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Nov 20-2021

**03 july 2022**

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**How to Develop Sample webpage:**

**HTML:**

1. Develop a sample web page:
2. We use html tags

<html>

<head> My Heading -1</head>

<title> My title</title>

<H1> h1 </H1>

My Web Page.

<br> <b> 1. Textboxes: </b> <br>

User name <input type="text"> <br>

First Name <input type="text"> <br>

Last Name <input type="text"> <br> <br>

<b>2.Password </b>

<input type="password">

<br> <br>

<b>3. Radio buttons </b> <br>

Select Sex :<input type="radio">Male

<input type = "radio"> Female <br> <br>

<b>4. Checkboxes: </b> <br>

<input type="checkbox"> ECE

<input type="checkbox" > EEE

<input type="checkbox" > MECH

</html>

HW 1: develop simple page with Customer name, Project, Project description textboxes

Dropdown :

<html>

<head> My Heading -1</head>

<title> My title</title>

<H1> h1 </H1>

My Web Page.

<br> <b> 1. Textboxes: </b> <br>

User name <input type="text" name="username" id="userid"> <br>

First Name <input type="text" name = "firstname" id="firstid"> <br>

Last Name <input type="text" name="lastname" id="lastid"> <br> <br>

<b>2.Password </b>

<input type="password">

<br> <br>

<b>3. Radio buttons </b> <br>

Select Sex :<input type="radio">Male

<input type = "radio"> Female <br> <br>

<b>4. Checkboxes: </b> <br>

<input type="checkbox"> ECE

<input type="checkbox" > EEE

<input type="checkbox" > MECH

<br> <br>

<b>5. Dropdown or Listbox: </b> <br>

Select Cars :

<select name="cars" id="carid">

<option> Audi </option>

<option> Benz </option>

<option> Honda </option>

<option> Maruthi </option>

</select>

</html>

For each tag or Element , developer can define other **properties / attributes – values**

**Attrname=”attr val”**

**Must be defined inside tag**

<input type="text" **name="username"** id="userid"> <br>

First Name <input type="text" name = "firstname" id="firstid"> <br>

Last Name <input type="text" name="lastname" id="lastid"> <br> <br>

**HW Dropdown**: Products: Lux, HeadShousdler......etc

**MultiSelect Dropdown :**

**<html>**

**<head> My Heading -1</head>**

**<title> My title</title>**

**<H1> h1 </H1>**

**My Web Page.**

**<br> <b> 1. Textboxes: </b> <br>**

**User name <input type="text" name="username" id="userid" value="default Enter user"> <br>**

**First Name <input type="text" name = "firstname" id="firstid"> <br>**

**Last Name <input type="text" name="lastname" id="lastid"> <br> <br>**

**<b>2.Password </b>**

**<input type="password">**

**<br> <br>**

**<b>3. Radio buttons </b> <br>**

**Select Sex :<input type="radio">Male**

**<input type = "radio"> Female <br> <br>**

**<b>4. Checkboxes: </b> <br>**

**<input type="checkbox"> ECE**

**<input type="checkbox" > EEE**

**<input type="checkbox" > MECH**

**<br> <br>**

**<b>5. Dropdown or Listbox: </b> <br>**

**Select Cars :**

**<select name="cars" id="carid">**

**<option value="audival"> Audi </option>**

**<option selected value="benzval"> Benz </option>**

**<option value="honda"> Honda </option>**

**<option value="maruthi"> Maruthi </option>**

**</select>**

**<br> <br>**

**<b>6.MultiSelect Dropdown : <b> <br>**

**Select Bikes:**

**<select multiple name="bikes">**

**<option value="hondaval"> Honda </option>**

**<option selected value="heroval"> Hero </option>**

**<option selected value="tvsval"> TVS </option>**

**<option value="yamahaval"> Yamaha </option>**

**<option value="suzukival"> Suzuki </option>**

**</select> <br> <br>**

**<b>7.Buttons <b> <br>**

**<input type="button" value="Login">**

**<button> My button </button>**

**<input type="submit" value="My submit">**

**</html>**

**----------------------------------**

Add Products button

Revise:

dropdown

<select >

<option> Audi </option>

<option selected > BMW </options> // if we mention selected in the argument, by defaultly it is always on select.

</select>

1. Multi Sleect

<select multiple >

<option> Audi </option>

<option selected > BMW </options>

</select>

**HW: Diff dropdown and Multi select ?**

Ans: drop makes us to select only one value at a time. By using multiple drop down option we can able to choose multiple values.

-Button:

<input type=”button” value=”Login”>

<input type=”submit” value=”My submit”>

<button> My button Tag </button>

Textboxes: default some value should be displayed in text box, for this we have to pass (value=”attribute value”)

Links :

<b>8.Links: <b> <br>

**Note: <a> is called anchor element.**

<a href="https://www.google.com/"> My google Link </a> <br>

<a href= "https://www.facebook.com/"> My Facebook </a>

<a href="file:///C:/brahma/Practise/qtp%20practise/web%20apps/WebTableAll.html"> My Web Table Page </a>

<br> <br>

**Image:**

<b>9.Images: <b> <br>

<img src="C:\Users\Lenovo\Pictures\Screenshots\test.png" width=300 height=200 alt="My images is not available"> </img>

Revision:

Links - <a href=”https://www.google.com”> google </a>

Image - <img src =”imahe file name.png” > </img>

Width and height

Alt - alternative text is dispayed if image is not available in server/ in ur system

File Upload :

<input type="file">

Develop table in html -🡪 Teach you Later

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By : --(C)

It is predefined Class in Selenium :

-By class has some methods and which are used to locate elements on the web page

Ex: locate user name element webpage

Locate pwd element in in webpage

**By class - Methods : id(), name(), className(), xpath(), CssSleector(),**

**Linktext(), partilLikntext(), tagname ();**

By.id(“ id val”)

By.name(“name value”)

By.className(“”)

By.*xpath*("");

By.*cssSelector*("");

By.*linkText*("visible link text from page");

By.*partialLinkText*(" partial link text");

By.*tagName*("tag anme ");

By class is mechanism or process to identify/locate / find Eelements on the webpage

**By class:**

Is predefined class in selenium .

It has some methods, which can be used to locate elements in the page.

Locators:

By.id ("")

By.name("")

By.className("")

By.xpath()

By.CSSselector()

By.linkText()

By.partialLinkText()

By.TagName() -- a

FAQ : what locator is the fastest ?

**Id -- fastest locator**

FAq : By is class or Interface ?

**By is abstract class**

Revision:

By

Methods:

**Inspect the element in web page :**

**Right clikc on desired element > click inspect > It will display element and highlight in html doc**

**<input type="text" name="username" id="userid" value="default Enter user" class="usernameClass">**

**Q:How to write By Class methods**

**By.attribute name(”Attribute value”);**

By.Id(“ userid”)

By.name(“username”)

By.className(“usernameClass”)

By.xpath(“ xpath of ele”):

2. Identify element

ex: enter "Rama" in first name

ex: enter "Rao" in last name

Click I have a bike check box.

Select male Radio button

Click Login button

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1. Identify elements using props id, name...etc

Ans: **//input[@id='idfirst'] [@name='lastname']**

2. perform action-- what action --send data, click ...

**identifying the elements in page :**

X-path :

**types of xpath :**

**1. absolute xpath or complete xpath :**

always starts from root node to desired node or element..

/html - 1 element found

/html/head - 1element found

/html/body - 1 Element found

Naviagate to title : /html/body/title –1 ele found

/html/body/form/input[8]

Navigate to input tag : /html/body/input - 9 elements found

Search all inputs in html doc

* **Absolute path starts with : /** (From the Root node ): It is not that much preferable, If the html code changes again we have to correct our path Again and Again.
* **Relative path starts with : //** (From desired node/Tag itself), we mostly prefer relative path only.

**2. Relative xpath or customised xpath or userdefined xpath**

* start from any tag..

<input id="bikeid" type="checkbox" name="bike" value="Bike" class="Vehicle">

**syntax**:

// tagname [@Attrname= 'Attr val']

**//input[@id='userid']** – 1 ele found

// input [@name='username'] - 1 ele

// it goes to html page -- checks all imput tags whose name =lastname

// input [@id='bikeid'] - 3 ele found

// input [@id='bikeid'] [@name='bike'] [@value='Bike'] -- 1 ele found

list out all elemnts..

/// we can define multiple props or attributes

[] [][ ]...

// input [@id='bikeid'] [@value='Bike']

Hw: identify first name ele using name , id, class ??

//input[@id='idfirst'] [@name='firstname']

//input[@id='idfirst'] [@class='firstclass'] [@name='firstname']

Hw : identify last name ele using name , id, class ??

//input[@id='idfirst'] [@class='firstclass'] [@name='lastname']

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* July 3 first session ends \*\*\*\*\*\*\*\*\*\*\*\*\*

Jul 3 6:20 Pm starts

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FAQ : Difference b/w Absolute xpath and Relative xpath ?

Id=”id101”

Id=”id2434”

Dynamic object: if any object/Element property values are changing frequently or in specific pattern, that object we can say dynamic object..

Ex:

Inbox (120) 🡪Inbox(121) 🡪 Inbox(122)………………..

Order no. 1013

Order no. 21312312

FAQ: How can u handle Dynamics objects ?

Ans: We can handle dynamic objects by using below methods:

**Starts-with()** - //tag [Starts-with( @Attribute name, ’Attribute value’)]

**Contains()** - // tag [contains(@attribute, ‘attribute value’ )]

what: whose object properties values are changing in diff patterns..

<input id="testid201" type="text" name="testname101" class="firstclass">

name="testname101"

name="testname301"

starts-with(@Attrname,"attr Val")

ex: // input[ starts-with(@id,'testid')] -- goes to html and checks all input tags , whose id starts with given value i.e testid

//input[starts-with(@name,'testname')] [] []

2. **contains(@Attrname, 'Attr val')**

ex: // tag[contains(@Attrname, 'Attr val')]

//input[contains(@name,'HUL')]

//input[contains(@name,'HUL')] [contains(@name,'testname')]

// browser : methods

**CSS Selector**:

CSS – Cascading style sheet

* Html --HTML elements, tells to the browser how to display the content(Format)
* CSS is the language, we use this to add style an HTML document. like, adding colour to web page background, changing font size and colour etc……
* CSS describes how HTML elements should be displayed.

xpath : // tagname [@Attrname= 'Attr val']

CSS : tagname [Attrname= 'Attr val']

input[id='idfirst'] - 2 ele - so add one more prop

input[id='idfirst'][name='firstname'] - 1 ele

input[name='firstname'] -- 1 ele

Shortcuts :

1.id : #idval or input[id='idfirst']

Ex: #idfirst - 3 ele

So add other props - #idfirst[name='firstname'] -- 1 ele

2.class : .Classname or [class=’classval’]

Ex: .firstclass - 3 ele

Start-with - input[id^='testid'] - 1 ele

Ends-with input[id$='testid'] - input[id$='id3456'] - 1 ele

Contains - input[id\*='testid']

^ 🡪 used for start-with 🡪 [id^=’id value’]

$ 🡪 used for ends-with 🡪 [id$=’id value’]

\* 🡪 used for contains 🡪 [id\*=’id value’]

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Send X-path notes

Send html page

notes

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Nov 23 3PM

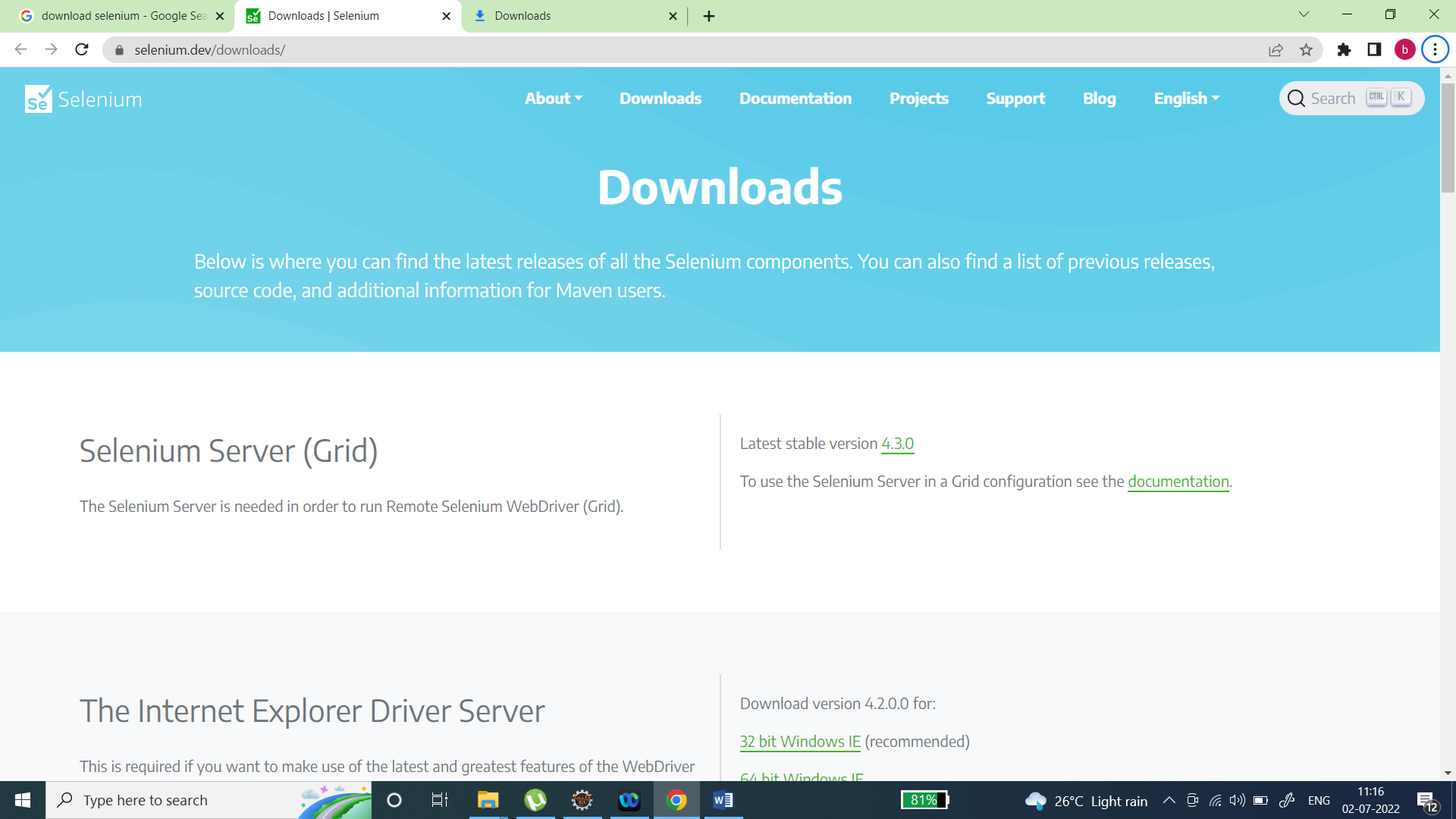
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Webdriver :

2 things

1. Download Sleenium jar file and add to project
2. Download chromedriver.exe file and Set property
3. Downoad Selenium jar file :

<https://www.selenium.dev/downloads/>

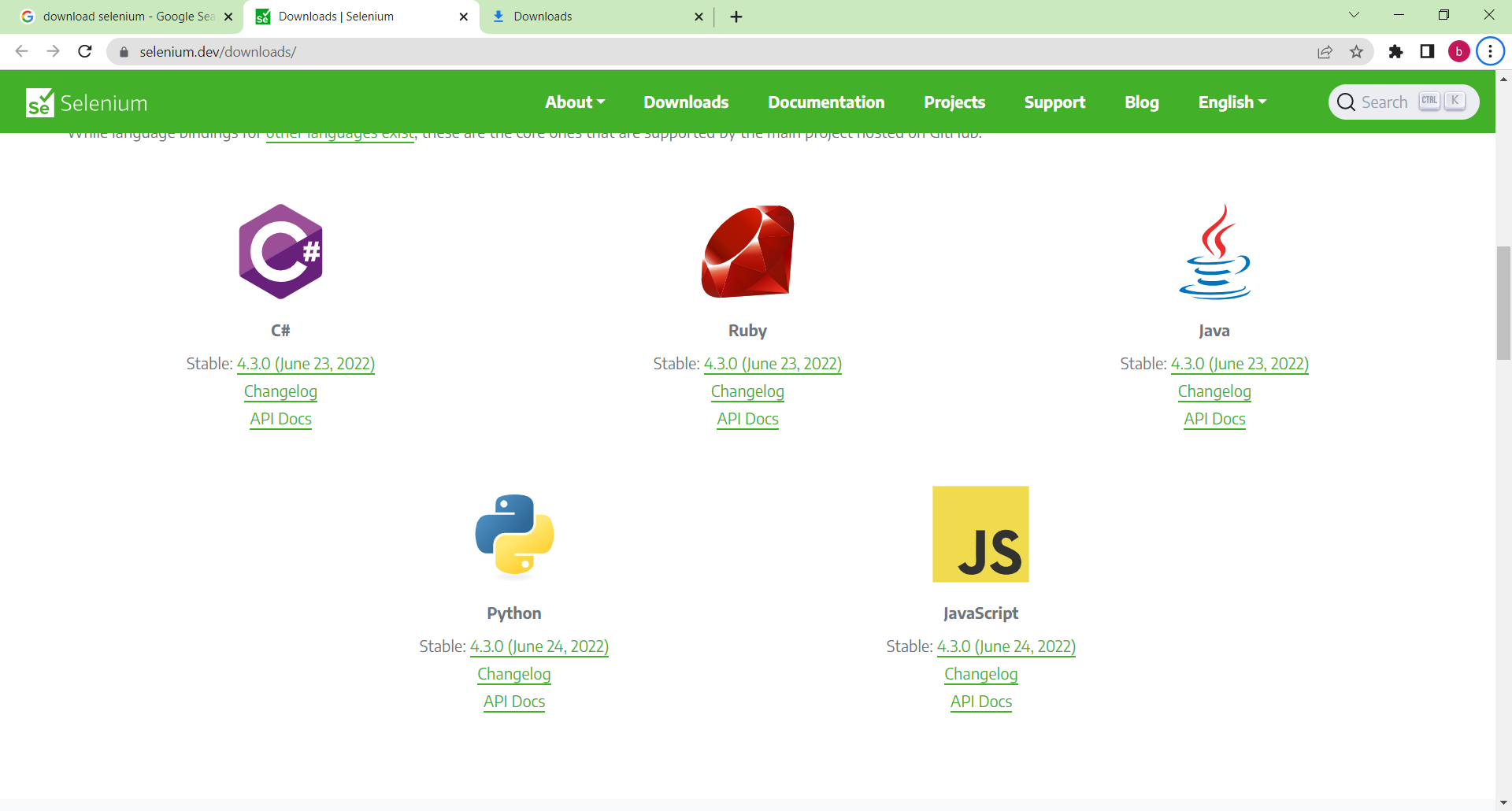


Click Selenium grid 4.3 ..

Or

Scroll down to the botton of page

Selenium – java –



Unzip file >

Add jar files to Eclipse Project :

HW : Right click on the project > Propeties

1. Download chromedriver.exe file

<https://chromedriver.chromium.org/downloads>

set chromedriver .exe file path

**package** seleniumpractice;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.chrome.ChromeDriver;

**public** **class** chromelaunch {

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

// **TODO** Auto-generated method stub

//java.lang.IllegalStateException: The path to the driver executable The path to the driver executable must be set by the webdriver.chrome.driver system property

// if we dont set property - for chromerdirver.exe file path

// FAQ : Write a progrram to open chrome browser?

System.*setProperty*("webdriver.chrome.driver", "C:\\brahma\\seleniumSoftwares\\Alldrivers\\chromedriver\_win32V103\\chromedriver.exe");

// System.setProperty("webdriver.chrome.driver", "C:\\brahma\\seleniumSoftwares\\Alldrivers\\chromedriver\_win32V103\\chromedriver3242.exe");

// java.lang.IllegalStateException: The driver executable must exist: C:\brahma\seleniumSoftwares\Alldrivers\chromedriver\_win32V103\chromedriver3242.exe

// if we pass in vlaid chromedriver.exe file or path -

// System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// create obj for chromedriver - opens chrome browser

ChromeDriver chromebrowser = **new** ChromeDriver();

}

}

// <https://github.com/mozilla/geckodriver/releases>

//https://developer.microsoft.com/en-us/microsoft-edge/tools/webdriver/

package AllWebElemens;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class BrowserBasics {

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

// open browser

// webDriver - predefined **interface** in selenium.

// basically it represent browser.

// By using webDriver interface we can access all browsers like, chrome, Edge, Firefox, safari

// any browser.

