDS***);

d.get("http://newtours.demoaut.com/");

d.manage().window().maximize();

WebElement username1 = d.findElement(By.*xpath*(".//\*/input[@name='userName']"));

Thread.*sleep*(3000);

username1.sendKeys("tutorial1");

WebElement password1 = d.findElement(By.*xpath*(".//\*/input[@name='password']"));

Thread.*sleep*(3000);

password1.sendKeys("tutorial1");

WebElement Login = d.findElement(By.*name*("login"));

Thread.*sleep*(3000);

Login.click();

WebElement oneway = d.findElement(By.*xpath*(".//input[contains(@value, 'oneway')]"));

oneway.click();

WebElement Submit = d.findElement(By.*xpath*("findFlights"));

Submit.click();

}

}

**isMultiple():**

Its usefull to select multiple values in a drop down.

If(dropdownObject.isMultiple())

{

-

-

}

**isSelected();**

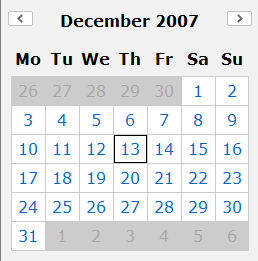
If returns true if the drop down is selected else return false

Syntax:

Objectname.isSelected(); // Returns true if web element is selected else return false

Objectname.isDisplayed() // Returns true if web element is visible on page else return false

Calendar Control:



If i want to move to 13th date in the above calendar

<table>

<tbody>

<tr>

<td>1</td>

<td>2</td>

<td>3</td>

<td>4</td>

-

-

<td>31</td>

</tr>

</table>

**Forming the Xpath:**

//table/tbody/tr[3]/td[4]

**Forming the array list of all TD text date from the calendar control**

List<WebELement> CalDate = d.findElements(By.*tagName*("td"));

for (WebElement x: CalDate)

{

String Dat = x.getText();

If (date.equals(“13”)

{

x.click();

}

)

**Assignment:**

Login the site [www.redbus.in](http://www.redbus.in/)

Type From city as Mumbai and To city as Delhi

From Journey Date: 27th-Oct-2016 & Return Journey Date: 31st- Oct -2016

**Program**:

**package** redbuspckg;

**import** java.util.List;

**import** java.util.concurrent.TimeUnit;

**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.support.ui.Select;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** redbucClass {

**public** **static** **void** main(String[] args) **throws** InterruptedException

{

System.*setProperty*("webdriver.chrome.driver","D:\\Vivek\\chromedriver.exe");

WebDriver d=**new** ChromeDriver();

//Actions act = new Actions(d);

d.manage().timeouts().implicitlyWait(120,TimeUnit.***SECONDS***);

d.get("http://www.redbus.in/");

d.manage().window().maximize();

WebElement FromCity = d.findElement(By.*xpath*(".//\*[@id='src']"));

Thread.*sleep*(1000);

FromCity.sendKeys("Mumbai");

WebElement ToCity = d.findElement(By.*xpath*(".//\*[@id='dest']"));

Thread.*sleep*(1000);

ToCity.sendKeys("Delhi");

WebElement FromDate = d.findElement(By.*xpath*(".//\*[@id='search']/div/div[3]/span"));

FromDate.click();

Thread.*sleep*(1000);

List<WebElement> CalDateFrom = d.findElements(By.*tagName*("td"));

**for** (WebElement x: CalDateFrom)

{

String DatFrm = x.getText();

**if**(DatFrm.equals("22"))

{

x.click();

}

}

WebElement ToDate = d.findElement(By.*xpath*(".//\*[@id='search']/div/div[4]/span"));

ToDate.click();

Thread.*sleep*(1000);

List<WebElement> CalDateTo = d.findElements(By.*tagName*("td"));

**for** (WebElement y: CalDateTo)

{

String DatTo = y.getText();

**if**(DatTo.equals("31"))

{

y.click();

}

}

WebElement Search = d.findElement(By.*xpath*(".//\*[@id='search\_btn']"));

Search.click();

Thread.*sleep*(1000);

}

}

**Assignment:**

Automate the website orangehrm.com & handle the left side menu by clicking.