// has some methods , can be used to control browser operations

// common open browser, Url, close, find element.

// **down load chromedriver.exe**, Microsoft Edge, Firefox (Gecko driver)

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

// **open the given url in chrome browser**

// driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

driver.navigate().to("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// FAQ" dif b./w get() and naviagte()?

// till it loads all elements in page it will will wait

// naviagte().-- naviagte to back, forward , refresh the page

driver.findElement(By.linkText("ToolTip Sumanth")).click();

driver.navigate().back();

Thread.sleep(3000);

driver.navigate().forward();

Thread.sleep(3000);

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

// **get title**

String getTitle= driver.getTitle();

System.out.println("getTitle="+getTitle);

//getTitle=All webobjects MyTitle Sumanth

// **get url**

String getCurrentUrl = driver.getCurrentUrl();

System.out.println("getCurrentUrl="+getCurrentUrl);

// **get page source code(HTML code)**

String getPageSource= driver.getPageSource();

System.out.println("getPageSource="+getPageSource);// return all html code for the specific page

// getPageSource=<html><head><title> All webobjects MyTitle Sumanth</title>

//close

driver.close();

}

}

Webdriver – (I ) -- represents browser –

Methods : Get(), get Title(), get CurrentUrl(), close(), quit(),get pagesource(),

**Webelement: (I) represent any element on the web page**

**Methods : abstract methods --**

package AllWebElemens;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class Textbox {

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

// open browser

// webdriver - predefined interface in selenium

// basicaly it represnt browser..

// represents chrome, ie, fireox, safar

// any browser.

// has some methods , can be used to control browser operations

// common open browsr, url, close ,,,findlement

// down load chromedriver.exe, ie-- , fiefox-geckodriver

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// use all locators , name , id

// 1. send data

WebElement firstnameTexboxEle= driver.findElement(By.name("firstname"));

// returns 1st matched webele by using name= firstname

// return type WebElement

// send "Ram" to first name

firstnameTexboxEle.sendKeys("Ram");

// clear value in first name text bx

firstnameTexboxEle.clear();

firstnameTexboxEle.sendKeys("Swathi");

driver.findElement(By.name("firstname")).sendKeys("Sowmya");

// HW .. use id

// use xpath

// class

// Css selector

// get value from text box

String getAttribute =driver.findElement(By.name("firstname")).getAttribute("name");

System.out.println("getAttribute="+getAttribute);

// getAttribute=firstname

getAttribute =driver.findElement(By.name("firstname")).getAttribute("value");

System.out.println("getAttribute="+getAttribute);

// getAttribute=SwathiSowmya

// HW .. send data , get data from last anme txt box using name, id , xpath locators

// GW pwd..

}

}

package AllWebElemens;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class Checkbox {

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

// open browser

// webdriver - predefined interface in selenium

// basicaly it represnt browser..

// represents chrome, ie, fireox, safar

// any browser.

// has some methods , can be used to control browser operations

// common open browsr, url, close ,,,findlement

// down load chromedriver.exe, ie-- , fiefox-geckodriver

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// click check box

// get selection sttais - checkbox is selected or not

// ele is displayed or nt

// ele is enable or not

}

}

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Nov 27

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package AllWebElemens;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class Checkbox {

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

// open browser

// webdriver - predefined interface in selenium

// basicaly it represnt browser..

// represents chrome, ie, fireox, safar

// any browser.

// has some methods , can be used to control browser operations

// common open browsr, url, close ,,,findlement

// down load chromedriver.exe, ie-- , fiefox-geckodriver

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// click check box

driver.findElement(By.name("bike")).click();

Thread.sleep(3000);

// get selection sttais - checkbox is selected or not

boolean isSelected= driver.findElement(By.name("bike")).isSelected();// true

System.out.println("isSelected="+isSelected);

// unselect check bo

driver.findElement(By.name("bike")).click();

isSelected= driver.findElement(By.name("bike")).isSelected();// false

System.out.println("isSelected="+isSelected);

// HW: select I have a car check box

// using name , id, xpath, CssSelector

// HW: verify check box is sleected or not

// HW unselect I have a car check box

// HW: verify check box is sleected or not

// ele is displayed or nt

boolean isDisplayed =driver.findElement(By.name("bike")).isDisplayed();

System.out.println("isDisplayed="+isDisplayed);

// give invalid name

// isDisplayed =driver.findElement(By.name("bikeDelet")).isDisplayed();

// System.out.println("isDisplayed="+isDisplayed);

// note : if ele is not there, it throws NoSuchElemnetException but not returns False

// Exception in thread "main" org.openqa.selenium.NoSuchElementException: no such element: Unable to locate element: {"method":"css selector","selector":"\*[name='bikeDelet']"}

// ename textbox is enabled or not

boolean isEnabled= driver.findElement(By.name("myname")).isEnabled();// not enabled

System.out.println("isEnabled="+isEnabled);// false

// first name textbox is enabled

isEnabled= driver.findElement(By.name("firstname")).isEnabled();

System.out.println("isEnabled="+isEnabled);

//isEnabled=false

// isEnabled=true

}

}

package AllWebElemens;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class Radiobutton {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// HW: Click 'Male' radio btn

// HW Get Male radio btn is selected or not

/// HW: Click 'Female' radio btn

// HW Get "Female' radio btn is selected or not

//HW check Male Radio btn is enabled or not

// HW check Male Radio btn is displayed

}

}

package AllWebElemens;

import java.util.ArrayList;

import java.util.List;

public class ListBasics {

public static void main(String[] args) {

// List: interface in java

// ex: list-- used to store group of vals or objects

// add- any val -- there will be some method

// delete

// get first, end , 3rd val from lst

// count of all vals from list

List<String> li= new ArrayList<String>();// empty list

// dfiend in java.util package -- must immport

// note: import pkg-- ctrl +shft + 0

// to add strng val

li.add("Ram");

li.add("Sita");

li.add("Swathi");

// store vals in sequentils order

// preserver the order index

System.out.println("li="+li);

// li=[Ram, Sita, Swathi]

// count of vals in

int liCnt= li.size();

System.out.println("liCnt="+liCnt); // 3

// remove some val

li.remove("Sita");

System.out.println("li="+li);

//li=[Ram, Swathi]

// get fist val, 2nd val

String firstVal= li.get(0);

System.out.println("firstVal="+firstVal);

String seconVal= li.get(1);

System.out.println("seconVal="+seconVal);

// if u pass index no =10

// seconVal= li.get(10);// eroorr

System.out.println("seconVal="+seconVal);

// IndexOutOfBoundsException: Index 10 out of bounds for length 2

li.add("Sita");

// get all vals from list obj

// for(int i=0;i<=2;i++)

for(int i=0;i<=li.size()-1;i++)

{

String getval=li.get(i);

// li.get(1);//

System.out.println("getval="+getval);

}

// getval=Ram

// getval=Swathi

// getval=Sita

// 2n way usinf for each loop

System.out.println("use for each loop");

for(String eachVal : li )

{

System.out.println("each val from list="+eachVal);

}

// each val from list=Ram

// each val from list=Swathi

// each val from list=Sita

}

}

package AllWebElemens;

import java.util.List;

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;

public class DropDownBasics {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// Select - is predfined class in Selenium

WebElement dropDownEle= driver.findElement(By.name("cars"));

**Select sel= new Select(dropDownEle);**

/\* sel.selectByVisibleText("Audi");

// -ve

// sel.selectByVisibleText("Merecedes");// error

// NoSuchElementException: Cannot locate option with text: Merecedes

// case sensitive

// sel.selectByVisibleText("audi");// must give exact value what ever it is visble in dropdown

//NoSuchElementException: Cannot locate option with text: audi

Thread.sleep(3000);

// Select Maruthi in dropdown

sel.selectByVisibleText("Maruthi");

Thread.sleep(3000);

// Select 'Kia' in dropdown

sel.selectByVisibleText("Kia");

Thread.sleep(3000);\*/

// 2nd way

/\*

\* sel.selectByIndex(0);

\*

\* sel.selectByIndex(1);

\*

\* sel.selectByIndex(2);

\*

\* // -ve sel.selectByIndex(8);// error as we dont index no =8

\* //NoSuchElementException: Cannot locate option with index: 8

\*/

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// 3.rd ways

sel.selectByValue("Mercedesval");

//

sel.selectByValue("audival");

// -ve

// sel.selectByValue("ename");

// NoSuchElementException: Cannot locate option with value: ename

// Revise:

// 1 . create obj Select -class and pass dropdown ele in Select (dropdwon ele)

//2. to sleect vals in dropdown - we have some methods in select class

// 3 ways ..Selectby visibletext("Audi")

// selectbyindex(0)

// SelectbyValue("AudiVal");

// -ve case sesinistive

// if u pass invalid text-- cannlocate option with text

// index- canot locate with given index no -9

// value property -- cannot locate with given value--

// FAQ: How can u handle dropdown or list box ?

// get selecetd val from dropdown

WebElement selectedOptionEle= sel.getFirstSelectedOption();

String getValFromDropdown= selectedOptionEle.getText();

System.out.println("getValFromDropdown="+getValFromDropdown);

sel.selectByVisibleText("Maruthi");

getValFromDropdown= sel.getFirstSelectedOption().getText();

System.out.println("getValFromDropdown="+getValFromDropdown);

// getValFromDropdown=Audi

// getValFromDropdown=Maruthi

// FAQ: get all vals from dropdown

List<WebElement> AllOptionsTagsList= sel.getOptions();

WebElement FirstOptionTag= AllOptionsTagsList.get(0);

String FirstOptionTagText= FirstOptionTag.getText();

System.out.println("FirstOptionTagText="+FirstOptionTagText);

// 1 for loop

for(int i=0;i<=AllOptionsTagsList.size()-1;i++)

{

String EachValFromdropdown= AllOptionsTagsList.get(i).getText();

System.out.println("EachValFromdropdown="+EachValFromdropdown);

// EachValFromdropdown=Maruthi

// EachValFromdropdown=Swiftvdi

// EachValFromdropdown=Mercedes

// EachValFromdropdown=Audi

// EachValFromdropdown=Kia

// EachValFromdropdown=BMW

}

// ctr + / = to comment lines

// use for each loop

System.out.println("use for each loop");

for(WebElement EachOptionEle: AllOptionsTagsList )

{

String eachval= EachOptionEle.getText();

System.out.println("eachval="+eachval);

// eachval=Maruthi

// eachval=Swiftvdi

// eachval=Mercedes

// eachval=Audi

// eachval=Kia

// eachval=BMW

}

// HW :write separate method - Verify given val is exist or not in dropdown,

// if val is exist - return true else false

// FAQ: Select all values one by one from dropdown

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

D:\EMC Selenium java Project --Sent

Send notes -- done

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Nov 28

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Hw : Select bikes dropdown ?

1.Select some val in dropdown

2. get selecetd val from dropdown

3. get all vals from dropdown and display?

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Multi Select dropdown:

package AllWebElemens;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class base {

public WebDriver openAppl()

{

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

// open the given url in chrome browser

// driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

driver.navigate().to("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

return driver; // return browser address

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package AllWebElemens;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.support.ui.Select;

public class MultiSelectDropdownBasics {

public static void main(String[] args) {

WebDriver driver = null;

base baseobj= new base();

driver =baseobj.openAppl();

WebElement multiCarsDropdown= driver.findElement(By.name("MultiCars"));

// Exception in thread "main" java.lang.NullPointerException:

// Cannot invoke "org.openqa.selenium.WebDriver.findElement(org.openqa.selenium.By)"

// because "driver" is null

// at AllWebElemens.MultiSelectDropdownBasics.main(MultiSelectDropdownBasics.java:17)?

Select sel= new Select(multiCarsDropdown);

sel.selectByVisibleText("Benz");

sel.selectByVisibleText("Audi");

// - ve if u pass invalid val--check what error you are getting

//HW 2. Select 2 vals use Selectbyindex(0)

// 3. Selectbyvalue("value")

// How can u check dropdown is multi select or single select ?

boolean isMultiple=sel.isMultiple();

System.out.println("isMultiple="+isMultiple);

//isMultiple=true

// HW1 : check for normal dropdown - also -- isMultiple

// get all selecetd values from dropdown

String selecetdVals= sel.getFirstSelectedOption().getText();

System.out.println("selecetd Vals="+selecetdVals);

//selecetdVals=Benz -- will get default selected val but not not all selecetd vals

List<WebElement> getAllSelectedOptionsList= sel.getAllSelectedOptions();

// get 1st val

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

for(WebElement EachEle: getAllSelectedOptionsList)

{

String selectedVals= EachEle.getText();

System.out.println("selected Val="+selectedVals);

}

// selected Val=Benz

// selected Val=Audi

//HW : get all selected vals count : 2

// HW: get all vals from dropdown

// HW : get all vals count from

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Links:

package AllWebElemens;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.support.ui.Select;

public class LinkBasics {

public static void main(String[] args) {

WebDriver driver = null;

base baseobj= new base();

driver =baseobj.openAppl();

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// driver.findElement(By.linkText(" Click My Google")).click(); -- error due space issue

// Exception in thread "main" org.openqa.selenium.NoSuchElementException: no such element:

// Unable to locate element: {"method":"link text","selector":" Click My Google"}

driver.findElement(By.linkText("Click My Google")).click();

// go back to previous page

driver.navigate().back();

driver.findElement(By.linkText("ToolTip Link")).click();

// back

driver.navigate().back();

// open next page/ forward page

driver.navigate().forward();

System.out.println("ends ");

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

FAQ: get all link names and count ?

package AllWebElemens;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.support.ui.Select;

public class GetAllLinkNamesCountFromWebpage {

public static void main(String[] args) {

WebDriver driver = null;

base baseobj= new base();

driver =baseobj.openAppl();

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FAQ : Diff b/w findElement() and findElements()?

//1. always returns 1st matched ele only using By Locators

//2. return webelement

// 3. if ele is not found using by locators-- NoSuchElementFoundException

// findElements();

// returns list of webelement using By class locators

// Return type List<webeleemnt>

// 3. if ele is not found using by locators-- it will store empty list

//but it will not throw NoSuchElementfoundExceptio

List<WebElement> allLinksList = driver.findElements(By.xpath("//a"));

List<WebElement> allLinksListNew = driver.findElements(By.xpath("//a1"));

// /-ve

// 3. if ele is not found using by locators--

System.out.println("check count or error ="+allLinksListNew.size());

allLinksListNew.isEmpty();

int cnt= allLinksList.size();

System.out.println("All links count="+allLinksList.size());

String firstLinkName= allLinksList.get(0).getText();

System.out.println("firstLinkName="+firstLinkName);

String secongLinkName= allLinksList.get(1).getText();

System.out.println("firstLinkName="+firstLinkName);

System.out.println("\*\*\*\*\*\*\*\*\*\*");

// get all link names

for(int i=0;i<=allLinksList.size()-1;i++)

{

String linkname = allLinksList.get(i).getText();

System.out.println((i+1)+".linkname ="+linkname);

}

// 1.linkname =ToolTip Sumanth

// 2.linkname =ToolTip Link

// 3.linkname =WebTableAll Link

// 4.linkname =Login Form Link

// 5.linkname =Click My Google

// 6.linkname = -- this does not have any text

// HW: use for each loop - get all

// or get all links by By.tagname

driver.findElements(By.tagName("a"));

System.out.println("ends ");

}

}

Note:

String url= allLinksList.get(i).getAttribute("href");

System.out.println("url-"+url);

//url-file:///D:/Practise/qtp%20practise/web%20apps/WebTableAll.html

Links :

<a href= "http:ww.google.com"> My Link </a>

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//HW : Get all checboxes count and click all check boxes?

???????????????

// HW : get all textboxes cnt, and Enter "Raju" in all text boxes?

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

images :

tag name <img src ="D:penguins.png" height="100" with="100" > </img>

HW:all Images cnt and and its location/path of img i.e src -attribute?

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Nov 29 3 PM to 4PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Table : Develop page

<input type= "text" >

<input type= "checkbox" >

<input type= "radio" >

<input type= "button" value="My button">

<button value= "My login"> </button >

dropdown:

<select >

<option > Maruthi</option>

<option> Audi </option>

</select>

Multi Select dropdpwn:

<select multiple >

<option > Maruthi</option>

<option> Audi </option>

</select>

Links:

<a href= "www.google.com"> My google </a>

Images:

<img src= "D:practise/penguins.png">

Table:

rows tr

cols -th

data - td

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

<input type= "text" >

<input type= "checkbox" >

<input type= "radio" >

<input type= "button" value="My button">

<button value= "My login"> </button >

dropdown:

<select >

<option > Maruthi</option>

<option> Audi </option>

</select>

Multi Select dropdpwn:

<select multiple >

<option > Maruthi</option>

<option> Audi </option>

</select>

Links:

<a href= "www.google.com"> My google </a>

Images:

<img src= "D:practise/penguins.png">

Table:

rows tr

cols -th

data - td

code:

<html>

<body bgcolor="yellow">

<title>WebtableAll Title</title>

<table id="TestCaseTable01" name= "TestCaseTable" class="HulClassName" size="100" border="1" >

<th>TCID</th>

<th>Test Case Description</th>

<th>Expected Value</th>

<th> Actual Value</th>

<th>Result</th>

<tr>

<td>TC\_01 </td>

<td>Verify Login </td>

<td>Login must be successfull </td>

<td>Login is successfull </td>

<td>Pass</td>

</tr>

<tr>

<td>TC\_02 </td>

<td>Verify Logout </td>

<td>Logout must be successfull </td>

<td>Logout is successfull </td>

<td> Fail</td>

</tr>

<tr>

<td>TC\_03 </td>

<td>Verify Order creation </td>

<td>Order must be created </td>

<td> Order is created </td>

<td> Pass</td>

</tr>

</table>

<br>

<table id="HulTablee01" name="HulTable" size=1 border="1">

<th> Activity Code </th>

<th>Activity description </th>

<th> Branch </th>

<th> channel </th>

<th> Terminate Activity </th>

<tr>

<td> <A HREF="WWW.GOOGLE.COM">10110101 </A> </td>

<td> Rs.10 per unit off on Surf XL Blue Powder 3.3 kg in aLL india MOC </td>

<td> CHENNAI </td>

<td> GT </td>

<td> <input type="checkbox"> <input type="checkbox"> </td>

</tr>

<tr>

<td><A HREF="WWW.gmail.COM">10110102 </A> </td>

<td> Rs.10 per unit off on Surf XL Blue Powder 3.3 kg in aLL india MOC </td>

<td> MUMBAI </td>

<td> GT </td>

<td> <input type="checkbox"> </td>

</tr>

<tr>

<td> <A HREF="WWW.testlabsinc.COM">10110103 </A> </td>

<td> CP COND/ 5 % STPR.all INDIA/ALL CHANNELS </td>

<td> MUMBAI </td>

<td> GT </td>

<td> <input type="checkbox"> </td>

</tr>

<tr>

<td> <A HREF="WWW.GOOGLE.COM">10110104 </A> </td>

<td> CP COND/ 5 % STPR.all INDIA/ALL CHANNELS </td>

<td> DELHI </td>

<td> GT </td>

<td> <input type="checkbox"> </td>

</tr>

<tr>

<td> <A HREF="WWW.GOOGLE.COM">10110105 </A></td>

<td> CP COND/ 5 % STPR.all INDIA/ALL CHANNELS </td>

<td> CALCUTTA </td>

<td> GT </td>

<td> <input type="checkbox"> </td>

</tr>

</table> <br>

<table id="TextboxTable01" name="TextboxTable" size=100 border="1">

<th> type </th>

<th> Ename </th>

<th> Esal</th>

<th> Fire </th>

<tr>

<td> <input type = "text"> </td>

<td> Ram </td>

<td> 70 </td>

<td> <input type="checkbox"> </td>

</tr>

<tr>

<td> <input type = "text"> </td>

<td> Swathi </td>

<td> 100 </td>

<td> <input type="checkbox"> </td>

</tr>

<tr>

<td> <input type = "text"> </td>

<td> Ram </td>

<td> 90 </td>

<td> <input type="checkbox"> </td>

</tr>

<tr>

<td> <input type = "text"> </td>

<td> Ram </td>

<td> 100 </td>

<td> <input type="checkbox"> </td>

</tr>

</table>

<br>

<table id="ListboxTable01" border="1"name="ListboxTable">

<th> type </th>

<th> Ename </th>

<th> Esal</th>

<th> Fire </th>

<tr>

<td> <select name="bikes">

<option value="Heroval">Hero</option>

<option value="Honda">Honda</option>

<option value="Suzuki">Suzuki</option>

<option value="BMwval">BMW</option>

</select>

</td>

<td> Ram </td>

<td> 70 </td>

<td> <input type="checkbox"> </td>

</tr>

<tr>

<td> <select name="bikes">

<option value="Heroval">Hero</option>

<option value="Honda">Honda</option>

<option value="Suzuki">Suzuki</option>

<option value="BMwval">BMW</option>

</select>

</td>

<td> Swathi </td>

<td> 100 </td>

<td> <input type="checkbox"> </td>

</tr>

<tr>

<td> <select name="bikes">

<option value="Heroval">Hero</option>

<option value="Honda">Honda</option>

<option value="Suzuki">Suzuki</option>

<option value="BMwval">BMW</option>

</select>

</td>

<td> Raj </td>

<td> 90</td>

<td> <input type="checkbox"> </td>

</tr>

<tr>

<td> <select name="bikes">

<option value="Heroval">Hero</option>

<option value="Honda">Honda</option>

<option value="Suzuki">Suzuki</option>

<option value="BMwval">BMW</option>

</select>

</td>

<td> Rajan </td>

<td> 100 </td>

<td> <input type="checkbox"> </td>

</tr>

</table> <br>

<table name="ProductTable" border=2 style='width:70%;'>

<tr> <th>Product</td>

<th>Article</td>

<th>Price</td>

<th>Quantity</td>

</tr>

<tr>

<td>Prod1</td>

<td>001</td>

<td>10</td>

<td><input type='text' ></td>

</tr>

<tr>

<td>Prod2</td>

<td>002</td>

<td>15</td>

<td><input type='text'></td>

</tr>

<tr>

<td>Prod3</td>

<td>003</td>

<td>12</td>

<td><input type='text' ></td>

</tr>

</table>

<br>

<table name="RelevantCodesTable" id="RelevantCodesTableId" class='simple-grey centerblock' border=5 style='width:70%;'>

<tr> <th>ID</td>

<th>First Name</td>

<th>Last Name</td>

<th>Gender</td>

<th>Attending class?</td>

</tr>

<tr>

<td>12345</td>

<td>John</td>

<td>Smith</td>

<td>M</td>

<td><input type='checkbox' name='attending'></td>

</tr>

<tr>

<td>12346</td>

<td>Anne</td>

<td>Johnson</td>

<td>F</td>

<td><input type='checkbox' name='attending'></td>

</tr>

<tr>

<td>12347</td>

<td>Adam</td>

<td>Roberts</td>

<td>M</td>

<td><input type='checkbox' name='attending'></td>

</tr>

<tr>

<td>12348</td>

<td>Mary</td>

<td>Doe</td>

<td>F</td>

<td><input type='checkbox' name='attending'></td>

</tr>

<tr>

<td>12349</td>

<td>Tiffany</td>

<td>Smith</td>

<td>F</td>

<td><input type='checkbox' name='attending'></td>

</tr>

</table>

</body>

</html>

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

nviagte to table elements :

//table[@id='TestCaseTable01']/tbody/tr ; all tr tags in tbody/tr -- 4 ele

//table[@id='TestCaseTable01']/tbody/tr[1] -- 1 ele

//table[@id='TestCaseTable01']/tbody/tr[2] -- 1 ele

//table[@id='TestCaseTable01']/tbody/tr[6] - o ele

col - navigateion : 1st row -

//table[@id='TestCaseTable01']/tbody/tr[1]/th[1] -- 1st row , 1st col

//table[@id='TestCaseTable01']/tbody/tr[1]/th[2] -- 1st row - 2nd th - col

//table[@id='TestCaseTable01']/tbody/tr[2]/td[1] -- 2 Row - 1st Col

//table[@id='TestCaseTable01']/tbody/tr[2]/td[2] -- row 2- col 2

Table with Links:

note:

use / - child ele

naviate to cild or sub child use //

//table[@id='HulTablee01']//tr

//table[@id='HulTablee01']//tr[2]/td/a -

//a[text()="10110101 "]

//table[@id='HulTablee01']//tr[3]/td/a[text()='10110102 ']

//table[@id='HulTablee01']//tr/td/a[text()='10110103 '] - all tr tags and all td tags - all anchor (a) tags wose text= 10110103

xpath Verify Logout

//table[@id='TestCaseTable01']//tr/td[text()='Verify Logout']

//table[@id='HulTablee01']//tr[2]/td[5]/input[1]

//table[@id='HulTablee01']//tr[2]/td[5]/input[2]

Addvanced xpath : refer Advanced xpath notes ----

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Nov 29 8.30 PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Practicse Table :

package AllWebElemens;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class TableBasics1 {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/WebTableAll.html");

// get all rows cnt

List<WebElement> allRowsList= driver.findElements(By.xpath("//table[@id='TestCaseTable01']/tbody/tr"));

// List is defened in Java.util pkg

int rowsCnt= allRowsList.size();

System.out.println("rowsCntrowsCnt="+rowsCnt);

//rowsCntrowsCnt=4

// HW: get all columns cnt

// get data from 1st row - 1st cell

String cell11= driver.findElement(By.xpath("//table[@id='TestCaseTable01']/tbody/tr[1]/th[1]")).getText();

System.out.println("Cell11="+cell11);//Cell11=TCID

// get data from 1st row - 2nd cell

String cell12= driver.findElement(By.xpath("//table[@id='TestCaseTable01']/tbody/tr[1]/th[2]")).getText();

System.out.println("Cell12="+cell12);// Cell12=Test Case Description

//Hw: get data from 2nd row - 1st cell

//Hw: get data from 2n row - 2nd cell

// get all rows and all cells data

//1 way2:

List<WebElement> allTrTDTagsList = driver.findElements(By.xpath("//table[@id='TestCaseTable01']/tbody/tr/td"));

for(WebElement EachEle : allTrTDTagsList)

{

String eachdata= EachEle.getText();

System.out.println("eachdata="+eachdata);

}

// eachdata=TC\_01

// eachdata=Verify Login

// eachdata=Login must be successfull

// eachdata=Login is successfull

// eachdata=Pass

// eachdata=TC\_02

// eachdata=Verify Logout

// eachdata=Logout must be successfull

// eachdata=Logout is successfull

// eachdata=Fail

// eachdata=TC\_03

// eachdata=Verify Order creation

// eachdata=Order must be created

// eachdata=Order is created

// eachdata=Pass

System.out.println("\*\*\*\*\*\*\*\*\*\*\*user for int loop");

for(int i=0;i<=allTrTDTagsList.size()-1;i++)

{

String eachdata= allTrTDTagsList.get(i).getText();

System.out.println("eachdata="+eachdata);

}

// 2nd way use int i,j

//table[@id='TestCaseTable01']/tbody/tr[2]/td[1]

//table[@id='TestCaseTable01']/tbody/tr[2]/td[2]

//.............

////table[@id='TestCaseTable01']/tbody/tr[2]/td[colcnt]

System.out.println("using rows and cols");

int colCnt= driver.findElements(By.xpath("//table[@id='TestCaseTable01']/tbody/tr[1]/th")).size();

for(int i=2;i<=rowsCnt;i++) // rows

{

for(int j=1;j<=colCnt;j++) // cols to 5

{

String myxpath ="//table[@id='TestCaseTable01']/tbody/tr[" + i + "]/td[" + j+ "]";

// System.out.println("myxpath="+myxpath );

String eachdata= driver.findElement(By.xpath(myxpath)).getText();

System.out.println("data="+ i + "," + j + "-"+eachdata);

}

}

// data=2,1-TC\_01

// data=2,2-Verify Login

// data=2,3-Login must be successfull

// data=2,4-Login is successfull

// data=2,5-Pass

// data=3,1-TC\_02

// data=3,2-Verify Logout

// data=3,3-Logout must be successfull

// data=3,4-Logout is successfull

// data=3,5-Fail

// data=4,1-TC\_03

// data=4,2-Verify Order creation

// data=4,3-Order must be created

// data=4,4-Order is created

// data=4,5-Pass

// verify given val is exist in table ?

// way1 :use for for loop with index no

// way 2:or for each loop

// way 3: //table[@id='TestCaseTable01']/tbody/tr/td[text()='Login must be successfull ']

// boolean dataExist= driver.findElement(By.xpath("//table[@id='TestCaseTable01']/tbody/tr/td[text()='Login must be successfull ']")).isDisplayed();

String Data = "TC\_02 ";

// -ve test

// String Data = "TC\_09 ";

//table[@id='TestCaseTable01']/tbody/tr/td[text()='Login must be successfull ']")).isDisplayed();

boolean dataExist= driver.findElement(By.xpath("//table[@id='TestCaseTable01']/tbody/tr/td[text()='"+ Data + "']")).isDisplayed();

if(dataExist)

{

System.out.println("Given Value=" + Data+ " is found in table");

}

else

{

System.out.println("Given Value=" + Data+ " is not found in table");

}

// write s separate methdo to verify given data is exist in test case table

}

}

---------------------------

package AllWebElemens;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class TableBasics2 {

public static WebDriver driver;

public static String is\_Data\_Exist\_inTestCaseTable(String val)

{

List<WebElement> allRowsList= driver.findElements(By.xpath("//table[@id='TestCaseTable01']/tbody/tr"));

// List is defened in Java.util pkg

String ValFound = "Fail";

int rowsCnt= allRowsList.size();

int colCnt= driver.findElements(By.xpath("//table[@id='TestCaseTable01']/tbody/tr[1]/th")).size();

for(int i=2;i<=rowsCnt;i++) // rows

{

for(int j=1;j<=colCnt;j++) // cols to 5

{

String myxpath ="//table[@id='TestCaseTable01']/tbody/tr[" + i + "]/td[" + j+ "]";

// System.out.println("myxpath="+myxpath );

String eachdata= driver.findElement(By.xpath(myxpath)).getText();

// System.out.println("data="+ i + "," + j + "-"+eachdata);

if(val.equals(eachdata))

{

// System.out.println("Given Value= " + val + " is found in test case table");

ValFound = "Pass";

break;

}

else

{

//System.out.println("Given Value= " + val + " is not found in test case table");

}

}

}

if(ValFound.equals("Pass"))

{

System.out.println("Given Value= " + val + " is found in test case table");

return "Pass";

}

else

{

System.out.println("Given Value= " + val + " is not found in test case table");

return "Fail";

}

// return ValFound;

}

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/WebTableAll.html");

// write s separate methdo to verify given data is exist in test case table

String res= is\_Data\_Exist\_inTestCaseTable("Verify Logout");

System.out.println("res= "+ res);

// res= Pass

res= is\_Data\_Exist\_inTestCaseTable("Verify invlaid ");

System.out.println("res= "+ res);

// Given Value= Verify invlaid is not found in test case table

// res= Fail

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package AllWebElemens;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class TableBasics2 {

public static WebDriver driver;

public static String is\_Data\_Exist\_inTestCaseTable(String val)

{

List<WebElement> allRowsList= driver.findElements(By.xpath("//table[@id='TestCaseTable01']/tbody/tr"));

// List is defened in Java.util pkg

String ValFound = "Fail";

int rowsCnt= allRowsList.size();

int colCnt= driver.findElements(By.xpath("//table[@id='TestCaseTable01']/tbody/tr[1]/th")).size();

for(int i=2;i<=rowsCnt;i++) // rows

{

for(int j=1;j<=colCnt;j++) // cols to 5

{

String myxpath ="//table[@id='TestCaseTable01']/tbody/tr[" + i + "]/td[" + j+ "]";

// System.out.println("myxpath="+myxpath );

String eachdata= driver.findElement(By.xpath(myxpath)).getText();

// System.out.println("data="+ i + "," + j + "-"+eachdata);

if(val.equals(eachdata))

{

// System.out.println("Given Value= " + val + " is found in test case table");

ValFound = "Pass";

break;

}

else

{

//System.out.println("Given Value= " + val + " is not found in test case table");

}

}

}

if(ValFound.equals("Pass"))

{

System.out.println("Given Value= " + val + " is found in test case table");

return "Pass";

}

else

{

System.out.println("Given Value= " + val + " is not found in test case table");

return "Fail";

}

// return ValFound;

}

public static String is\_Data\_Exist\_In\_TestCaseTableUsingTextMethod(String Data)

{

boolean dataExist = false;

// -ve test

// String Data = "TC\_09 ";

//table[@id='TestCaseTable01']/tbody/tr/td[text()='Login must be successfull ']")).isDisplayed();

try

{

dataExist = driver.findElement(By.xpath("//table[@id='TestCaseTable01']/tbody/tr/td[text()='"+ Data + "']")).isDisplayed();

}

catch (Exception e) {

System.out.println("Given Value=" + Data+ " is not found in table . Plx Check ur xpath");

}

if(dataExist)

{

System.out.println("Given Value=" + Data+ " is found in table");

return "Pass";

}

else

{

System.out.println("Given Value=" + Data+ " is not found in table");

return "Fail";

}

}

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/WebTableAll.html");

// write s separate methdo to verify given data is exist in test case table

String res= is\_Data\_Exist\_inTestCaseTable("Verify Logout");

System.out.println("res= "+ res);

// res= Pass

res= is\_Data\_Exist\_inTestCaseTable("Verify invlaid ");

System.out.println("res= "+ res);

// Given Value= Verify invlaid is not found in test case table

// res= Fail

res= is\_Data\_Exist\_In\_TestCaseTableUsingTextMethod("Verify Logout");

System.out.println("res= "+ res);

// res= Pass

res= is\_Data\_Exist\_In\_TestCaseTableUsingTextMethod("Verify invlaid ");

System.out.println("res= "+ res);

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Q: Click check box in last row based on Activity code =10110101. 10110102

package AllWebElemens;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class TableBasics3WithCheckboxes {

public static WebDriver driver;

public void ClickTerminateActivityBasedOnActivityCode(String activityCode)

{

String myxpath= "//a[text()='" + activityCode+ "']/parent::td/following-sibling::td[4]/input[1]";

System.out.println("myxpath="+myxpath);

try

{

driver.findElement(By.xpath(myxpath)).click();

}

catch (Exception e) {

System.out.println("Activity Code=" + activityCode+" is not found.plz check ur data or xpath="+myxpath);

System.out.println("exception details="+e);

}

}

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/WebTableAll.html");

//Q: Develope a Reusable Method Click check box in last row based on Activity code =10110101. 10110102

// ClickTerminateActivityBasedOnActivityCode("10110101");// eroro

// Cannot make a static reference to the non-static method

// ClickTerminateActivityBasedOnActivityCode(String) from the type TableBasics3WithCheckboxes

TableBasics3WithCheckboxes tbl= new TableBasics3WithCheckboxes();

tbl.ClickTerminateActivityBasedOnActivityCode("10110101");

tbl.ClickTerminateActivityBasedOnActivityCode("10110102");

tbl.ClickTerminateActivityBasedOnActivityCode("10110103");

tbl.ClickTerminateActivityBasedOnActivityCode("10110109");// error

//Exception in thread "main" org.openqa.selenium.NoSuchElementException: no such element: Unable to locate element: {"method":"xpath","selector":"//a[text()='10110109']/parent::td/following-sibling::td[4]/input[1]"}

// Activity Code=10110109 is not found.plz check ur data or xpath

}

}

-----------------------------------

xpath advanced notes

----------------------------

xpath // starts

absolute x-path:::::

syntax: parentobj / child1 / child2/....

html / head...........

document------its not root node only //html is root node

//document/html-----no matching nodes

// form/input - all forms lo all input tags

goes to form tag and howmany input tags

all input tags in form tag

//form / input[1] -- all form s lo -first input

ex: 3rd input tag

// form/input[9] -- not macthed with

ex:

// form/select[2]

//select - 3matched

custom xpath:

//tagname[@propname='propval']

<input type="checkbox" value="Car" name="vehicle"/>

ex:

//input[@name='vehicle'] : care: use '' 2 macthed objects

<input id="idfirst" class="firstclass" width="50" type="text" size="80" name="firstname"/>

//input[@name='firstname'] - 1 obj found

or

//input[@id='idfirst'] - 1 obj found

or

//input[@class='firstclass'] 2 obje found

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

HW1: <select name="cars">

//select[@name='cars']

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Hw2: <select name="bikes">

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

note:

multiple props :

[] [] [].................

//input[@class='firstclass'] [@name='firstname'] - 1 obj found

??/ and ????

//\*\*\*\*\*\*\*//?????????????????\*\*\*\*\*\*\*\*\*\*\*\* contains \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

in the web page any property name contains the given property value then corresponding objects will b matched

<input id="idfirst" class="firstclass" width="50" type="text" size="80" name="firstname"/>

syntax:

contains(@propname,'propval')---

ex:

//input[contains(@id,'idfi')] ---ok one obj

//input[contains(@name,'firstwrw')] - no matched

//input[contains(@id, "fema")]-one obj care:: id="femaleid"

//input[contains(@class,'le')]------no matching nodes

//input[contains(@class,'la')]-------one matching node

//select[contains(@value,'lux')]------no matching nodes

//select/option[contains(@value,'lux')]------3 matching node

<input id="idfirst" class="firstclass" width="50" type="text" size="80" name="firstname"/>

<input id="idlast" class="firstclass" type="text" name="lastname"/>

//input[contains(@class,'firstclass')]- 2 objects care:

multiple attributes:

// parent /childobj [] [] ...[].........ect , input[2]

//input[contains(@class,'firstclass')] [contains(@id,'idfirst')] -one obj

//input[contains(@class,'changefirstclass')] [contains(@id,'idfirst')] -- no matched

-works like "and" condition

[ ] [] []....

//or

//input[contains(@class,'changefirstclass') or contains(@id,'idfirst')] -one obje

class not macthed but id macthed

invlaid: //input[contains(@class,'changefirstclass')] or [contains(@id,'idfirst')] -invalid xpath

andcond: tag [ and ]...... but not [ ]and[ ]

tag[ or ]

//input[contains(@class,'firstclass') and contains(@id,'idfirst')] -one obj

//input[contains(@class,'fir23123stclass') and contains(@id,'idfirst')] - not matched

name="english"

Japanse

//\*[@name='english' or @name='Japanese']

\* represents any tag name . it could be input tag, select tag, a tag

//\*[@name='.\*' or @name='Japanese'] --- Cannot uuse ...

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Starts-with\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

contains(@prop,'propval')

starts-with(@prop,'propval')

name='ram'

name='raj'

name='sam'

name='ranga'

sa sam---1

ra 3

ran --1

//input[starts-with(@id,'idfir')] -one match

//input[starts-with(@class,'first')] -- 2objects

//input[starts-with(@name,'first')] -one obj

//input[starts-with(@name,'changefirst')] -- no obj found

and:

valid : use this also [] [] [ ]

or [ and ]

invaid: [ ] and [ ]

//input[starts-with(@class,'first') and starts-with(@name,'first')] one obj

(ledha)

[] [] []

//input[starts-with(@class,'first')] [starts-with(@name,'first')] --one obj

space no problem --works

'

//input[starts-with(@class,'changefirst') and starts-with(@name,'first')] -no obj found

//or: [ or ]

//input[starts-with(@class,'first') or starts-with(@name,'first')] 2 objects

//input[starts-with(@class,'changefirst') or starts-with(@name,'first')] - 1 node

or

//input[@id='idfirst'] | //input[@id='idlast'] - 2 objects/???????????????????????????????????????????????????

//input[@id='idfirst'] | //input[@id='changeidlast'] - 1obj

note:

//input[@id='idfirst'] & //input[@id='idlast'] invalid synatx\*\*\*\*\*care:

//input[@id='idfirst'] && //input[@id='idlast'] invalid synatx\*\*\*\*\*care:

//input[starts-with(@id,'idfir')] -1 obj

//input[starts-with(@id,'id')] -- 3 obejcts

//input[starts-with(@id,'idfir')] --1 obj

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*ends-with \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

note: ends-with we dont have method

//input[ends-with(@class,'class')] ????????? innvaid xpath

//input[ends-with(@id,'st')] ----invlaid xpah

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* text() \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

incase i dont have name. id ... or no properties there .