After clicking “request a quote” button

analyse the broken links on orangehrm.com

**Page Factory**

Here we create 2 classes:

1. 1 is used to declare the web element which is **@FindBy**
2. 2nd is used to initialise the page object by **PageFactory** class

Import org.openqa.selenium.How;

Import org.openqa.selenium.PageFactory;

Import org.openqa.selenium.FindBy;

@FindBy(how = How.locatornameincapital,using = “value”)

How.Name

How.ID

How.ClASS\_NAME

How.XPATH

HOW.LINK\_TEXT

Public WebElement webelement name;

How class is used to define real elements

**Initialization of page factory elements**

Syntax:

Classname of WebElements ObjectName = PageFactoy.initElements(d,classnameofWebElements.Class);

ObjectName.method(parameters);

Example:

Parent Class

Child Class

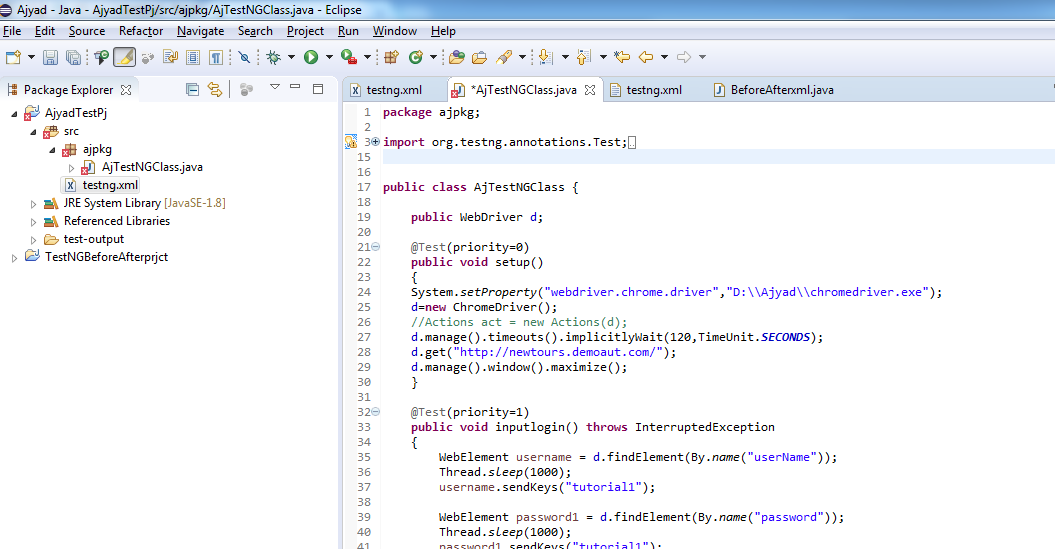
Assignment:

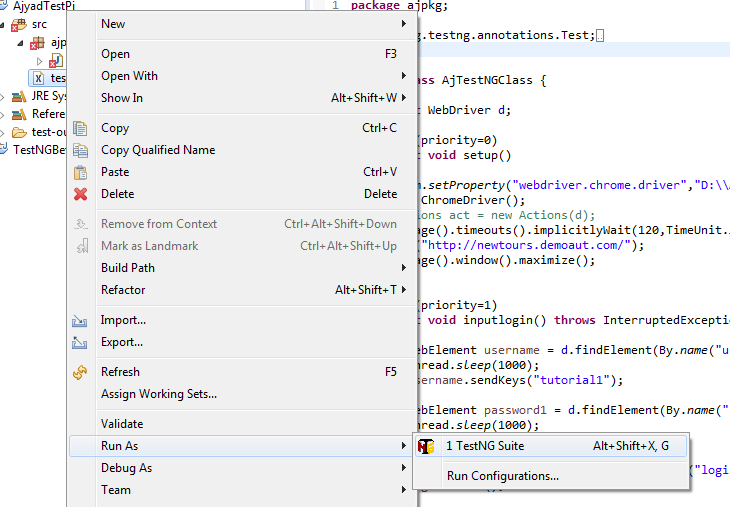
Login to newtours.demoaut.com website and by using page factory method.

Login

19-11-2016

**TestNG:**





**XML Format for TestNG**

<?xml version="1.0" encoding="UTF-8"?>

<suite name="Suite" parallel="false">

<test name="Test">

<classes>

<class name="ajpkg.AjTestNGClass"/>

</classes>

</test> <!-- Test -->

</suite> <!-- Suite -->

Assignment 1:

**package** ajpkg;

**import** org.testng.annotations.Test;

**import** java.util.List;

**import** java.util.concurrent.TimeUnit;

**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.support.ui.Select;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** AjTestNGClass {

**public** WebDriver d;

@Test(priority=0)

**public** **void** setup()

{

System.*setProperty*("webdriver.chrome.driver","D:\\Ajyad\\chromedriver.exe");

d=**new** ChromeDriver();

//Actions act = new Actions(d);

d.manage().timeouts().implicitlyWait(120,TimeUnit.***SECONDS***);

d.get("http://newtours.demoaut.com/");

d.manage().window().maximize();

}

@Test(priority=1)

**public** **void** inputlogin() **throws** InterruptedException

{

WebElement username = d.findElement(By.*name*("userName"));

Thread.*sleep*(1000);

username.sendKeys("tutorial1");

WebElement password1 = d.findElement(By.*name*("password"));

Thread.*sleep*(1000);

password1.sendKeys("tutorial1");

WebElement login = d.findElement(By.*name*("login"));

login.click();

}

}

**Assignment 2**:

Q: Open http://newtours.demoaut.com/ , get the title of the page and close the website

package BeforeAfterpckg;

import org.testng.annotations.Test;

import org.testng.annotations.BeforeMethod;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.testng.annotations.AfterMethod;

public class BeforeAfterxml {

public WebDriver d;

@Test

public void f() {

String title = d.getTitle();

System.out.println(title);

}

@BeforeMethod

public void beforeMethod() {

System.setProperty("webdriver.chrome.driver","D:\\Ajyad\\chromedriver.exe");

d=new ChromeDriver();

//Actions act = new Actions(d);

d.manage().timeouts().implicitlyWait(120,TimeUnit.SECONDS);

d.get("http://newtours.demoaut.com/");

d.manage().window().maximize();

}

@AfterMethod

public void afterMethod() {

d.close();

}

}

**Home Work:**

WAP using TestNG to launch http://newtours.demoaut.com/ .

* Print the title
* Click the Register link & Print the title
* Go back to home page & again the check the home page

**Parameterization through TESTNG by Data Provider**

import org.testing.annotations.DataProvider;

@DataProvider (name ="dp name")

public object [][] method name ()

{

object [][] array name = new object [row size] [column size]

array name [row] [column] = data;

return array name;

}

example -

public object [] [] m1()

{

object [] [] arr = new object [3][2];

arr [0] [0] = "abc";

arr [0] [1] = "pqr";

arr [1] [0] = "xyz";

return arr;

}

Call Parameterization through TestNG

@Test(dataProvider= "dp name")

public void methodname (parameters mapped with column)

{

code;

}

The number of iterations of the method before @Test can be managed by number of rows of data provider.

**Parameterization through excel**

Excel Handling

download apache poi for XSSF (xls,xlsx)

HSSF (xls)

import java.io.File;

import java.io.FileInputStream;

import java.io.FileOutputStream;

import java.io.IOException;

import java.io.InputStream;

import java.io.Iterator;

import org.apache.poi.xssf.usermodel.XSSFCell;

import org.apache.poi.xssf.usermodel.XSSFRow;

import org.apache.poi.xssf.usermodel.XSSFSheet;

import org.apache.poi.xssf.usermodel.XSSFWorkbook;

public class ParameterizeDataClas{

public static void main dataread() throws IOException

{

String fname = "path of the file to be read";

File f = new File (fname);

if (f.exists())

{

FileInputStream ExcelFileToRead = new FileInputStream (fname);

XSSFWorkbook wb = new XSSFWorkbook (ExcelFileToRead);

XSSFSheet sheet = wb.getSheetAt(0);

XSSFRow row;

XSSFCell cell;

Iterator rows =shet.rowIterator();

while (rows.hasNext())

{

row =(XSSFRow) rows.next();

Iterator cells = row.cellIterator();

while (cell.hasNext())

{

cell=(XSSFCell) cell.next();

if (cell.getCellType() == XSSFCell.CELL\_TYPE\_STRING)