//tag[text()='Tool tip sumanth']

text()='text in page'

ex:

//a[text()='Click here!']

note:

<input id='tooltipid'>

<a id='tooltipid'>

<select id='id2'>

<select id='tooltipid'>

ex:

// \* [@id='tooltipid'] - 3 objs

//select[@id='tooltipid'] -- 1 obj

//a [@id='tooltipid'] -- 1 obj

\* means any tag it can be input, a, select ....etc

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//\*[text()='Male']--high lihts it is avialable in form \*\*\*???????//doubt????????????????????????me

//\*[text()='i have a bike'] -refer form obj-------

//form[text()='I have a bmw'] --not macthed

//form[text()='ToolTip'] -no macthing nodes

//\*[text()='WebTableAll Link '] -not macthed

//p[contains(text(),'Image-link: Still a link, but with no boders:')]

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

note 1:

Matching any attribute (propname ) using a value

// input [@id,'idfirst']

\* means -any tag mean // \* [@id,'idfirst']

//input[@\*='idlast'] - 1 obj with any property

//input[@\*='firstclass'] - 2objects

//\*[@\*='HulTablee01'] -- 1st \* - any tag name

2nd \* - any attr anme = HulTablee01

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//form/input[last()] --submit btn

//form/input[last()-1] --> i have car chkbox

//form/input[last()-2] -- i ahve bike chkbox

//\*[@\*='HulTablee01']//tr[2]/td[last()]

//\*[@\*='HulTablee01']//tr[2]/td[last()-1]

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Child:

//table[@\*='HulTablee01']/tbody/tr

child:: tagname

//table[@\*='HulTablee01']/child::tbody

//table[@\*='HulTablee01']/child::tbody/child::tr

//table[@\*='HulTablee01']/child::tbody/child::tr[1]

//table[@\*='HulTablee01']/child::tbody/child::tr[1]/child::th

Parent:

parent:: tagname

//a[text()='10110102 ']/parent::td/parent::tr/parent::tbody

ancestors:

parenet > grand parent --> grand grand parent

ancestor :: tag name

//a[text()='10110102 ']/ancestor::td

//a[text()='10110102 ']/ancestor::tbody

//a[text()='10110102 ']/ancestor::table

syntax:

descendant :: tagname

//table[@id='HulTablee01']/descendant::tbody

//table[@id='HulTablee01']/descendant::tr -- all tr

//table[@id='HulTablee01']/descendant::th -- col headings

//table[@id='HulTablee01']/descendant::a

ex:

//form/descendant::input- 11 nodes...in form : child nodes with input tag in \*\*all forms::care:

//form/descendant::input[@type='submit'] -- submitt btn-

ex: find links in form -1?

//form[1]/descendant::link------no no macthes

note: link name starts with <a so v should use tag name "a"

//form[1]/descendant::a-------7 matching nodes

HW1:?????????????????????????????????????????

in all forms,count how many comboboxes are there?

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Hw2:?????????????????????????????????????????????????????????????????//

in form -1 , how many checkboxes ?

ans. //form[1]/descendants::input[@type='checkbox']

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//HW#3???????????????????????????????????????????????/

in form -1 , how many radio btns?

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//Hw4:???????????????????????????????????????/

in form -2 , how many checkboxes ?

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

/HW5:????????????????????????????????????????????????????????/

in form -2 , how many checkboxes ?

text box = <input type="text"

radio btn= <input type="radio"??????????????????????????????????????????????????????????

check box= <input type="checkbox"

note":\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*vimp\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

combobox = <select name="cars" ........>

<option value="ECEVal" .......> ECE </option>

<option value="Computerval "> Computer </option>

.........................

</select>

combobox does not start withn "input " tag

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//tagname[position()=number]

ex:

//input[position()=1] in whole page, we have 2 forms-it shows all input position=1

ie in form , form-2

or //input[1]

//input[position()=2] --2 nodes i.e lastname, email ---

//form[1]/descendant::input[position()=1] --first name only

//input[position=2]-------not matched due to position=2 but v should write position()=2

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//\*[@id='idfirst'] matches with any tag where id=idfirst

//\*[@class='firstclass'] 2 obj's first name and last name..

//note:

//ex: any attribute and any tag name

//\*[@\*='idfirst'] -1 obj

note:

-- //\*[@\*='firstclass'] -- 2--objectsndant

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//a - 8 objs total links in all apge

//body/a[text()='WebTableAll Link '] -- not working recheck????????

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Xpath examples for drop down:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//select - 3obj

//select[1] - cras obj

//select[last()] multi slect obj

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//form[1]/descendant::select - 3obects

//form[1]/descendant::select[@name='cars'] -- 1 obj

//table[@name='']/descendant::tr

note:

//form[1]/descendant::select[@name='cars']/option[text()='Maruthi'] -- one obj

//form[1]/descendant::select[position()=1] --cars obj only

//form[1]/descendant::select[position()=3] -- multi slect obj

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

hw;;-in form1 find the 4th combobox???

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

hw2;;in form 2 find the 1st combobox

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

note:

//form[1]/descendant::select[count(\*)>1] -- 3 objects????????????????????????read frm googlr

hw3:::

//form[1]/descendant::select[count(\*)>10] - no objects correct?????????????????????????read frm google

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//form[1]/\*[1] -inform first name obj

//form[1]/\*[2] --last nAME OBJ

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

table:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ex1:

//table -6 obj

ex: th

<tr>

<td> 1 </td>

<td> ram </td>

<td> 95 </td>

<td> 8th </td>

</tr>

//table[1] -----

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

hw---identify the 2nd table using id name,class name??????????????????????????????????????????

//\*[@id='TestCaseTable01']/\*/tr/td - 15

-in full table, search for all tr td tags Care:

tr

-td

-td

tr

-td

-td

..........

ex:

//\*[@id='TestCaseTable01']/tr - not macthed care : tbody tag

ex:count tr tags

//\*[@id='TestCaseTable01']/tbody/tr- 4 rows

ex:columns

//\*[@id='TestCaseTable01']/tbody/tr/th - 5 cols

or

//\*[@id='TestCaseTable01']/\*/tr/th - 5 cols

ex:check col data

//\*[@id='TestCaseTable01']/\*/tr/th[text()='TCID'] - one obj

ex: //\*[@id='TestCaseTable01']/\*/tr/td[text()='TCID'] --ot macthed ???/why? tcid is not td tag . it is in th tag

//\*[@id='TestCaseTable01']/\*/tr/td[text()='Verify Login'] -not macthed ????why

//\*[@id='TestCaseTable01']/\*/tr[2]/td[2][text()='Verify Login'] -- not macthed????? chek space

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ex:desecnadants

//\*[@id='TestCaseTable01']/descendant::tr -- 4 rows ok

//\*[@id='TestCaseTable01']/descendant::th - 5 cols ok

//\*[@id='TestCaseTable01']/descendant::td 15 vals, excluding col headings

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

note:

//\*[@id='TestCaseTable01']/descendant::td[text()='TC\_01'] --- no t amcthed why????

//\*[@id='TestCaseTable01']/descendant::tr/td[text()='TC\_01'] ---- not amcthed ???????why not working

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*table with links

//table[2]/\*/tr[2]/td/a -- 101 link

//table[2]/\*/tr[3]/td/a --102,link

note:

<input type="radio" id="HulTablee01"]

<input type="text" id="HulTablee01"]

<input type="checkbox" id="HulTablee01"]

<a id="HulTablee01">

<select id="HulTablee01">

//\*[@id='HulTablee01']-=????????????????5

//input[@id='HulTablee01'] -1

//a[@id='HulTablee01'] -1

//\*[@id='HulTablee01']/descendant::a - 5 links

//\*[@id='HulTablee01']/descendant::a[text()='10110102'] -not matched????????bzoz space

//\*[@id='HulTablee01']/descendant::a[text()='10110102 '] = working recheck??? hw?????

remove spaces-?????/

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//table with hul check boxes

//\*[@id='HulTablee01']/descendant::input -- 5 chkboxes kin tbl

-

//\*[@id='HulTablee01']/descendant::input[1] -1 chkbox

//\*[@id='HulTablee01']/descendant::input[2] 2nd chkbox

hw1----create radio button in the place of mumbai n calcutta

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

hw2=====table name=student column names =std name,address,phone number,gender,website,discount apply ,discount apply

frs col text box

2nd normal text

3rd text box

4th radio button male,fema

5th website link

6th discount apply checkbox,

7th branch-combo box

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

table

<html>

<table name="student" id="tableid" border="1" >

<th> serial no. </th>

<th> student name </th>

<th> student persentage </th>

<th>class </th>

<tr>

<td> 1 </td>

<td> ram </td>

<td> 95 </td>

<td> 8th </td>

</tr>

<tr>

<td> 2 </td>

<td> swathi</td>

<td> 98 </td>

<td> 9th class </td>

</tr>

</table>

</html>

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Siblings :

following-sibling :: tagname

//table[@id='HulTablee01']//td/a[text()='10110101 ']/parent::td/following-sibling::td[1]

//table[@id='HulTablee01']//td/a[text()='10110101 ']/parent::td/following-sibling::td[4]/input[1]

//table[@id='HulTablee01']//td/a[text()='10110105 ']/parent::td/following-sibling::td[4]/input[1]

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

file:///C:/Users/sys/Desktop/SiblingFollowingXpath.html

//td[contains(text(),'Dog')]/following-sibling::td - dog -oppo data

//td[contains(text(),'Dog')]/following-sibling::td/input -dog oppo check box

//td[contains(text(),'Lion')]/following-sibling::td/input

<tab>

<tr>

<tr>

<tr> curent

<tr>

<tr>

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

preceding-sibling

//table[@id='HulTablee01']//td[text()=' DELHI ']/preceding-sibling::td/a

//td[contains(text(),'Cow')]/preceding-sibling::td -cow before cell

//table[@id='HulTablee01']//td[text()=' CALCUTTA ']/preceding-sibling::td/a

//table[@id='HulTablee01']//td[text()=' MUMBAI ']/preceding-sibling::td/a -- 2 lee

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

http://elementalselenium.com/tips

note:

//button[text()="Some text"]') // note\*\*\*\*\*\*\*\*\* recheck????? hw???????????????//

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ote:

lution 2 : Using position() Function In XPath

In bellow given xpath, [@type='checkbox'] will locate checkbox and function [position()=3] will locate checkbox which Is located on 3rd position from top. You can change your position number as per requirement.

xpath=(//input[@type='checkbox'])[position()=3]

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Solution 3 : Using last() Function In XPath

In bellow given xpath, [last()-1] function will locate 2nd last checkbox which Is for Lion.

xpath=(//input[@type='checkbox'])[last()-1]

To locate last checkbox, You can use It as bellow.

xpath=(//input[@type='checkbox'])[last()]

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*x\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//button(contains(., 'press me')] --??? not recheck with \* instead of dot. ?HW??????????????//

//\*[contains(@\*, 'idfirst')] -- ok

//\*[text()='Male'] -refers to form????

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//a refer all links in page

//input[@type='text'] [1] refere all elements in all forms(2)

//input[@id='idfirst'] [1]

//ex:

//text()???///

http://aksahu.blogspot.in/2014/01/selenium-tricks-for-css-and-xpath-locators.html

For element with multiple class we need to separate with space(" ") in Xpath and dot(".") in case of CSS. See below example,

In Xpath locator

//div[@class='panelClass1 panelClass2'] ---- recheck ?????????????????????????/// hw

????????????/////

In CSS selector

css=div.panelClass1.panelClass2

(5) Child or Subchild:

A direct child of an element is denoted as "//" in Xpath and a wehite-space(" ") in CSS selector. See the example below for a child/subchild "li" for a "ul" element:

In Xpath locator

//ul//li' hw1??????????????????????????????????????????????? revcvheck by me ???? brahma

/ child

//subchild

Recgheck >>>>>>>>>>>>>>>>>> learn more????????????????????????????

In CSS selector

css=ul li

Note that "ul li" and "ul > li" are different. If you are confusing please go through this article.

//input[@id='idfirst']//input????????not working????// HW1??????????

//form[1]/input[2] ok -lastname

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

note2:

note3:

//tbody/tr/td[text()='Verify Login ']/ancestor ::table ??????// not working

recheck with th tag instead of td tag???????????????????????????????? hw ???

t if we dont know?????????????????/ HW ???????????????????????????????????//

google i

.//\*[@id='TestCaseTable01']/tbody/tr[2]/td[2][text()='Verify Login'] --no macthed

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

4: ???????????/

//td[text()='TC\_01 ']/following::tr

note$:

//table/ descendant::td/input -

//table/ descendant::td/input[@type='checkbox'] -- 18 nodes

followingsibling :Selects all siblings after the current node.

ex:

//input[@id='idpwd']/following::tr - 9 nodes

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//td[text()='Product1']/following sibling::td This will get the second column from the second row immediately after the column that has Product 1 as the text value.

preceding Selects all nodes that appear before the current node in the document, except ancestors, attribute nodes, and namespace nodes.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//td[text()='$150']/preceding::tr

This will get the header row.precedingsibling Selects all(\*\*\*\*\*\*\*\*) siblings before the current node.

ex:

//input[@id='idpwd']/preceding::input // 2nodes matched

ex: negative

//input[@id='idpwd']/preceding::tr - not macthed at all

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//td[text()='$150']/precedingsibling::td

This will get the first column of third row from the table.

-----------------------

the primary difference between XPath and CSS Selectors is that,

-with the XPath we can traverse both forward and backward whereas CSS selector only moves forward.

Although CSS selectors perform far better than Xpath and it is well documented in Selenium community.

It has following advantages over XPath as:

-Xpath engines are different in each browser, hence make them inconsistent

-IE does not have a native xpath engine, therefore selenium injects its own xpath engine for compatibility of its API.

Thus losing the advantage of using native browser features.

-Xpath tend to become complex and hence make hard to read.

However there are some situations where, you need to use xpath, like while searching for a parent element or

searching element by its text.

//a[text()='My google']

//a[contains(text(),''My google')]

//a[.='10110101'] -- text() repace by dot

//a[contains(text(),'101')]

//a[contains(.,'10110101')] ..text() repace by dot

--------------------------

----------------------

CSS selector:

xpath synatx: // tagname[@attrName, 'Attr Val']

CSsSelector : tagname[attrName, 'Attr Val']

ex:

table[id='HulTablee01']

input[name='firstname'] - 1 ele found

input[class='firstclass'] - 3 ele found

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-----------

css sleector:

------------

xpath : // tagname[@attr name='val']

CSS : tagname[attr name='val']

Dont use // and @

ex:

input[name='firstname'] -- 1 ele found

input[name='sex'] - 2eles found --

input[name='sex'][id='maleid'] -- 1 ele found

-----------------------

naviagte child object : / use >

Hw: converti into xpath ?

CSS: table[id='HulTablee01'] > tbody

xpath : //table[@id='HulTablee01']/tbody

table[id='HulTablee01'] > tr

xpath : //table[@id='HulTablee01'] / tr

xpath ://select[@name='cars']/option

Css : select[name='cars'] > option

form>input

xpath : //select[@name='cars']/option[1]

select[name='cars'] > option : nth-child(1)

select[name='cars'] > option:nth-child(2)

--------------------------------

Subchild :

xpath : //, descendant

/ replace by space -- navigate to child or sub child

table[id='HulTablee01'] tbody -- child

table[id='HulTablee01'] tr - - subchild

Hannlde Dynamic objects :

----------------------------

1. starts-with(@id, ''firstid)

2.contains(@id, 'id val')

ends-with() -- dont have

CSS: ^ \* $

ele -- id = Myid-101

id = Myid-547

id = Myid-089

xpath :

starts-with(@attrname,'attr val') = attrname ^= 'propval'

conatins(@attrname,'attr val') = attrname \*= ' propval'

ends-with ---dont have = attrname $= 'propval'

css: ^ $ \*

start with = attrname ^='propval'

ex:

input[id^='idla']

table[id ^= 'Hul']

table[id ^= 'TestCase']

ex3:attrname \*='propval' -- attr contains given prop val

<input type="text" name="firstname" id="id first" class="firstclass">

css: input[id\*=' first'

table[id \*= 'Hul']

ex2: attrname $='propval' =attr ends with given prop val

input[id$='first']

table[id $= 'Table01']

table[id = 'TextboxTable01'] > tbody >tr

table[id = 'TextboxTable01'] > tbody >tr:nth-child(1)

table[id = 'HulTablee01'] > tbody >tr>td

---------------------------------------------------------------

xpath :input[1]

css : input:nth-child(1)

ex:

form:nth-child(1) select option:nth-child(2)

HW :

xpath : //ul[@id='blq-nav-main']/li[2]/a

CSS : ul[id='blq-nav-main']>li:nth-child(2)>a

Hw :

//li[@id='blq-nav-sport']/a

//ul[@id='blq-nav-main']/li[2]/a

//a[@href='http://www.bbc.co.uk/sport/']

CSS :

li[id='blq-nav-sport']>a

ul[id='blq-nav-main']>li:nth-child(2) a

a[href='http://www.bbc.co.uk/sport/']

------------------

input[id='firstnameid']

or

#idpropval

ex:#firstnameid

#HulTablee01

ex2: [class= 'attr Val']

.classPropVal

ex: .firstclass

.HulClassName

---------------

siblings : dont go for CSS much

Refer :

https://www.freecodecamp.org/news/css-selectors-cheat-sheet/

https://help.crossbrowsertesting.com/selenium-testing/tutorials/css-selectors-to-xpath/

---------------------------

xpath vs CSSselector

--------------------------------

1. xpath - we can naviagte to from parent to child - or child to parent

we can nvigate in forward directions or backward direction

2. Css Selector: can nviagte only in forward direction but not backward direction

3. xpath in slow performance little bit than CSSSelector

CSSSelector in IE browser is fast

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Following::

//table[@id='TestCaseTable01']/tbody/tr[1]/following::tr - - from tr[1] tag -- following any tr tag name in html code

//table[@id='HulTablee01']/tbody/tr[2]/following::input[1]

preceding:

//table[@id='HulTablee01']/tbody/tr[3]/preceding::tr

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Read props File :

create props file

define data in props file

config.properties

browser= chrome

url= loalhost.in

Env = PROD

similat to getAttribute("attRName") -- return Att val--check

read propert name

package ReadPropertiesFileBasics;

import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.IOException;

import java.util.Properties;

public class ReadingPropertiesFile1 {

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

// FAQ: how do u read properties file ?

// proper file path

String fileName= "D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiSeleniumBasics\\config.properties";

Properties prop= new Properties();

FileInputStream fis = new FileInputStream(fileName);

prop.load(fis);

// read prop name

String browser= prop.getProperty("browser");

System.out.println("browser="+browser);

String url= prop.getProperty("url");

System.out.println("url="+url);

// -ve

String Prod= prop.getProperty("prod");

System.out.println("Prod="+Prod);

// Prod=null

// Note: if given key is not exist in props file, it returns null

// Revise:

// 1. create props :

// extension

// 2. where to create

// 3. read. prop.getProperty("broswr")

// if key is not there, null

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Q: Develop a reusable method to read Xpath properties file?

package ReadPropertiesFileBasics;

import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.IOException;

import java.util.Properties;

public class ReadXpathPropertiesFile {

public String getPropertyVal(String fileName, String KeyName) throws IOException

{

// String fileName= "D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiSeleniumBasics\\config.properties";

Properties prop= new Properties();

FileInputStream fis = new FileInputStream(fileName);

prop.load(fis);

// read prop name

String keyVal= prop.getProperty(KeyName);

System.out.println("Get Key value=" + keyVal + " for key="+KeyName );

// invalid key name

if(keyVal==null)

{

System.out.println("Failed.plz check Key name or prp name='" + KeyName+ "'is not exist in given file="+fileName);

}

return keyVal;

}

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

String fileName= "D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiSeleniumBasics\\ObjectRepository.properties";

ReadXpathPropertiesFile read= new ReadXpathPropertiesFile();

String user\_xpath= read.getPropertyVal(fileName, "user\_xpath");

System.out.println("user\_xpath="+user\_xpath);

String Prod= read.getPropertyVal(fileName, "prod");

System.out.println("Prod="+Prod);

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

use data chromedriverexepath and browser in test case level ?

package ReadPropertiesFileBasics;

import java.io.IOException;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class Textbox {

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

// read data from config

// read data from Object reporsiorty fiels

ReadXpathPropertiesFile read= new ReadXpathPropertiesFile();

String fileName= "D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiSeleniumBasics\\config.properties";

String ChromeDriverExePath= read.getPropertyVal(fileName, "ChromeDriverExePath");

String url= read.getPropertyVal(fileName, "url");

System.setProperty("webdriver.chrome.driver", ChromeDriverExePath);

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get(url);

// use all locators , name , id

// 1. send data

WebElement firstnameTexboxEle= driver.findElement(By.name("firstname"));

// returns 1st matched webele by using name= firstname

// return type WebElement

// send "Ram" to first name

firstnameTexboxEle.sendKeys("Ram");

// clear value in first name text bx

firstnameTexboxEle.clear();

firstnameTexboxEle.sendKeys("Swathi");

driver.findElement(By.name("firstname")).sendKeys("Sowmya");

// HW .. use id

// use xpath

// class

// Css selector

// get value from text box

String getAttribute =driver.findElement(By.name("firstname")).getAttribute("name");

System.out.println("getAttribute="+getAttribute);

// getAttribute=firstname

getAttribute =driver.findElement(By.name("firstname")).getAttribute("value");

System.out.println("getAttribute="+getAttribute);

// getAttribute=SwathiSowmya

// HW .. send data , get data from last anme txt box using name, id , xpath locators

// GW pwd..

}

}

HW: define firstname textbox, last name text box, pwd text box, I have a car check box... in OR.proerties and use in code level ?

Ends Dec 2 2021

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Alert :

FAQ: how do u handle alert popup ?

package AlertPractise;

import org.openqa.selenium.Alert;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

public class AlertPopupHandling {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/jscript/Alert%20Prompt.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// driver.findElement(By.id("btnid")).click();

// Alert popup:

// how to identify alter popup: we are not able to inspect element in popup widow

// Alert - Interface and has methods clikc ok, cancel buton....etc

Alert al= driver.switchTo().alert();

// if alert is not exist in page , if we try to swicth to alter popwindow

// ,it throws org.openqa.selenium.NoAlertPresentException: no such alert

// get text from popup alert

String AlertText = al.getText();

System.out.println("AlertText="+AlertText);//AlertText=Please enter Employee name

// sedn data to alert

al.sendKeys("Sumanth");

Thread.sleep(3000);

// clikc ok

// al.accept();

al.accept();

// cancel

// al.dismiss();

// HW : GET paragraph msg

//

// paragraphMsg=Hello Sam! How are you today?

//def content ????

System.out.println("end ");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

}

}

// Revise:

// inspect :

// Alert -

// -- Exception

// methods : senda, acept, dismiss, gettext

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package AlertPractise;

import org.openqa.selenium.Alert;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

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

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

public class MultipleAlertsHandling {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

driver.findElement(By.id("alertid2")).click();

// wait for alert popup window max 20 sec

WebDriverWait wait= new WebDriverWait(driver, 20);

wait.until(ExpectedConditions.alertIsPresent());

/\*

\* Alert al= driver.switchTo().alert(); // 1st alert popup window Alert al=

\* driver.switchTo().alert(); String String AlertPopupMsg= al.getText();

\* System.out.println("AlertPopupMsg="+AlertPopupMsg); //Please enter Employee

\* name Thread.sleep(3000); al.sendKeys("Ram");

\* System.out.println("Clikc ok button in 1st alert"); al.accept();

\*

\* Thread.sleep(2000); //2nd alert popup

\* System.out.println("Clikc ok button in 2nd alert"); //

\*

\* al.accept(); //if we dont handle 2nd alert popup window by click ok, cancel

\* // button, try to perofrm any actions on main page, // it //

\* throows,UnhandledAlertException: unexpected alert open: //{Alert text : Order

\* // No : 101 created successfully}

\* System.out.println("Clicked ok button in 2nd alert");

\*

\* driver.findElement(By.name("lastname")).sendKeys("Raju");

\* System.out.println("end ");

\*/

/\*

\* AlertPopupMsg=Please enter Employee name ==Sam,

\* Clikc ok again in 1st alert Clikc ok

\* again in 2nd alert Clicked ok again in 2nd alert end

\*/

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Alert al= driver.switchTo().alert();

// String AlertPopupMsg= al.getText();

// System.out.println("AlertPopupMsg="+AlertPopupMsg);

// System.out.println("Send data to alert");

// al.sendKeys("Ram"); // ?????? not working chk later

// Thread.sleep(3000);

// System.out.println("Click ok button in 1st alert");

// al.accept();

// Thread.sleep(3000);

//

// System.out.println("Clikc ok again in 2nd alert");

// Alert al2= driver.switchTo().alert();// this also ok

// Thread.sleep(3000);

// al2.accept();

// System.out.println("Clicked ok button in 2nd alert");

//

// driver.findElement(By.name("lastname")).sendKeys("Raju");

// System.out.println("end ");

// can i use defaultcontent()

Alert al= driver.switchTo().alert();

String AlertPopupMsg= al.getText();

System.out.println("AlertPopupMsg="+AlertPopupMsg);

Thread.sleep(3000);

al.sendKeys("Ram"); // ??????

System.out.println("Click ok in 1st alert");

al.accept();

Thread.sleep(3000);

/// driver.switchTo().defaultContent();// no need for alert must for frame but not for alert

System.out.println("Clikc ok again in 2nd alert"); Alert

al2=driver.switchTo().alert();// this also ok Thread.sleep(3000);

al2.accept();

/// driver.switchTo().defaultContent(); // no need

// org.openqa.selenium.UnhandledAlertException: unexpected alert open: {Alert

// text : Order No : 101 created successfully} //?????????????????????

System.out.println("Clicked ok again in 2nd alert");

driver.findElement(By.name("lastname")).sendKeys("Raju");

System.out.println("end ");

}

}

Revise :

miltiple alerts

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 3 -2021 1:24 PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Frame : teach again

package FrameHandling;

import java.util.List;

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.ExpectedConditions;

public class FrameHandling {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/iframes.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// develop frame- <frameset tag> <frame src="mypahe.html"

// <iframe name= id= "" src="webtableall.html" >

// get frames count

List<WebElement> AllIframesList= driver.findElements(By.tagName("iframe"));

System.out.println("AllIframesList cnt="+AllIframesList.size());//3

// HW :get frames cnt use xpath

//Note: even if name prop is correct, but it will not perform action on the desired ele,

// we need to check the elemen is presetn in frame, swicth ctrol to frame then perform action

// desired ele

//NoSuchElementException: no such element: Unable to locate element: {"method":"css selector","selector":"\*[name='lastname']

// must swicth ctrl to frame

// driver.findElement(By.name("lastname")).sendKeys("Last name");// error

// Switch to frame by index

// driver.switchTo().frame(0);

// driver.findElement(By.name("lastname")).sendKeys("Last name");

// driver.findElement(By.name("pwd")).sendKeys("mercury");

// driver.switchTo().defaultContent();// must come back to main page

//

// Thread.sleep(3000);

// driver.switchTo().frame(1);

// driver.findElement(By.name("username")).sendKeys("My user name");

// driver.findElement(By.name("password")).sendKeys("My pwd");

// driver.switchTo().defaultContent();

//

// 2 name or id

// driver.findElement(By.name("lastname")).sendKeys("Last name");// must switch to frame

/\*

\* driver.switchTo().frame("iframe1name");

\* driver.findElement(By.name("lastname")).sendKeys("Last name");

\* driver.findElement(By.name("pwd")).sendKeys("mercury");

\* driver.switchTo().defaultContent();

\*

\* Thread.sleep(3000);

\*

\* driver.switchTo().frame("iframe2name");

\* driver.findElement(By.name("username")).sendKeys("My user name");

\* driver.findElement(By.name("password")).sendKeys("My pwd"); // // //

\* driver.findElement(By.name("myname")).sendKeys("Out of frame"); // must // //

\* swithc to default page //NoSuchElementException: no such element: Unable to

\* // locate element: {"method":"css selector","selector":"\*[name='myname']"}

\*

\* driver.switchTo().defaultContent();

\*

\* driver.findElement(By.name("myname")).sendKeys("Out of frame");//ok

\*/

//id

/\*

\* driver.switchTo().frame("iframe1id");

\* driver.findElement(By.name("lastname")).sendKeys("Last name");

\* driver.findElement(By.name("pwd")).sendKeys("mercury");

\* driver.switchTo().defaultContent();

\*

\* Thread.sleep(3000);

\* driver.switchTo().frame("iframe2id");

\* driver.findElement(By.name("username")).sendKeys("My user name");

\* driver.findElement(By.name("password")).sendKeys("My pwd");

\* driver.switchTo().defaultContent();

\*/

//3. switchTo().frame(Iframe1Ele);

/\*

\* WebElement Iframe1Ele= driver.findElement(By.name("iframe1name")) ;

\* driver.switchTo().frame(Iframe1Ele);

\* driver.findElement(By.name("lastname")).sendKeys("Last name");

\* driver.findElement(By.name("pwd")).sendKeys("mercury");

\* driver.switchTo().defaultContent();

\*

\* Thread.sleep(3000); WebElement Iframe2Ele=

\* driver.findElement(By.name("iframe2name")) ;

\* driver.switchTo().frame(Iframe2Ele);

\* driver.findElement(By.name("username")).sendKeys("My user name");

\* driver.findElement(By.name("password")).sendKeys("My pwd");

\* driver.switchTo().defaultContent();

\*/

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// ele by id

/\*

\* WebElement Iframe1Ele= driver.findElement(By.id("iframe1id")) ;

\* driver.switchTo().frame(Iframe1Ele);

\* driver.findElement(By.name("lastname")).sendKeys("Last name");

\* driver.findElement(By.name("pwd")).sendKeys("mercury");

\* driver.switchTo().defaultContent();

\*

\* Thread.sleep(3000); WebElement Iframe2Ele=

\* driver.findElement(By.id("iframe2id")) ; driver.switchTo().frame(Iframe2Ele);

\* driver.findElement(By.name("username")).sendKeys("My user name");

\* driver.findElement(By.name("password")).sendKeys("My pwd");

\* driver.switchTo().defaultContent();

\*/

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// ele by xpath

/\*

\* WebElement Iframe1Elexpath=

\* driver.findElement(By.xpath("//\*[@id='iframe1id']"));//ok

\* driver.switchTo().frame(Iframe1Elexpath);

\* driver.findElement(By.name("lastname")).sendKeys("Last name");

\* driver.findElement(By.name("pwd")).sendKeys("mercury"); //

\* driver.switchTo().defaultContent(); //switch

\* driver.switchTo().parentFrame();//ok

\*

\* Thread.sleep(3000); WebElement Iframe2Elexpath=

\* driver.findElement(By.xpath("//\*[@id='iframe2id']")) ;

\* driver.switchTo().frame(Iframe2Elexpath);

\* driver.findElement(By.name("username")).sendKeys("My user name");

\* driver.findElement(By.name("password")).sendKeys("My pwd");

\* driver.switchTo().defaultContent();

\*/

///

driver.switchTo().frame(4);// error: As we dont have frame 4 in page

//NoSuchFrameException: no such frame

System.out.println("end ");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

}

}

FAq: how can u handle Frames?

if we dont swicth to frame, perform action on ele -- NoSuchElementException

If we switch to Frame- 4 , which is not exist on page, NoSuchFrameException

- defaultContent(); -- must we once we switchTo frame, always use defaultContent();

methods:

1.frame - index

2.frame- name or id

3. frame( IFrameEle) ;

Note:

even if xpath is right , but we are not able to enter data in textbox?

Sol: -- check text box ele is in frame or not ---

package FrameHandling;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.Alert;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

import org.openqa.selenium.support.ui.Select;

public class InnerFrameHandling3Sumath {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("https://chercher.tech/practice/frames-example-selenium-webdriver");

driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

// innner frame-- frame inside frame

// swicth to frame1 - swicth to inner frame

driver.switchTo().frame("frame1");

// driver.findElement(By.id("topic")).sendKeys("Raju");//error:

// ElementNotInteractableException: element not interactable

// we are trying to enter data for text element but not for textbox

driver.findElement(By.xpath("//b[@id='topic']/../input")).sendKeys("Raju");

Thread.sleep(3000);

driver.switchTo().frame("frame3");//.NoSuchFrameException: No frame element found by name or id frame3

driver.findElement(By.id("a")).click();

driver.switchTo().defaultContent(); // check ctrl goes to main page but not parent frame

//driver.findElement(By.xpath("//b[@id='topic']/../input")).sendKeys("Swathi");//Erorr

// this elee is present in parent frame - swicth().parentFrame();

Thread.sleep(3000);

// driver.switchTo().defaultContent();// even if u write/ dont write also, it is fine,

driver.switchTo().frame("frame2");

WebElement animalsDropdownEle = driver.findElement(By.id("animals"));

Select sel = new Select(animalsDropdownEle);

sel.selectByVisibleText("Avatar");

driver.switchTo().defaultContent();

/\*

\* //siwtch frame 1 driver.switchTo().frame("frame1");

\* driver.findElement(By.xpath("//b[@id='topic']/following-sibling::input")).

\* sendKeys("Ram");

\*

\* // swicth to inner frame //Inner Frame Check box :

\*

\* driver.switchTo().frame("frame3");

\* driver.findElement(By.id("a")).click();

\* driver.switchTo().defaultContent();// ctrl comes to main page only

\*

\* String paraTxtFromMainPage=

\* driver.findElement(By.xpath("//\*[contains(text(),'Not a Friendly Topic')]")).

\* getText(); System.out.println("paraTxtFromMainPage="+paraTxtFromMainPage);

\*

\* // swicth to last frame driver.switchTo().frame("frame2");

\*

\* WebElement dropdownEle= driver.findElement(By.id("animals")); Select sel= new

\* Select(dropdownEle); sel.selectByVisibleText("Avatar");

\*/

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// parent frame...

//siwtch frame 1

// driver.switchTo().frame("frame1");

// driver.findElement(By.xpath("//b[@id='topic']/following-sibling::input")).sendKeys("Ram");

// swicth to inner frame //Inner Frame Check box :

driver.switchTo().frame("frame3");

driver.findElement(By.id("a")).click();

// swicth to parent frame and enter some text in topic

driver.switchTo().parentFrame();// control goes paren frame i.e frame-1

driver.findElement(By.xpath("//b[@id='topic']/following-sibling::input")).sendKeys("Swathi");

// can we swicth to inner frame directly : no. we cannot swicth

//Exception in thread "main" org.openqa.selenium.NoSuchFrameException: No frame element found by name or id frame3

System.out.println("end ");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

}

}

FAq: how can u handle inner frame ?

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Implicit wait:

package SynchronisationBasics;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class ImplicitlyTimeOutBasics1 {

public static void main(String[] args) {

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

// global time out -- define only once

// applicable for each findElement();

// open url in browser

driver.get("https://chercher.tech/practice/frames-example-selenium-webdriver");

String getText= driver.findElement(By.xpath("//span[text()='Not a Friendly TopicDelte']")).getText();

// org.openqa.selenium.NoSuchElementException: no su

// it throws exception - immeditely if ele is not found

//but some times appl takes some time to give response -- ex: 4 sec 5 sec

driver.findElement(By.name("lastname")).sendKeys("Ram");

// if ele is found with in 10 sec, then it will not wait remaining 10 sec

// if eles not found with in given max time out= 20 sec, noSucchelement

driver.findElement(By.name("firstname")).sendKeys("Ram");

System.out.println("getText="+getText);

}

}

package SynchronisationBasics;

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;

public class ImplicitlyTimeOutBasics2 {

public static void main(String[] args) {

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

//driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS); // old version

// driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10)); // Latest version

// page load tim out

driver.manage().timeouts().pageLoadTimeout(10, TimeUnit.SECONDS);

// global time out -- define only once

// applicable for each findElement() and also findElements();

// open url in browser

driver.get("https://chercher.tech/practice/frames-example-selenium-webdriver");

System.out.println("checking time out =1");

List<WebElement> allEles = driver.findElements(By.xpath("//span[text()='Not a Friendly TopicDelte']"));

// findElements() also checks implicitlyWait time out define -- it waits for given max time

System.out.println("display after 20 secs");

System.out.println("getText="+allEles.get(0).getText());

}

}

Explicit wait :

WaitForAlert

package SynchronisationBasics;

import org.openqa.selenium.Alert;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

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

import org.openqa.selenium.support.ui.FluentWait;

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

public class WebDriverWaitBasics1 {

public static void main(String[] args) {

// explicit wait : waiting for some eleme and with specific condition

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/AlertDisplayafterSomeTime.html");

// click btn

driver.findElement(By.xpath("//input[@type='button']")).click();

// wait for alert for max time 20 sec

// explicit time out can be handled by using 2 classes

// 1.WebDriverWait

// 2. FluentWait<T>

WebDriverWait wait = new WebDriverWait(driver, 10);// suppose if alet takes 5 sec

// WebDriverWait wait = new WebDriverWait(driver, 4);

wait.until(ExpectedConditions.alertIsPresent());

// if alert is present with in 5 sec, it goes to next stmt,

// if alert is not presetn after waiting for given time out = 10 sec, throws TimeoutException

// TimeoutException: Expected condition failed: waiting for alert to be present (tried for 4 second(s) with 500 milliseconds interval)

// handle alert

Alert al = driver.switchTo().alert(); //org.openqa.selenium.NoAlertPresentException: no such alert

System.out.println("get text from alert popup="+ al.getText());

// wait for title

wait.until(ExpectedConditions.titleContains("actiTIME - Login"));

wait.until(ExpectedConditions.titleIs("actiTIME - Login"));

// wwait for last name to be visible

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("//input[@name='username']")));

// wait for elem to disappera invisible

wait.until(ExpectedConditions.invisibilityOfElementLocated(By.xpath("//input[@name='username']")));

// wait for ele to ble clickable

wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//input[@name='username']")));

//wait for text to be presnt ele

wait.until(ExpectedConditions.textToBePresentInElementLocated(By.xpath("//td[@id='headerContainer']"), "Please identify yourself"));

}

}

HW: PRactsie for ORange HRMs

when u click link, button --- it takes some time to give response-- so wait for some element in page..

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

open firefox ::

package AllWebElemens;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

public class FirefoxDriverBasics {

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

// down load chromedriver.exe, ie-- , firefox-geckodriver

System.setProperty("webdriver.gecko.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\Alldrivers\\geckodriver.exe");

// run time we can download

//WebDriver dri = new ChromeDriver();

WebDriver driver = new FirefoxDriver();// open chrome browser

// Hw: down Internet explorer driver .exe file and webdriver.ie.driver

// open the given url in chrome browser

// driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

driver.navigate().to("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// FAQ" dif b./w get() and naviagte()?

// till it loads all elements in page it will will wait

// naviagte().-- naviagte to back, forward , refresh the page

driver.findElement(By.linkText("ToolTip Sumanth")).click();

driver.navigate().back();

Thread.sleep(3000);

driver.navigate().forward();

Thread.sleep(3000);

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

// get title

String getTitle= driver.getTitle();

System.out.println("getTitle="+getTitle);

//getTitle=All webobjects MyTitle Sumanth

// get url

String getCurrentUrl = driver.getCurrentUrl();

System.out.println("getCurrentUrl="+getCurrentUrl);

String getPageSource= driver.getPageSource();

System.out.println("getPageSource="+getPageSource);// return all html code for the specific page

// getPageSource=<html><head><title> All webobjects MyTitle Sumanth</title>

//close

// driver.close();

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

identiy element in fireox browser:

ctrl + F - write xpath a nd presss enter - check how many elements are ffound on the page..

try xpath : addon

Add try xpath addon to fireox

open try xpath : check or TX icon in top right corner

Css:

----------------------

Select in Try Xpath :

Way : querySelectotr

Way : querySelectotrAll --- multiple eleemnst

Write CssSelector expression : input[id='idfirst']

Note:

note: chropath --- addon -- in chrome browser

open IE : idenify elements

This element might be pseudo element/comment/inside iframe from different src. Currently ChroPath doesn't support for them.

Note: we can copy xpath also :

Rt clk on desired ele, Copy > copy Xpath

//\*[@id="idfirst

//\*[@id="testid201"]"]

Copy Full xpath :

/html/body/form/input[3]

---------------------------------

Actions :

package ActionsBasics;

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 ActionsBasics1 {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// Actions -- predefined class in Selenium

//can be used to peform mouse movement operations ex: move mouse to desired elemnt ,

// .mouse move to desired element and click

// mouse move to ele- dbl click, drag and drop,, move ele to x - axis

// and also we can perform k/b related operations : enter, Ctrl , Alt , Sht

/\*

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

\*

\* WebElement TooltipSumnathEle=

\* driver.findElement(By.xpath("//a[text()=' ToolTip Sumanth ']"));

\* act.moveToElement(TooltipSumnathEle).perform();

\*

\* Thread.sleep(3000);

\*

\* WebElement TooltipLinkEle=

\* driver.findElement(By.xpath("//a[text()=' ToolTip Link ']"));

\* act.moveToElement(TooltipLinkEle).perform();

\*/

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/MenuDesciption.html");

// move mouse over to W3Schools.com

Actions act = new Actions(driver);

WebElement W3schoolLinkEle= driver.findElement(By.id("id1"));

act.moveToElement(W3schoolLinkEle).perform();

// Hw move mouse to Internet Explorer and get desription text

// HW move mouse to Netscape Navigator and get desription text

}

}

------------------

package ActionsBasics;

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 ClickDoubleClick {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// click elem by using actions

// driver.findElement(null).click(); // some times findelemnt().click();

Actions act = new Actions(driver);

//act.click(driver.findElement(By.id("bikeid"))); // error wont come

// it does not click bike chk box , as we did not perform() at end

// FAQ: how can u perform mouse over on th elem ?

act.click(driver.findElement(By.id("bikeid"))).build().perform();

Thread.sleep(3000);

act.click(driver.findElement(By.xpath("//input[@type='checkbox'][2]"))).perform();

// can perform multiple actions in the same line

// composite actions--

Thread.sleep(3000);

act.moveToElement(driver.findElement(By.xpath("//input[@type='checkbox'][2]"))) .click().perform();

// Hw: dbl click with args anf with out args

// FAQ how can u perform rt clk on ele?