{

String un=cell.getStringCellValue();

}

else if(cell.getCellType() == XSSFCell.CELL\_TYPE\_NUMERIC)

{

System.out.print (cell.getNumericCellValue ()+"")

}

else

{

System.out.println ("invalid cell value");

}

}

System.out.println();

}

}

}

public static void dataWrite() throws IOException {

String excelFileName = "path of the file";

String sheetName = "RadheData";

String sl = "Gud";

String il = "100 bags";

XSSFWorkbook wb = new XSSFWorkbook ();

XSSFSheet sheet = wb.createSheet (sheetName);

for ( int r=0;r<1;r++0

{

XSSFRow row = sheet.createRow (r):

for (int c=0;c<1;c++)

{

XSSFCell cell = row.createCell(c);

switch(c)

{

case 0:

{

cell.setCellValue (s1+" "+il);

break;

}

case 1:

{

cell.setCellValue("ok");

break;

}

case 2:

{

cell.setCellValue ("Execute");

break;

}

case 3:

{

cell.setCellValue ("test plan implement");

break;

}

case 4:

{

cell.setCellValue (" ");

break;

}}

}

}

FileOutputStream fileOut = new FileOutputStream (excelFileName);

wb.write (fileout);

fileout.flush();

fileout.close();

}

public static void main (String [] args) throws IOException

{

dataRead();

dataWrite();

}

**03-Dec-2016**

**AutoIT:**

Auto it is used for handling the windows

This includes VB and QTP commands

Autoit has the extension .au3

When u compile .au3 file and build then .exe file is created

How to Include.exe file in selenium – Use below command

**Command:**

**Runtime.getRunTime().exec(“Path of exe file”)**

Download autoIT

Goto google and type : free download autoIT

Also download **– Script Editor** for AutoIT i.e. SciTE

**Now OpenAutoIT v3 folder  AutoIT Window Info  Finder Tool will open  Refer the Window and Control tabs to identify the properties and values**

Finder Tool is only used to find the properties and values of object

Control ID from finder tool is the combination of class & instance

Now open the SciTE

(Its a script editor to write the scripts)

VB Script Commands for AutoIT –>

1. ControlFocus (“Tiltle”,”Text”,”ControlID”)  Its used to set the focus of the textbox
2. WinActivate(“title”,”text”)  Gives focus to a window
3. ControlClick(“title”)  Used to click through mouse on the specified buttons
4. Send(“keys”)  Used to type the text in the text boxes
5. Sleep(delay)  This waits for specified milliseconds

**Prerequisite:**

Before running AutoIT scripts you have to open the “aut” applications.

**Send Commands**:

Send(“{ASC 068}”)

Send(“{ASC 2709}”)

Send(“{DEL 4}”)

Send(“{S 30}”) ; Sends 30 ‘S’ characters

Send(“+{Tab 4}”) ; Presses Shift + Tab key 4 times

Send(“{a down}”) ;

Send (“{a up}”)

Send (“{TAB}”)  Navigate to next control (Button, Checkboxes etc)

Send (“+{TAB}”)  Navigate to previous Control

Send (“^{TAB}”)  Navigate to next windowTab (on tabbed dialog window)

Send (“^+{TAB}”)  Navigate to previous windowTab

Send (“{SPACE}”)  can be used to toggle a checkbox or a click button

Send (“{+}”)  Usually checks a check box

Send (“{-}”)  Usually unchecks a check box

**Menu Handling**

Send(“!f”)  Send alt + f commands

Send(“{DOWN}”)  To move to the down in the menu

Send(“{UP}”) To move to Up in the menu

Send(“{RIGHT}”) To move right in the menu

**Assignment:**

WAP to type some text in note pad and save the file

**Program:**

WinActivate("Untitled - Notepad")

Sleep(2000)

ControlFocus("Untitled - Notepad","","Edit1")

Sleep(2000)

Send("Good Evening")

Send("!f")

Send("{DOWN 3}")

Sleep(2000)

ControlClick("Save As","","")

Sleep(2000)

Send("{ENTER}")

Sleep(2000)

Send("TestNotepadDoc.txt")