WebElement TooltipSumnathEle=driver.findElement(By.xpath("//a[text()=' ToolTip Sumanth ']"));

act.contextClick(TooltipSumnathEle).perform();

// contextClick() no args move to ele and rt clk

System.out.println("ends");

}

}

send html page

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 7 2021 4PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package ActionsBasics;

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 ClickDoubleClick {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// click elem by using actions

// driver.findElement(null).click(); // some times findelemnt().click();

Actions act = new Actions(driver);

//act.click(driver.findElement(By.id("bikeid"))); // error wont come

// it does not click bike chk box , as we did not perform() at end

// FAQ: how can u perform mouse over on th elem ?

act.click(driver.findElement(By.id("bikeid"))).build().perform();

Thread.sleep(3000);

act.click(driver.findElement(By.xpath("//input[@type='checkbox'][2]"))).perform();

// can perform multiple actions in the same line

// composite actions--

Thread.sleep(3000);

act.moveToElement(driver.findElement(By.xpath("//input[@type='checkbox'][2]"))) .click().perform();

// Hw: dbl click with args anf with out args

// FAQ how can u perform rt clk on ele?

WebElement TooltipSumnathEle=driver.findElement(By.xpath("//a[text()=' ToolTip Sumanth ']"));

act.contextClick(TooltipSumnathEle).perform();

// contextClick() no args move to ele and rt clk

System.out.println("ends");

}

}

--------------------

package ActionsBasics;

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 DragandDrop {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/dragdrop.html");

// drag and drop

Actions act = new Actions(driver);

WebElement srcEle= driver.findElement(By.id("drag1"));

WebElement targetEle= driver.findElement(By.id("div1"));

act.dragAndDrop(srcEle, targetEle).perform();

// check in fireox

act.clickAndHold(srcEle).moveToElement(targetEle).release().perform();// ??? recheck once

// or

act.clickAndHold(srcEle).release(targetEle).perform();// ?????

System.out.println("ends");

}

}

package ActionsBasics;

import java.awt.Desktop.Action;

import org.openqa.selenium.By;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.interactions.Actions;

public class KeyBoardOperationsBasics1 {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//

Actions act =new Actions(driver);

act.sendKeys(Keys.TAB).perform();

act.keyDown(Keys.SHIFT).sendKeys("Ravi").perform(); // key up

act.sendKeys(Keys.TAB).perform();

act.sendKeys("Swam").perform();

// act.keyUp(Keys.SHIFT).perform();

//

}

}

package ActionsBasics;

import org.openqa.selenium.By;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.interactions.Actions;

public class KeyBoardOperationsBasics2 {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//

driver.findElement(By.name("firstname")).sendKeys("Swati");

Actions act = new Actions(driver);

act.sendKeys(Keys.TAB).perform();

act.sendKeys("Ravi last name").perform();

Thread.sleep(3000);

act.sendKeys(Keys.TAB).perform();

act.sendKeys("Test field data ").perform();

Thread.sleep(3000);

act.sendKeys(Keys.TAB).perform();

act.sendKeys("pwd").perform();

Thread.sleep(3000);

act.sendKeys(Keys.TAB).perform();

act.sendKeys(Keys.SPACE).perform();

Thread.sleep(3000);

act.sendKeys(Keys.TAB).perform();

act.sendKeys(Keys.SPACE).perform();

//

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dropdown handling with out Select class:

get notes from Sasi : \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ??????????????????

Multi select :

rr click press arrow down

text == ctrl + A -- Deleet

-----------------------------

//selecting all elements in dropdown using Actions class

WebElement textele=driver.findElement(By.name("firstname"));

textele.click();

act.keyDown(Keys.CONTROL).sendKeys("a").sendKeys(Keys.DELETE).perform();

act.keyUp(Keys.CONTROL);

// HW:move the moouseover on tooltip and press ctrl click

Actions act=new Actions(driver);

WebElement tooltip\_sumanth = driver.findElement(By.linkText("ToolTip Sumanth"));

act.moveToElement(tooltip\_sumanth).perform();

act.keyDown(Keys.CONTROL).perform();

act.click(tooltip\_sumanth).perform();

act.keyUp(Keys.CONTROL).perform();

// right click on tooltip sumanth link press down arrow two times and press enter

act.contextClick(tooltip\_sumanth).sendKeys(Keys.ARROW\_DOWN).sendKeys(Keys.ARROW\_DOWN).perform();

act.sendKeys(Keys.ENTER).perform();

// HW://selecting multiple dropdown values in the multi select dropdown.

WebElement multidrop= driver.findElement(By.xpath("//select[@name='MultiCars']"));

act.click(multidrop).perform();

act.keyDown(Keys.CONTROL).perform();

act.click(driver.findElement(By.xpath("//select[@name='MultiCars']/option[text()='Maruthi']"))).perform();

act.click(driver.findElement(By.xpath("//select[@name='MultiCars']/option[text()='Audi']"))).perform();

act.keyUp(Keys.CONTROL).perform();

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 10 2021

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Multiple windows :

alert popup window

frame handling

multiple browser windows ???

package MultipleBrowserWindowsBasics;

import java.util.Set;

import org.openqa.selenium.Alert;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

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

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

public class MultipleWindowsHandling {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

driver.findElement(By.id("loginid")).click();

// it opens new browser window

// FAQ : how to get browsers cnt which are opened by Selenium?

Set<String> AllWindowAddresses= driver.getWindowHandles();

int BrowsersCnt= AllWindowAddresses.size();

System.out.println("BrowsersCnt="+BrowsersCnt);

// BrowsersCnt=2

driver.switchTo().window();//????

System.out.println("end ");

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package MultipleBrowserWindowsBasics;

import java.util.ArrayList;

import java.util.ListIterator;

import java.util.Set;

import org.openqa.selenium.Alert;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

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

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

public class ArrayListBasics1 {

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

// 1. open chrome browser //set property

ArrayList<String> al = new ArrayList<String>();

// aadd vals

al.add("Ramu"); // inserts val in 0 index

al.add("Sita");// index =1

al.add("Raju"); /// inde x=2

System.out.println("Array list="+al);

//1. preserve insertion order - the order we insert the values in list obj, in the same order only values

// will be stored

//Array list=[Ramu, Sita, Raju]

// 2. allows duplicate vals

al.add("Ramu");

// Array list=[Ramu, Sita, Raju, Ramu]

// 3 does it allow null values? allows null

al.add("null");

System.out.println("Array list="+al);

al.add(null);

System.out.println("Array list="+al);

al.add(null);

System.out.println("Array list="+al);

// Array list=[Ramu, Sita, Raju, Ramu, null]

// Array list=[Ramu, Sita, Raju, Ramu, null, null]

// Array list=[Ramu, Sita, Raju, Ramu, null, null, null]

//Hw: explore all metods

// HW: contains

// remove

// get all values from Arraylist obj

// HW1 for loop with indeex

// Hw2: for each loop

//HW3: iterator - iterates values in forwsrd direction

// listiterator :: forward and reverse directions

ListIterator<String> lit= al.listIterator();

System.out.println("listIterator\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

while(lit.hasNext())

{

String val= lit.next();

System.out.println("vals in forward direction using ListIterator ="+val);

}

// vals using ListIterator =Ramu

// vals using ListIterator =Sita

// vals using ListIterator =Raju

// vals using ListIterator =Ramu

// vals using ListIterator =null

// vals using ListIterator =null

// vals using ListIterator =null

System.out.println("listIterator in reverse direction\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

while(lit.hasPrevious())

{

String val= lit.previous();

System.out.println("vals in reverse direction using ListIterator ="+val);

}

// FAq diff itertaor() and listIterator ?

// vals in reverse direction using ListIterator =null

// vals in reverse direction using ListIterator =null

// vals in reverse direction using ListIterator =null

// vals in reverse direction using ListIterator =Ramu

// vals in reverse direction using ListIterator =Raju

// vals in reverse direction using ListIterator =Sita

// vals in reverse direction using ListIterator =Ramu

System.out.println("end ");

}

}

package MultipleBrowserWindowsBasics;

import java.util.HashSet;

import java.util.Iterator;

public class HashSettBasics {

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

// HAshset -- we can store group of vhss

// predefined class in java -- pkg: java.util

// add some vhss, remove, count , iterate vhss from hashset

HashSet<String> hs = new HashSet<String>();

// create hash set with no vhss i.e empty

// aadd vhss

hs.add("Ramu"); // it does not store vals in hashset in seq order -- no index no

hs.add("Sita");//

hs.add("Raju");

hs.add("Amar");

System.out.println("Hashset ="+hs);// random order

// Hashset =[Ramu, Amar, Sita, Raju]

//1. does not preserve insertion order - the order we insert the vhsues in list obj, in the same order only vhsues

// will be stored

// 2. does not allows duplicate vals in hash set

hs.add("Ramu");

// Hash set=[Ramu, Sita, Raju, Ramu]

System.out.println("after inserting duplicate val,Hashset ="+hs);

// 3 does it alllow null valuees? hslows null

// hs.add("null"); // Note: String null

System.out.println("Hash set="+hs);

// HashSet permits to have a single null value .

hs.add(null);

System.out.println("insert null --Hash set="+hs);

hs.add(null);

System.out.println("Hash set="+hs);

// get val from hash set

// hs.get();// donot have get() in hashset // al. get(0)

/\*

\* for(int i) {

\*

\* }

\*/

// HW :way2: for each loop

// HW way 3: iterator

// HW: listIterartor()

// HW : explore all other methods in hasshet

Object oref= hs.clone();

System.out.println("oref=" +oref);

System.out.println("end ");

}

}

FAQ : diff b/w ARRay List and HashSet

1.def: can be used store group of vals

Hashset - """"""""

2.allows duplciate vals

HS: does not allow duplicate vals

3. index order

HS- does have index no-

4. alows multiple null vals

HS: allows single null vals

package MultipleBrowserWindowsBasics;

import java.util.Iterator;

import java.util.Set;

import org.openqa.selenium.Alert;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

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

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

public class MultipleWindowsHandling {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

driver.findElement(By.id("loginid")).click();

// it opens new browser window

// FAQ : how to get browsers cnt which are opened by Selenium?

Set<String> AllWindowAddresses= driver.getWindowHandles();

int BrowsersCnt= AllWindowAddresses.size();

System.out.println("BrowsersCnt="+BrowsersCnt);

// BrowsersCnt=2

// get window address

Iterator<String> it= AllWindowAddresses.iterator();

String MainWindow= it.next();

String Window2Address= it.next(); // ??????

driver.findElement(By.id("userid")).sendKeys("Ram");

// go to window-2 enter user and pwd

// driver.switchTo().window(Window2Address);

driver.findElement(By.id("userid")).sendKeys("Ram");

// driver.switchTo().window();//????

System.out.println("end ");

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

DEc 11 -2021

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package MultipleBrowserWindowsBasics;

import java.util.Iterator;

import java.util.Set;

import org.openqa.selenium.Alert;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

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

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

public class MultipleWindowsHandling {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

driver.findElement(By.id("loginid")).click();

// it opens new browser window

// FAQ : how to get browsers cnt which are opened by Selenium?

Set<String> AllWindowAddresses= driver.getWindowHandles();

int BrowsersCnt= AllWindowAddresses.size();

System.out.println("BrowsersCnt="+BrowsersCnt);

// BrowsersCnt=2

// get window address

Iterator<String> it= AllWindowAddresses.iterator();

String MainWindow= it.next();

String Window2Address= it.next(); // ?????? FAQ . why set returns vals in sequntials?

// bcoz getWindowHandles(); returns ordered set

// driver.findElement(By.id("userid")).sendKeys("Ram");// error as we did not swicth ctrl to browser-2

// go to window-2 enter user and pwd

driver.switchTo().window(Window2Address);

driver.findElement(By.id("userid")).sendKeys("Ram");

driver.findElement(By.id("pwdid")).sendKeys("Mypwd");

// close Browser2

Thread.sleep(3000);

driver.close(); // close currently focussed browser window -- close single winow only

// FAQ: close and quit ?

// close all browsers windows which are opened by Selenium

// driver.quit();

//NoSuchSessionException: Session ID is null. Using WebDriver after calling quit()?

// go to main bropwser and enter last name

// driver.findElement(By.name("lastname")).sendKeys("My last");// error as we did not swict to main browser

// driver.switchTo().window(MainWindow);//ok

// driver.switchTo().window("MwindowsAdrress");// exception

// .NoSuchWindowException: no such window: target window already closed

driver.findElement(By.name("lastname")).sendKeys("My last");

// Revise : alert, frame, window

System.out.println("end ");

}

}

package MultipleBrowserWindowsBasics;

import java.util.Iterator;

import java.util.Set;

import org.openqa.selenium.Alert;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

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

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

public class GetAllBrowserTitles {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Get all browser titles

// Set<String> allWindowAddresses =driver.getWindowHandles();// Dont write here

// System.out.println("Browsers cnt="+allWindowAddresses.size());

// Browsers cnt= 1

driver.findElement(By.id("loginid")).click();

driver.findElement(By.id("allid")).click();

driver.findElement(By.id("simpleid")).click();

Set<String> allWindowAddresses =driver.getWindowHandles();//

System.out.println("Browsers cnt="+allWindowAddresses.size());

System.out.println("allWindowAddresses="+allWindowAddresses);

//allWindowAddresses=[CDwindow-3085965AA4B273A08E3A3C6BAEFF8606,

//CDwindow-1B9DC9F732366FA0BB6CD145F8BD1100,

//CDwindow-8DA5B73D8D84A2374FBB34BF92569B6D,

//CDwindow-F9BC6606FD908C8363ABAF8B1AD1CDB9]

Iterator<String> it= allWindowAddresses.iterator();

String mainWindowAddress= it.next();

String window2Address=it.next();

String window3Address=it.next();

String mainwindowTitle=driver.getTitle();

System.out.println("mainwindowTitle="+mainwindowTitle);

// get 2nd window title

driver.switchTo().window(window2Address);

String window2Title=driver.getTitle();

System.out.println("window2Title="+window2Title);

// get 3rd window title

driver.switchTo().window(window3Address);

String window3Title=driver.getTitle();

System.out.println("window3Title="+window3Title);

// go to main window

driver.switchTo().window(mainWindowAddress);

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Hw1 use for each loop

System.out.println(" use for each loop");

for(String EachWindowAddr : allWindowAddresses)

{

driver.switchTo().window(EachWindowAddr);

String EachTitle=driver.getTitle();

System.out.println("EachTitle="+EachTitle);

driver.close();

}

// EachTitle=All webobjects MyTitle Sumanth

// EachTitle=Simple all objects Title

// EachTitle=WebtableAll Title

// EachTitle=Login page

// HW2: use iterator() use while loop

System.out.println("end ");

}

}

// HW 3: open 3 windows go to each browser and get links cnt

FAQ: diff b/w getWindowHandle() and getWindowHandles() ?

package MultipleBrowserWindowsBasics;

import java.util.Iterator;

import java.util.Set;

import org.openqa.selenium.Alert;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

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

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

public class GetwindowHandle {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

String mainwindowTitle=driver.getTitle();

System.out.println("mainwindowTitle="+mainwindowTitle);

String mainwindowAddress= driver.getWindowHandle();

// return currently foccussed browser window address

driver.switchTo().window(mainwindowAddress);

mainwindowTitle=driver.getTitle();

System.out.println("mainwindowTitle="+mainwindowTitle);

// mainwindowTitle=All webobjects MyTitle Sumanth

// mainwindowTitle=All webobjects MyTitle Sumanth

// FAQ: diff b/w getWindowHandle() and getWindowHandles() ?

// return String but getWindowHandles() returns set <String>

// returns currenlty focussed browser window address

// but getWindowHandles() returns all browser window addresses

System.out.println("end ");

// HW 3: open 3 windows go to each browser and get links cnt

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 12 10PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Multiple tabs :

package MultipleBrowserWindowsBasics;

import java.util.Iterator;

import java.util.Set;

import org.openqa.selenium.Alert;

import org.openqa.selenium.By;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

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

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

public class MultipleTabsHandling1 {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver",

"D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver = new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Actions act = new Actions(driver);// constr

// new Actions();// erro The constructor Actions() is undefined

WebElement TooltipSumnathLink = driver.findElement(By.linkText("ToolTip Sumanth"));

act.keyDown(Keys.CONTROL).click(TooltipSumnathLink).perform();

//Ctrl + A press Ctl + I -- indentation

Set<String> allWindows= driver.getWindowHandles();

System.out.println("Cnt="+allWindows.size());// 2

Iterator<String> it =allWindows.iterator();

String MainWindowAddr= it.next();

String Window2Addr= it.next();

driver.switchTo().window(Window2Addr);

System.out.println("browser1 ttile="+driver.getTitle());

driver.switchTo().window(MainWindowAddr);

System.out.println("Main window ttile="+driver.getTitle());

System.out.println("end ");

}

}

package MultipleBrowserWindowsBasics;

import java.util.Iterator;

import java.util.Set;

import org.openqa.selenium.Alert;

import org.openqa.selenium.By;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

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

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

public class MultipleTabsHandling1 {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver",

"D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver = new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Actions act = new Actions(driver);// constr

// new Actions();// erro The constructor Actions() is undefined

WebElement TooltipSumnathLink = driver.findElement(By.linkText("ToolTip Sumanth"));

act.keyDown(Keys.CONTROL).click(TooltipSumnathLink).perform();

//Ctrl + A press Ctl + I -- indentation

// opne nwew browser window -- it take some time new window

WebDriverWait wait = new WebDriverWait(driver, 20);

// new

// wait.until(ExpectedConditions.numberOfWindowsToBe(2));

// -ve testing

wait.until(ExpectedConditions.numberOfWindowsToBe(3));

// org.openqa.selenium.TimeoutException: Expected condition failed: waiting for number of open windows to be 3 (tried for 20 second(s) with 500 milliseconds interval)

// max 20 sec -- TimeoutException

Set<String> allWindows= driver.getWindowHandles();

System.out.println("Cnt="+allWindows.size());// 2

Iterator<String> it =allWindows.iterator();

String MainWindowAddr= it.next();

String Window2Addr= it.next();

driver.switchTo().window(Window2Addr);

System.out.println("browser1 ttile="+driver.getTitle());

driver.switchTo().window(MainWindowAddr);

System.out.println("Main window ttile="+driver.getTitle());

System.out.println("end ");

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package JavaScriptExecutorBasics;

import org.openqa.selenium.By;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.interactions.Actions;

public class JavaScriptExecutorBasics1 {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// JAvascriptExecutor - Interafce in selenium

// has some methods-- can be used to execute jscript code in browser

// Can we create obj for interface ? --No

JavascriptExecutor js= ((JavascriptExecutor)driver);

/// bascis : alert("Hi ram");

js.executeScript("alert(\"Hi ram\");");

}

}

package JavaScriptExecutorBasics;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class Browser {

public static void main(String[] args) {

// TODO Auto-generated method stub

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// get title

JavascriptExecutor js = (JavascriptExecutor) driver;

Object ttile= js.executeScript("return document.title;");

System.out.println("ttile="+ttile);

// ttile=All webobjects MyTitle Sumanth

// String mytitle= js.executeScript("return document.title;");

// Type mismatch: cannot convert from Object to String

String mytitle= js.executeScript("return document.title;").toString();

System.out.println("mytitle="+mytitle);

System.out.println("ttile="+ttile);

// HW : get url using JS

}

}

// HW : text box

document.getElementById("idfirst").value="Brahma";

document.getElementById("idfirst").value;

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Text box handling using JS:

//------------------------

to clear val in text box

document.getElementById("idfirst").value="";

package JavaScriptExecutorBasics;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class TextboxUSingJS {

public static void main(String[] args) {

// TODO Auto-generated method stub

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// clear val from text box

JavascriptExecutor js = (JavascriptExecutor) driver;

js.executeScript("document.getElementById(\"idfirst\").value=\"\";");

// get class val for first name textbox

//document.getElementById("idfirst").getAttribute("class");

Object ClassAttrVal= js.executeScript("return document.getElementById(\"idfirst\").getAttribute(\"class\");");

System.out.println("ClassAttrVal="+ClassAttrVal);

// firstclass

// if attribute is not exist for element, it returns 'null'

ClassAttrVal= js.executeScript("return document.getElementById(\"idfirst\").getAttribute(\"href\");");

System.out.println("ClassAttrVal="+ClassAttrVal);// null

}

}

package JavaScriptExecutorBasics;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class CheckboxUsingJS {

public static void main(String[] args) {

// TODO Auto-generated method stub

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

JavascriptExecutor js = (JavascriptExecutor)driver;

// click check box

// way 1

js.executeScript("document.getElementById(\"bikeid\").click();");

// selected or not

// Object Checked= js.executeScript("return document.getElementById(\"bike\").checked;");//

// if ele is not found by locator, throws JavaScriptException

Object Checked= js.executeScript("return document.getElementById(\"bikeid\").checked;");

System.out.println("Checked true="+Checked);// true

// unselect check box

js.executeScript("document.getElementById(\"bikeid\").click();");

Checked= js.executeScript("return document.getElementById(\"bikeid\").checked;");

System.out.println("Checked false="+Checked);// false

// way 2:to click check box - checked=true;

js.executeScript("document.getElementById(\"bikeid\").checked=true;");

Checked= js.executeScript("return document.getElementById(\"bikeid\").checked;");

System.out.println("Checked true="+Checked);// true

// un sleect

js.executeScript("document.getElementById(\"bikeid\").checked=false;");

Checked= js.executeScript("return document.getElementById(\"bikeid\").checked;");

System.out.println("Checked false="+Checked);

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// getElementsByName() -- do not have getElementByName()

js.executeScript("document.getElementsByName(\"bike\")[1].checked=true;");

//

Checked= js.executeScript("return document.getElementsByName(\"bike\")[1].checked;");

System.out.println("Checked true ="+Checked);

//

// boolean schecked=(boolean) js.executeScript("return document.getElementsByName(\"bike\")[1].checked");

String schecked= js.executeScript("return document.getElementsByName(\"bike\")[1].checked").toString();

System.out.println("schecked="+schecked);

// document.getElementsByName("bike")[1].checked=false;

// false

// HW :un select chk box - usig checked -false

}

}

package JavaScriptExecutorBasics;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class RadioBtnUsingJS {

public static void main(String[] args) {

// TODO Auto-generated method stub

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//HW Select male radio btn

// document.getElementById("maleid").click();

// document.getElementById("maleid").checked=true;

// document.getElementById("maleid").checked=false;

// HW get status

// document.getElementById("maleid").checked;

// true

// document.getElementById("femaleid").checked;

// false

// HW select female radio btn

// HW : get status

}

}

-------------------------

package JavaScriptExecutorBasics;

import java.util.List;

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.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

import org.openqa.selenium.support.ui.Select;

public class Dropdown1 {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V94\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// select any val from dropdpwn

WebElement CarsDropdpwnEle= driver.findElement(By.xpath("//select[@name='cars']"));

//document.getElementById("bikesid").selectedIndex="1";

// ????????????????