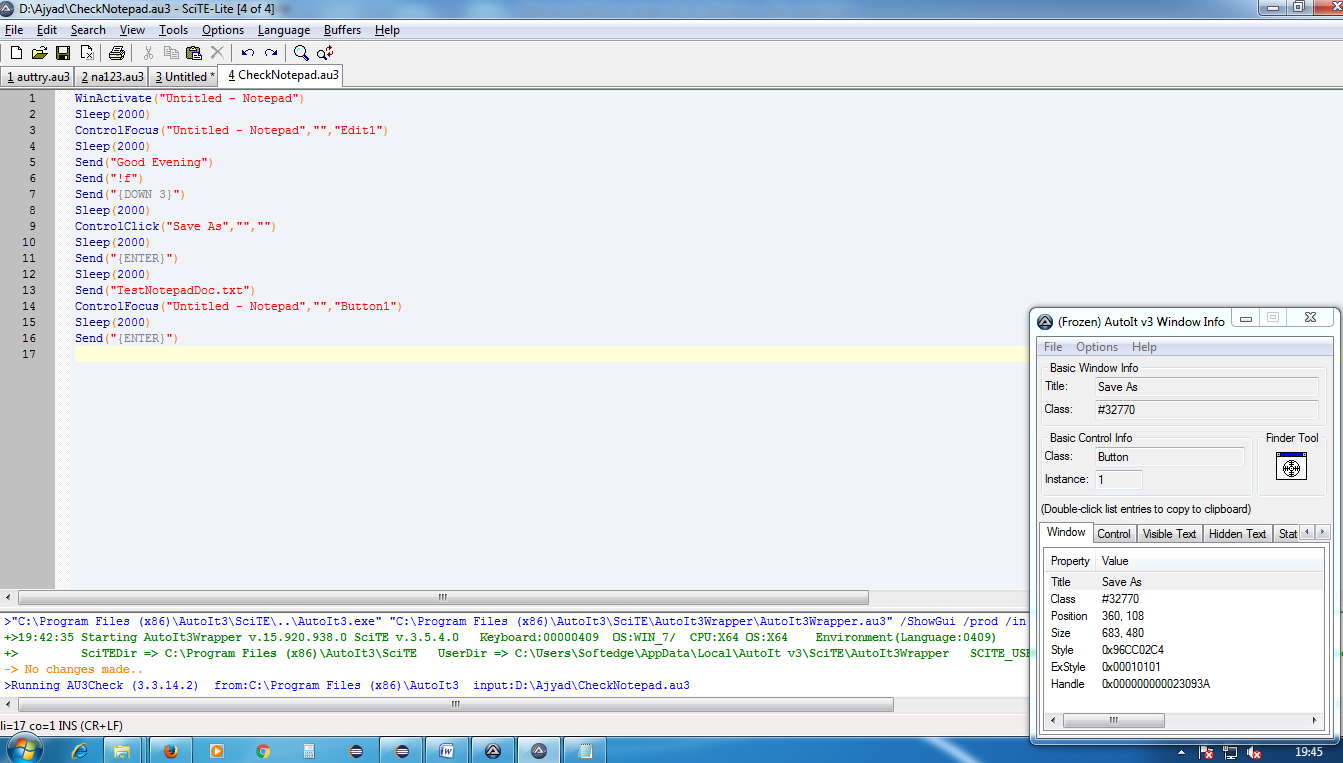
ControlFocus("Untitled - Notepad","","Button1")

Sleep(2000)

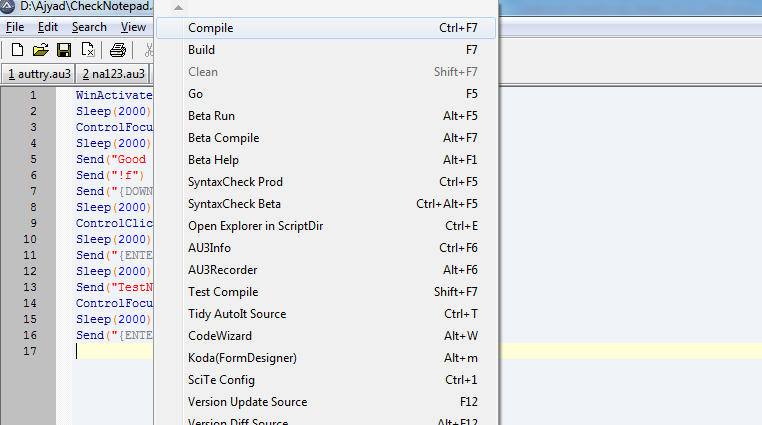
Send("{ENTER}")

Steps for execution:

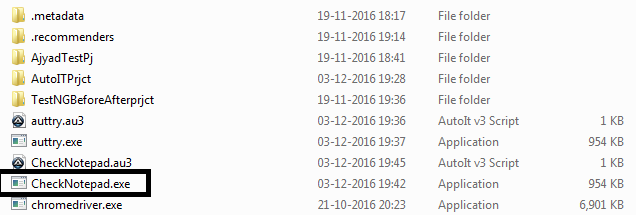
Goto



1. Build and Compile the code



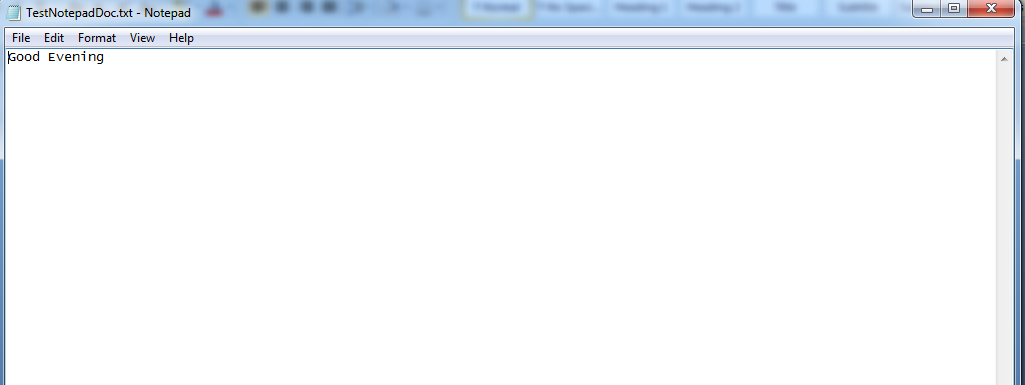
**.exe** will be created in your folder



Click on the above exe file You will see your code will be executed

And file will be created

**Note**: Before executed please open the Application on which you have to perform the AutoIT. For example to work on Notepad, you have to open the Notepad File



**Assignment**:

Write a program to upload resume in Naukri.com

URL to be used:

<https://my.naukri.com/account/register/basicdetails>

**Selenium Code:**

**package** uplaodresumeusingautoITpckg;

**import** java.io.IOException;

**import** java.util.List;

**import** java.util.concurrent.TimeUnit;

**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.support.ui.Select;

**import** org.openqa.selenium.interactions.Actions;

**import** org.openqa.selenium.interactions.Action;

**import** org.openqa.selenium.support.ui.ExpectedConditions;

**import** org.openqa.selenium.support.ui.WebDriverWait;

**public** **class** uplaodresumeusingautoITClass {

**public** **static** **void** main(String[] args) **throws** InterruptedException, IOException

{

System.*setProperty*("webdriver.chrome.driver","D:\\Ajyad\\chromedriver.exe");

WebDriver d=**new** ChromeDriver();

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

d.manage().timeouts().implicitlyWait(120,TimeUnit.***SECONDS***);

d.get("https://my.naukri.com/account/register/basicdetails");

d.manage().window().maximize();

WebElement IAMProfessional = d.findElement(By.*xpath*("html/body/div[1]/form/div[2]/div/button"));

IAMProfessional.click();

WebElement UploadResume = d.findElement(By.*xpath*("html/body/main/div/div/form/resman-uploader/div/div[1]/span[1]"));

UploadResume.click();

Runtime.*getRuntime*().exec("D:\\Ajyad\\UploadNaukriResume.exe");

}

}

**Auto It Code:**

WinActivate("Open")

Sleep(1000)

ControlFocus("Open","","Edit1")

Sleep(1000)

send("D:\Ajyad\TestTheUploadResume.doc")

ControlFocus("Open","","Button1")

send("{ENTER}")