//document.getElementById("bikesid").selectedIndex;

// Hw: Select by viisble text usin JS ????

//HW get sleectd val from dropdown ?????? ??

System.out.println("ends");

}

}

button:

HW :: clck button

---------------------

scroll window

window.scrollBy(0,20); // vertial scrolling

window.scrollBy(10,0); // horizontal scroll

document.getElementsByName("uploadname");

NodeList [input]0: inputlength: 1[[Prototype]]: NodeList

document.getElementsByName("uploadname").scrollIntoView();

VM2907:1 Uncaught TypeError: document.getElementsByName(...).scrollIntoView is not a function

at <anonymous>:1:42

(anonymous) @ VM2907:1

document.getElementsByName("uploadname")[0].scrollIntoView();

undefined

document.getElementsByName("uploadname")[0].scrollIntoView();

undefined

HW: do all above

--------------------

set style:

document.getElementById("idfirst").setAttribute("style","background:yellow");

undefined

document.getElementById("idfirst").setAttribute("style","background:gree");

undefined

HW:

document.getElementById("idfirst").setAttribute("style","border:5px solid red");

undefined

document.getElementById("idfirst").setAttribute("style","border:10px solid red");

HW:

FAQ: hight light object using background color:

document.getElementById("idfirst").setAttribute("style","background:yellow;border:10px solid red");

HW:

executeScript with 2 args:

js.executeScript("arguemnts[0].value="ramu";", webele);

package JavaScriptExecutorBasics;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class TextboxUSingJS {

public static void main(String[] args) {

// TODO Auto-generated method stub

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// clear val from text box

JavascriptExecutor js = (JavascriptExecutor) driver;

js.executeScript("document.getElementById(\"idfirst\").value=\"\";");

// get class val for first name textbox

//document.getElementById("idfirst").getAttribute("class");

Object ClassAttrVal= js.executeScript("return document.getElementById(\"idfirst\").getAttribute(\"class\");");

System.out.println("ClassAttrVal="+ClassAttrVal);

// firstclass

// if attribute is not exist for element, it returns 'null'

ClassAttrVal= js.executeScript("return document.getElementById(\"idfirst\").getAttribute(\"href\");");

System.out.println("ClassAttrVal="+ClassAttrVal);// null

// with 2 args

// syntax: js.executeScript("js code", ele);

WebElement firstNAme =driver.findElement(By.id("idfirst"));

// js.executeScript("document.getElementById(\"idfirst\").value=\"Ramu NEw\";", firstNAme);

// ok we dont prefer why should we idetify 2 elem id = idifrst

//

js.executeScript("arguments[0].value=\"Ramu Test2\";", firstNAme);

// try arguments[0] ;; dont use arguments[1]

// js.executeScript("arguments[1].value=\"Ramu Test3 Li 2\";", firstNAme);

//Exception in thread "main" org.openqa.selenium.JavascriptException: javascript error: Cannot set properties of undefined (setting 'value')

// List<WebElement> li= driver.findElements(By.id("idifrst"));

// js.executeScript("arguments[0].value=\"Ramu Test Li1\";", li);

// js.executeScript("arguments[1].value=\"Ramu Test3 Li 2\";", li);

//Exception in thread "main" org.openqa.selenium.JavascriptException: javascript error: Cannot set properties of undefined (setting 'value')

}

}

// Check box use JS with 2 args

//Radio btn use JS with 2 args

// set style : background:yellow;border: 10ox solid red with 2 args :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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JS - handle disabled elemenst and also hidden elemenst

package JavaScriptExecutorPractise;

import org.openqa.selenium.By;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

public class DisabledEle {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/disabled.html");

// driver.findElement(By.name("firstname")).sendKeys("Raju");

//ElementNotInteractableException: element not interactable, if ele is disabled/ hidden

WebElement firstname= driver.findElement(By.name("firstname"));

JavascriptExecutor js = (JavascriptExecutor)driver;

js.executeScript("arguments[0].value='raju';", firstname);

}

}

--------------------------

package JavaScriptExecutorPractise;

import org.openqa.selenium.Alert;

import org.openqa.selenium.By;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.events.internal.EventFiringTouch;

public class HiddenElement {

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

// 1. open chrome browser //set property

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/hidden.html");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// document.getElementById("displayed-text").value="Ram";

// driver.findElement(By.id("displayed-text")).sendKeys("Raju");

// ElementNotInteractableException: element not interactable, if ele is not visisble

WebElement textbox= driver.findElement(By.id("displayed-text"));

JavascriptExecutor js = (JavascriptExecutor) driver;

js.executeScript("arguments[0].value='Raju';", textbox);

driver.findElement(By.id("show-textbox")).click();

String val= textbox.getAttribute("value");

System.out.println("val="+val);//val=Raju

System.out.println("end ");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

}

}

Revision:

if u click disable -- Eele not interactable

hidden -- """

// check with out sroll enter data

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TakeScreenShotinSelenium :

if tc fail --

package AllWebElemens;

import java.io.File;

import java.io.IOException;

import org.apache.commons.io.FileUtils;

import org.openqa.selenium.By;

import org.openqa.selenium.OutputType;

import org.openqa.selenium.TakesScreenshot;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

package AllWebElemens;

import java.io.File;

import java.io.IOException;

import org.apache.commons.io.FileUtils;

import org.openqa.selenium.By;

import org.openqa.selenium.OutputType;

import org.openqa.selenium.TakesScreenshot;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class TakesScreenShotInterface {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// FAq how can u take screen shot of page ?

// TakesScreenshot : Interface in selenium

// has some methdo --

File srcFile =((TakesScreenshot)driver).getScreenshotAs(OutputType.FILE);

//File =C:\Users\brahma\AppData\Local\Temp\screenshot8750837803639605185.png

System.out.println("File ="+srcFile);

// down oad commons-io-2.7 and add to project

File destFile= new File("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiSeleniumBasics\\src\\AllWebElemens\\Myscreenshot.png");

FileUtils.copyFile(srcFile,destFile);

// FileUtils.copyFile(srcFile,new File("D:screen.png"));

}

}

// get proj folder path

String userDir= System.getProperty("user.dir");

System.out.println("userDir="+userDir);

String userName= System.getProperty("user.name");

System.out.println("userName="+userName);

// userDir=D:\Practise\FrameWorkDeisgnsPractiseWorkSpace\SasiSeleniumBasics

// userName=brahma

userName= System.getProperty("username");//userName=null invalid key

System.out.println("userName="+userName);

-----------------------------------

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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File uplaod:

package FileUploading;

import java.awt.AWTException;

import java.awt.Robot;

import java.awt.Toolkit;

import java.awt.datatransfer.StringSelection;

import java.awt.event.KeyEvent;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class SimpleFileUploading {

public static void uploadFileUsingRobotClass(String fileName) throws AWTException

{

//put path to your image in a clipboard

StringSelection ss = new StringSelection(fileName);

Toolkit.getDefaultToolkit().getSystemClipboard().setContents(ss, null);

//imitate mouse events like ENTER, CTRL+C, CTRL+V

Robot robot = new Robot();

robot.delay(250);

robot.keyPress(KeyEvent.VK\_ENTER);

robot.keyRelease(KeyEvent.VK\_ENTER);

robot.keyPress(KeyEvent.VK\_CONTROL);

robot.keyPress(KeyEvent.VK\_V);

robot.keyRelease(KeyEvent.VK\_V);

robot.keyRelease(KeyEvent.VK\_CONTROL);

robot.keyPress(KeyEvent.VK\_ENTER);

robot.delay(90);

robot.keyRelease(KeyEvent.VK\_ENTER);

}

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// 1. file uplaoding

// driver.findElement(By.name("uploadname")).sendKeys("D:\\Practise\\TestFile.txt");

// 2. using Robot -- through keyboard

driver.findElement(By.id("fileid")).click();

Thread.sleep(2000);

uploadFileUsingRobotClass("D:\\Practise\\TestFile.txt");

}

}

2. Robot

FAQ: how can u handle windows based popup windows ?

3. Auto IT s/w -- we can automate windows based popup window

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Maven :

Pre Req: Java must be onstalled

add env vars JAVA\_HOME= C:\Program Files\Java\jdk1.8.0 (JDK Path)

Maven : down load zip file --> unzip

add env vars: MAVEN\_HOME = D:\SeleniumSoftwares\JarFilesJul2019\Maven36 (Maven Path)

Refer belwo :

https://mkyong.com/maven/how-to-install-maven-in-windows/

What : Maven is build mngment tool --

so far selenium jar, Coomonns -io .jar file --added manually

in run time we can download all jar files and add to the project

Create Maven Proj:

default it created pom.xml file

Maven PRoj strcuture:

src/main/java -- Pages , utilties

src/test/java -- test cases

src/main/resources

src/test/resources -- Cofig.props, Teesdata, Drivers

target

pom.xml

<groupId>com.hcl</groupId> -- represents ORG name

<artifactId>SasiMavenProject</artifactId> -- represents Projct name

Dependecny files:

Selenium . jar file

commons io -

HW: add commons-io- jar file on POM.xml

check : C:\Users\brahma\.m2\repository --- deafult location all jar fiels from POM.xml

Check selenium jar files added to proj : go to proj > Maven dependencies folder> expand it > selenium 4.10 version

So far main () -- execute program

Note :

We can execute test case thru xml file

--------------------------

POM: PAge Object Model

Each Page - I will create separate class

ex:

Login Page -- loginPage class -- define elements with locators

ex: user name, pwd , loginbtn

HomePage -- HomePage class

Employee Page --- Employee class

package AllPages;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

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

public class LoginPage

{

public WebDriver driver;

// 1. define elemnsts with locatos

@FindBy(name="txtUsername")

public WebElement username\_Textboox;

@FindBy(id="txtPassword")

public WebElement pwd\_Textboox;

@FindBy(xpath="//input[@name='Submit']")

public WebElement loginBtn;

@FindBy(id="welcome")

public WebElement WelcomeMsg;

//2 intilaise element // constr

public LoginPage(WebDriver driver)

{

PageFactory.initElements(driver, this);

// PageFactory.initElements(driver, LoginPage.class);

}

//3 .. use all elemsnt in methods

public void enter\_userName(String user)

{

// driver.findElement(null).sendKeys("");// dont neeed to write driver.findEleemnt()

System.out.println("enter\_userName ="+user);

System.out.println("driver="+driver + ",username\_Textboox="+username\_Textboox);

// driver=null,username\_Textboox=null

username\_Textboox.sendKeys(user);

// Exception in thread "main" java.lang.NullPointerException: Cannot invoke "org.openqa.selenium.WebElement.sendKeys(java.lang.CharSequence[])"

//because "this.username\_Textboox" is null

}

public void enter\_password(String pwd)

{

System.out.println("enter\_password ="+pwd);

pwd\_Textboox.sendKeys(pwd);

}

public void click\_Login()

{

System.out.println("click\_Login");

loginBtn.click();

// WebDriverWait wait = new webdri

if(WelcomeMsg.isDisplayed()) // no such ele

{

System.out.println("Login is successfull");

}

else

{

System.out.println("Login is not successfull");

}

}

}

package AllTestCases;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import AllPages.LoginPage;

public class LoginTC01 {

public static void main(String[] args) {

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver1 = new ChromeDriver();// open chrome browser

driver1.get("https://opensource-demo.orangehrmlive.com/");

// enter user

LoginPage loginPage= new LoginPage(driver1);

loginPage.enter\_userName("Admin");

// enter pwd

loginPage.enter\_password("admin123");

// lcick login

loginPage.click\_Login();

}

}

package AllPages;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

public class HomePage {

public WebDriver driver;

// 1 Define elemenst

@FindBy(xpath="//\*[@id=\"menu\_admin\_viewAdminModule\"]")

public WebElement admin\_Tab;

@FindBy(css ="#menu\_admin\_UserManagement")

public WebElement UserManagementLink;

@FindBy(id ="menu\_admin\_viewSystemUsers")

public WebElement usersList;

@FindBy(id="searchSystemUser\_userName")

public WebElement UsernameSearchboxEle;

//2 initiall all lee -- const

public HomePage(WebDriver driver1)

{

PageFactory.initElements(driver1, this);

this.driver=driver1;

}

//3 use all those eleents in methods

public void mouse\_Over\_AdminTab()

{

System.out.println("mouse\_Over\_AdminTab");

System.out.println("driver ="+driver);

Actions act = new Actions(driver);

act.moveToElement(admin\_Tab).perform();

act.moveToElement(UserManagementLink).perform();

usersList.click();

if(UsernameSearchboxEle.isDisplayed())

{

System.out.println("User page is displayed");

}

else

{

System.out.println("Users page is not displayed");

}

}

}

package AllTestCases;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import AllPages.HomePage;

import AllPages.LoginPage;

public class HomePageNavigationTC02 {

public static void main(String[] args) {

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver1 = new ChromeDriver();// open chrome browser

driver1.get("https://opensource-demo.orangehrmlive.com/");

// enter user

LoginPage loginPage= new LoginPage(driver1);

loginPage.enter\_userName("Admin");

// enter pwd

loginPage.enter\_password("admin123");

// lcick login

loginPage.click\_Login();

//\*\*\*\*\*\*\*\*\*\*\*

HomePage homePage = new HomePage(driver1);

homePage.mouse\_Over\_AdminTab();

}

}

package AllTestCases;

import org.openqa.selenium.WebDriver;

public class A {

static int i;// 0 // instance var

float salary; // 0.0

String ename; // null

public WebDriver driver; // null

public boolean isEmpExist; // false

public static void main(String[] args) {

A aobj= new A();

System.out.println("i="+i);

System.out.println("saley= "+aobj.salary);

System.out.println("ename= "+aobj.ename);

System.out.println("driver= "+aobj.driver);

System.out.println("isEmpExist= "+aobj.isEmpExist);

int b;// local var must be initialsed

// System.out.println("b="+b);//isEmpExist= false

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 18 2021 2PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

create new user method:

package AllPages;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

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

import org.openqa.selenium.support.ui.Select;

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

public class HomePage {

public WebDriver driver;

// 1 Define elemenst

@FindBy(xpath="//\*[@id=\"menu\_admin\_viewAdminModule\"]")

public WebElement admin\_Tab;

@FindBy(css ="#menu\_admin\_UserManagement")

public WebElement UserManagementLink;

@FindBy(id ="menu\_admin\_viewSystemUsers")

public WebElement usersList;

@FindBy(id="searchSystemUser\_userName")

public WebElement UsernameSearchboxEle;

@FindBy(id="btnAdd")

public WebElement AddBtn;

@FindBy(id="systemUser\_userType")

public WebElement userRole\_Dropdown;

@FindBy(id="systemUser\_employeeName\_empName")

public WebElement employeeName\_Textbox;

@FindBy(id="systemUser\_userName")

public WebElement Username\_Textbox;

@FindBy(id="systemUser\_status")

public WebElement Status\_Dropdown;

@FindBy(id="systemUser\_password")

public WebElement Password\_Textbox;

@FindBy(id="systemUser\_confirmPassword")

public WebElement ConfirmPassword\_Textbox;

@FindBy(id="btnSave")

public WebElement SaveBtn;

//2 initiall all lee -- const

public HomePage(WebDriver driver1)

{

PageFactory.initElements(driver1, this);

this.driver=driver1;

}

//3 use all those eleents in methods

public void mouse\_Over\_AdminTab()

{

System.out.println("mouse\_Over\_AdminTab");

System.out.println("driver ="+driver);

Actions act = new Actions(driver);

act.moveToElement(admin\_Tab).perform();

act.moveToElement(UserManagementLink).perform();

usersList.click();

if(UsernameSearchboxEle.isDisplayed())

{

System.out.println("User page is displayed");

}

else

{

System.out.println("Users page is not displayed");

}

}

public void create\_New\_User(String emplName,String userName)

{

System.out.println("Select user role");

Select sel = new Select(userRole\_Dropdown);

sel.selectByVisibleText("Admin");

System.out.println("enetr employee name");

employeeName\_Textbox.sendKeys(emplName);

Username\_Textbox.sendKeys(userName);

Select sel2 = new Select(Status\_Dropdown);

sel2.selectByVisibleText("Enabled");

Password\_Textbox.sendKeys(userName);

ConfirmPassword\_Textbox.sendKeys("brahma");

SaveBtn.click();

// wait for data to be visible

WebDriverWait wait = new WebDriverWait(driver, 20);

String myxpath= "//table[@id='resultTable']//td/a[text()='"+ userName +"']";

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath(myxpath)));

System.out.println("Verify user is exist in table or not");

if(driver.findElement(By.xpath(myxpath)).isDisplayed())

{

System.out.println("User created ");

}

else

{

System.out.println("User is not created ");

}

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package Utilities;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class TestBase {

// Browser common/ generic methods

public static WebDriver openBrowser()

{

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("https://opensource-demo.orangehrmlive.com/");

return driver;

}

// textbox : enter, clear, getval from

// eX: enter\_Val\_InTextbox(), get\_Val\_From\_Textbox()

// button

// checkbox

// sleect dropdown val

//

}

package AllPages;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

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

public class LoginPage

{

public WebDriver driver;

// 1. define elemnsts with locatos

@FindBy(name="txtUsername")

public WebElement username\_Textboox;

@FindBy(id="txtPassword")

public WebElement pwd\_Textboox;

@FindBy(xpath="//input[@name='Submit']")

public WebElement loginBtn;

@FindBy(id="welcome")

public WebElement WelcomeMsg;

//2 intilaise element // constr

public LoginPage(WebDriver driver)

{

PageFactory.initElements(driver, this);

// PageFactory.initElements(driver, LoginPage.class);

}

//3 .. use all elemsnt in methods

public void enter\_userName(String user)

{

// driver.findElement(null).sendKeys("");// dont neeed to write driver.findEleemnt()

System.out.println("enter\_userName ="+user);

System.out.println("driver="+driver + ",username\_Textboox="+username\_Textboox);

// driver=null,username\_Textboox=null

username\_Textboox.sendKeys(user);

// Exception in thread "main" java.lang.NullPointerException: Cannot invoke "org.openqa.selenium.WebElement.sendKeys(java.lang.CharSequence[])"

//because "this.username\_Textboox" is null

}

public void enter\_password(String pwd)

{

System.out.println("enter\_password ="+pwd);

pwd\_Textboox.sendKeys(pwd);

}

public void click\_Login()

{

System.out.println("click\_Login");

loginBtn.click();

}

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Method Name : LogintoOrangeHRMSAppl

// Arguments :

// Return Type : void

// Author : Brahma

//

// Modfied Date :

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

public void logintoOrangeHRMSAppl(String user,String pwd)

{

enter\_userName(user);

enter\_password(pwd);

click\_Login();

// WebDriverWait wait = new webdri

if(WelcomeMsg.isDisplayed()) // no such ele

{

System.out.println("Login is successfull");

}

else

{

System.out.println("Login is not successfull");

}

}

}

package AllPages;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

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

import org.openqa.selenium.support.ui.Select;

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

public class HomePage {

public static WebDriver driver;

// 1 Define elemenst

@FindBy(xpath="//\*[@id=\"menu\_admin\_viewAdminModule\"]")

public WebElement admin\_Tab;

@FindBy(css ="#menu\_admin\_UserManagement")

public WebElement UserManagementLink;

@FindBy(id ="menu\_admin\_viewSystemUsers")

public WebElement usersList;

@FindBy(id="searchSystemUser\_userName")

public WebElement UsernameSearchboxEle;

@FindBy(id="btnAdd")

public WebElement AddBtn;

@FindBy(id="systemUser\_userType")

public WebElement userRole\_Dropdown;

@FindBy(id="systemUser\_employeeName\_empName")

public WebElement employeeName\_Textbox;

@FindBy(id="systemUser\_userName")

public WebElement Username\_Textbox;

@FindBy(id="systemUser\_status")

public WebElement Status\_Dropdown;

@FindBy(id="systemUser\_password")

public WebElement Password\_Textbox;

@FindBy(id="systemUser\_confirmPassword")

public WebElement ConfirmPassword\_Textbox;

@FindBy(id="btnSave")

public WebElement SaveBtn;

@FindBy(id="btnDelete")

public WebElement deleteBtn;

@FindBy(id="dialogDeleteBtn")

public WebElement OKBtnDeleteRecords;

//2 initiall all lee -- const

public HomePage(WebDriver driver1)

{

PageFactory.initElements(driver1, this);

this.driver=driver1;

}

//3 use all those eleents in methods

public void mouse\_Over\_AdminTab()

{

System.out.println("mouse\_Over\_AdminTab");

System.out.println("driver ="+driver);

Actions act = new Actions(driver);

act.moveToElement(admin\_Tab).perform();

act.moveToElement(UserManagementLink).perform();

usersList.click();

if(UsernameSearchboxEle.isDisplayed())

{

System.out.println("User page is displayed");

}

else

{

System.out.println("Users page is not displayed");

}

}

public void create\_New\_User(String emplName,String userName) throws InterruptedException

{

System.out.println("Click add bnt");

AddBtn.click();

System.out.println("Select user role");

Select sel = new Select(userRole\_Dropdown);

sel.selectByVisibleText("Admin");

System.out.println("enetr employee name");

employeeName\_Textbox.sendKeys(emplName);

Username\_Textbox.sendKeys(userName);

Select sel2 = new Select(Status\_Dropdown);

sel2.selectByVisibleText("Enabled");

Password\_Textbox.sendKeys(userName+"@123321");

ConfirmPassword\_Textbox.sendKeys(userName+"@123321");

Thread.sleep(3000);

//SaveBtn.click();

Actions act = new Actions(driver);

act.click(SaveBtn).perform();

// wait for data to be visible

WebDriverWait wait = new WebDriverWait(driver, 20);

String myxpath= "//table[@id='resultTable']//td/a[text()='"+ userName +"']";

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath(myxpath)));

System.out.println("Verify user is exist in table or not");

if(driver.findElement(By.xpath(myxpath)).isDisplayed())

{

System.out.println("User=" + userName+ " created ");

}

else

{

System.out.println("User=" + userName+ " is not created ");

}

}

public void delete\_User(String user)

{

String myxpath ="//table[@id='resultTable']//td/a[text()='" + user +"']/../preceding-sibling::td/input";

driver.findElement(By.xpath(myxpath)).click();

deleteBtn.click();

OKBtnDeleteRecords.click();

// Successfully Deleted

// verify user is delete or not

String userXpath= "//table[@id='resultTable']//td/a[text()='"+ user +"']";

// if(driver.findElement(By.xpath(userXpath)).isDisplayed()) // exeption

// {

// System.out.println("Fail.User=" + user+ " is exist in table ");

// }

// else

// {

// System.out.println("Pass.User=" + user+ " is not exist in table ");

// }

// try

// {

// driver.findElement(By.xpath(userXpath)).isDisplayed();

// System.out.println("Fail.User=" + user+ " is exist in table ");

//

// }

// catch (Exception e) {

// System.out.println("Pass.User=" + user+ " is not exist in table ");

// }

// using cnt

int cnt= driver.findElements(By.xpath(userXpath)).size();// 0 or 1

if(cnt ==0 )

{

System.out.println("Pass.User=" + user+ " is not exist in table ");

}

else

{

System.out.println("Fail.User=" + user+ " is exist in table ");

}

}

// HW: is\_User\_Exist\_UseraTable()

// Hw1: is\_User\_Not\_Exist\_UseraTable()

}

package AllTestCases;

import org.openqa.selenium.WebDriver;

import AllPages.HomePage;

import AllPages.LoginPage;

import Utilities.TestBase;

public class DeleteUserTC04 {

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

//1 open browser

TestBase tb= new TestBase();

WebDriver driver= tb.openBrowser();

// login to appl

LoginPage loginPage = new LoginPage(driver);

loginPage.logintoOrangeHRMSAppl("Admin", "admin123");

// open user page

HomePage homePage= new HomePage(driver);

homePage.mouse\_Over\_AdminTab();

// deleet user

homePage.delete\_User("dilshadsup");

}

}

package AllPages;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

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

import org.openqa.selenium.support.ui.Select;

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

public class HomePage {

public static WebDriver driver;

// 1 Define elemenst

@FindBy(xpath="//\*[@id=\"menu\_admin\_viewAdminModule\"]")

public WebElement admin\_Tab;

@FindBy(css ="#menu\_admin\_UserManagement")

public WebElement UserManagementLink;

@FindBy(id ="menu\_admin\_viewSystemUsers")

public WebElement usersList;

@FindBy(id="searchSystemUser\_userName")

public WebElement UsernameSearchboxEle;

@FindBy(id="btnAdd")

public WebElement AddBtn;

@FindBy(id="systemUser\_userType")

public WebElement userRole\_Dropdown;

@FindBy(id="systemUser\_employeeName\_empName")

public WebElement employeeName\_Textbox;

@FindBy(id="systemUser\_userName")

public WebElement Username\_Textbox;

@FindBy(id="systemUser\_status")

public WebElement Status\_Dropdown;

@FindBy(id="systemUser\_password")

public WebElement Password\_Textbox;

@FindBy(id="systemUser\_confirmPassword")

public WebElement ConfirmPassword\_Textbox;

@FindBy(id="btnSave")

public WebElement SaveBtn;

@FindBy(id="btnDelete")

public WebElement deleteBtn;

@FindBy(id="dialogDeleteBtn")

public WebElement OKBtnDeleteRecords;

//2 initiall all lee -- const

public HomePage(WebDriver driver1)

{

PageFactory.initElements(driver1, this);

this.driver=driver1;

}

//3 use all those eleents in methods

public void mouse\_Over\_AdminTab()

{

System.out.println("mouse\_Over\_AdminTab");

System.out.println("driver ="+driver);

Actions act = new Actions(driver);

act.moveToElement(admin\_Tab).perform();

act.moveToElement(UserManagementLink).perform();

usersList.click();

if(UsernameSearchboxEle.isDisplayed())

{

System.out.println("User page is displayed");

}

else

{

System.out.println("Users page is not displayed");

}

}

public void create\_New\_User(String emplName,String userName) throws InterruptedException

{

System.out.println("Click add bnt");

AddBtn.click();

System.out.println("Select user role");

Select sel = new Select(userRole\_Dropdown);

sel.selectByVisibleText("Admin");

System.out.println("enetr employee name");

employeeName\_Textbox.sendKeys(emplName);

Username\_Textbox.sendKeys(userName);

Select sel2 = new Select(Status\_Dropdown);

sel2.selectByVisibleText("Enabled");

Password\_Textbox.sendKeys(userName+"@123321");

ConfirmPassword\_Textbox.sendKeys(userName+"@123321");

Thread.sleep(3000);

//SaveBtn.click();

Actions act = new Actions(driver);

act.click(SaveBtn).perform();

// wait for data to be visible

WebDriverWait wait = new WebDriverWait(driver, 20);

String myxpath= "//table[@id='resultTable']//td/a[text()='"+ userName +"']";

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath(myxpath)));

System.out.println("Verify user is exist in table or not");

if(driver.findElement(By.xpath(myxpath)).isDisplayed())

{

System.out.println("User=" + userName+ " created ");

}

else

{

System.out.println("User=" + userName+ " is not created ");

}

}

public void delete\_User(String user)

{

String myxpath ="//table[@id='resultTable']//td/a[text()='" + user +"']/../preceding-sibling::td/input";

driver.findElement(By.xpath(myxpath)).click();

deleteBtn.click();

OKBtnDeleteRecords.click();

// Successfully Deleted

// verify user is delete or not

String userXpath= "//table[@id='resultTable']//td/a[text()='"+ user +"']";

// if(driver.findElement(By.xpath(userXpath)).isDisplayed()) // exeption

// {

// System.out.println("Fail.User=" + user+ " is exist in table ");

// }

// else

// {

// System.out.println("Pass.User=" + user+ " is not exist in table ");

// }

// try

// {

// driver.findElement(By.xpath(userXpath)).isDisplayed();

// System.out.println("Fail.User=" + user+ " is exist in table ");

//

// }

// catch (Exception e) {

// System.out.println("Pass.User=" + user+ " is not exist in table ");

// }

// using cnt

int cnt= driver.findElements(By.xpath(userXpath)).size();// 0 or 1

if(cnt ==0 )

{

System.out.println("Pass.User=" + user+ " is not exist in table ");

}

else

{

System.out.println("Fail.User=" + user+ " is exist in table ");

}

}

// HW: is\_User\_Exist\_UseraTable()

// Hw1: is\_User\_Not\_Exist\_UseraTable()

// HW: Search

public void search\_Valid\_User()

{

}

// HW:

public void search\_InValid\_User()

{

}

// HW : add job ttile

public void createNewJobTitle()

{

}

// Hw: open given job

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 20 2021 10:30 PM

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FluentWaitPractise1

: web drive wai t

package SynchronisationBasics;

import java.time.Duration;

import java.util.NoSuchElementException;

import org.openqa.selenium.Alert;

import org.openqa.selenium.By;

import org.openqa.selenium.NoAlertPresentException;

import org.openqa.selenium.TimeoutException;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

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

import org.openqa.selenium.support.ui.FluentWait;

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

public class WebDriverWaitBasics1 {

public static void main(String[] args) {

// explicit wait : waiting for some eleme and with specific condition

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

// open url in browser

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/AlertDisplayafterSomeTime.html");

// click btn

// driver.findElement(By.xpath("//input[@type='button']")).click();

// wait for alert for max time 20 sec

// explicit time out can be handled by using 2 classes

// 1.WebDriverWait

// 2. FluentWait<T>

// WebDriverWait wait = new WebDriverWait(driver, 10);// suppose if alet takes 5 sec

// WebDriverWait wait = new WebDriverWait(driver, 4);

// wait.until(ExpectedConditions.alertIsPresent());

// if alert is present with in 5 sec, it goes to next stmt,

// if alert is not presetn after waiting for given time out = 10 sec, throws TimeoutException

// TimeoutException: Expected condition failed: waiting for alert to be present (tried for 4 second(s) with 500 milliseconds interval)

// Fluentwait

// Each FluentWait instance defines the maximum amount of time to wait for a condition, as well as the frequency with which to check the condition. Furthermore, the user may configure the wait to ignore specific types of exceptions whilst waiting, such as NoSuchElementExceptions when searching for an element on the page.

FluentWait<WebDriver> wait= new FluentWait<WebDriver>(driver);

wait.withTimeout(Duration.ofSeconds(3))

.pollingEvery(Duration.ofSeconds(3))

.ignoring(NoAlertPresentException.class)

.until(ExpectedConditions.alertIsPresent());

// Note: .ignoring(TimeoutException.class) -- it does not ignore timeoutExceptiuon

// TimeoutException: Expected condition failed: waiting for alert to be present (tried for 3 second(s) with 3000 milliseconds interval

// handle alert

Alert al = driver.switchTo().alert(); //org.openqa.selenium.NoAlertPresentException: no such alert

System.out.println("get text from alert popup="+ al.getText());

al.accept();

// Examples: diff consditiosn

// // wait for title

// wait.until(ExpectedConditions.titleContains("actiTIME - Login"));

// wait.until(ExpectedConditions.titleIs("actiTIME - Login"));

//

//

// // wwait for last name to be visible

// wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("//input[@name='username']")));

//

// // wait for elem to disappera invisible

// wait.until(ExpectedConditions.invisibilityOfElementLocated(By.xpath("//input[@name='username']")));

//

// // wait for ele to ble clickable

// wait.until(ExpectedConditions.elementToBeClickable(By.xpath("//input[@name='username']")));

//

// //wait for text to be presnt ele

// wait.until(ExpectedConditions.textToBePresentInElementLocated(By.xpath("//td[@id='headerContainer']"), "Please identify yourself"));

System.out.println("ends ");

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

FAQ: Diff b/w webdriverWait and FluentWait()?

WebDriverWait wait = new WebDriverWait(driver, 4);

// wait.until(ExpectedConditions.alertIsPresent());

FluentWait<WebDriver> wait= new FluentWait<WebDriver>(driver);

wait.withTimeout(Duration.ofSeconds(3))

.pollingEvery(Duration.ofSeconds(3))

.ignoring(NoAlertPresentException.class)

.until(ExpectedConditions.alertIsPresent());

// Note: .ignoring(TimeoutException.class) -- it does not ignore timeoutExceptiuon

// TimeoutException: Expected condition failed: waiting for alert to be present (tried for 3 second(s) with 3000 milliseconds interval

// Fluentwait

// Each FluentWait instance defines the maximum amount of time to wait for a condition, as well as the frequency with which to check the condition.

Furthermore, the user may configure the wait to ignore specific types of exceptions whilst waiting, such as NoSuchElementExceptions when searching for an element on the page.

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TestNG:

https://testng.org/doc/documentation-main.html

package TestNGBasics;

public class TestNGAnnotations {

public static void main(String[] args) {

// if we wanto see o/p - println()

// how did we execute class-- main() run as jav appl

// html reports

// 2, 3 claasses -

// Dont use main() ---- how testng annoatations:

// Why:

// Testng: is next generation testing frame work.

// execujte 1 class 2 claases , 3 -- groupf of classes

// execute whole packge

// execute tests based on priority 0,1, 2

// tests based on Group name ex: smoke, Regression

// send user defined msgs in reports

// we can see diff types of reports

// installation : HW

// 1. Annottaions: decides what test method has to be executes first

// define annoations:

}

}

package TestNGBasics;

import org.testng.annotations.Test;

public class TestAnnotationBasics1 {

// don need main()

@Test // Test annoation method or test method

// Note : if we have 2 @Test anonations, it run test methods based on alphbetcical order

public void testA() // method

{

System.out.println("in testA ");

}

// [RemoteTestNG] detected TestNG version 7.0.0

// in testA

// PASSED: testA

//

// ===============================================

// Default test

// Tests run: 1, Failures: 0, Skips: 0

// ===============================================

//

//

// ===============================================

// Default suite

// Total tests run: 1, Passes: 1, Failures: 0, Skips: 0

// ===============================================

}

package TestNGBasics;

import org.testng.annotations.Test;

public class TestAnnotationBasics2 {

// don need main()

@Test // Test annoation method or test method

public void testA() // method

{

System.out.println("in testA ");

}

@Test

public void testB()

{

System.out.println("in testB");

}

// in testA

// PASSED: testA

//

// ===============================================

// Default test

// Tests run: 1, Failures: 0, Skips: 0

// ===============================================

//

//

// ===============================================

// Default suite

// Total tests run: 1, Passes: 1, Failures: 0, Skips: 0

}

package TestNGBasics;

import org.testng.annotations.Test;

public class TestAnnotationWithPriorityBasics1 {

// execte test methods based on priorit

// first it executes prioerty-0

// next =1....

@Test(priority = 1)

public void testA() // method

{

System.out.println("in testA ");

}

@Test(priority = 0)

public void testB()

{

System.out.println("in testB");

}

//

// [RemoteTestNG] detected TestNG version 7.0.0

// in testB

// in testA

// PASSED: testB

// PASSED: testA

//

// ===============================================

// Default test

// Tests run: 2, Failures: 0, Skips: 0

// ===============================================

//

//

// ===============================================

// Default suite

// Total tests run: 2, Passes: 2, Failures: 0, Skips: 0

// ===============================================

}

package TestNGBasics;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeTest;

import org.testng.annotations.Test;

public class BeforeTestTestAnnotationBasics1 {

@BeforeTest // method gets executed only once just before executing @Test method

public void beforeTestA()

{

System.out.println("in beforeTestA");

}

@Test

public void testA() // method

{

System.out.println("in testA ");

}

@Test

public void testB()

{

System.out.println("in testB");

}

@AfterTest // only once

public void afterTest()

{

System.out.println("gets excutes only once after Executing test nethd");

}

// [RemoteTestNG] detected TestNG version 7.0.0

// in beforeTestA

// in testA

// in testB

// gets excutes only once after Executing test nethd

// PASSED: testA

// PASSED: testB

//

// ===============================================

// Default test

// Tests run: 2, Failures: 0, Skips: 0

// ===============================================

//

//

// ===============================================

// Default suite

// Total tests run: 2, Passes: 2, Failures: 0, Skips: 0

// ===============================================

}

package TestNGBasics;

import org.testng.annotations.AfterMethod;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeMethod;

import org.testng.annotations.BeforeTest;

import org.testng.annotations.Test;

public class BeforeMethodTestAnnotationBasics1 {

@BeforeMethod // method gets executed for each and every test Metohd just before executing @Test method

public void beforeMethod()

{

System.out.println("gets executed for each and every test Metohd before excuting test method");

}

@Test

public void testA() // method

{

System.out.println("in testA ");

}

@Test

public void testB()

{

System.out.println("in testB");

}

@AfterMethod // gets executed for each test method

public void afterMethod()

{

System.out.println("gets executed for each test method after executing test method");

}

// [RemoteTestNG] detected TestNG version 7.0.0

// gets executed for each and every test Metohd

// in testA

// gets executed for each test method

// gets executed for each and every test Metohd

// in testB

// gets executed for each test method

// PASSED: testA

// PASSED: testB

//

// ===============================================

// Default test

// Tests run: 2, Failures: 0, Skips: 0

// ===============================================

//

//

// ===============================================

// Default suite

// Total tests run: 2, Passes: 2, Failures: 0, Skips: 0

// ===============================================

}

@Test

with priority

@beforeTest -- only once

@AfterTest

@BeforeMethod -- for each test method

@afterMethod

FAq: Tell me some testng annotations

FAQ: diff b/w @BeforeTest and @BeforeMethod ?

------------------------------------------------------

package TestNGBasics;

import org.testng.annotations.AfterMethod;

import org.testng.annotations.AfterSuite;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeMethod;

import org.testng.annotations.BeforeSuite;

import org.testng.annotations.BeforeTest;

import org.testng.annotations.Test;

public class BeforeSuiteAnnotationBasics1 {

@BeforeSuite //only once

public void beforeSuite()

{

System.out.println("@BeforeSuite gets executed only once ");

}

@Test

public void testA() // method

{

System.out.println("in testA ");

}

@Test

public void testB()

{

System.out.println("in testB");

}

@AfterSuite

public void afterSuite()

{

System.out.println("@afterSuite gets executed only once ");

System.out.println("test\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

// [RemoteTestNG] detected TestNG version 7.0.0

// @BeforeSuite gets executed only once

// in testA

// in testB

// @afterSuite gets executed only once

// test\*\*\*\*\*\*\*\*\*\*\*\*\*

// PASSED: testA

// PASSED: testB

//

// ===============================================

// Default test

// Tests run: 2, Failures: 0, Skips: 0

// ===============================================

//

//

//

// ===============================================

// Default suite

// Total tests run: 2, Passes: 2, Failures: 0, Skips: 0

// ===============================================

}

// HW @beforeClass @After class

// Mixed :

package TestNGBasics;

import org.testng.annotations.AfterMethod;

import org.testng.annotations.AfterSuite;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeMethod;

import org.testng.annotations.BeforeSuite;

import org.testng.annotations.BeforeTest;

import org.testng.annotations.Test;

public class MixedAllAnnotationBasics1 {

@BeforeSuite

public void beforeSuite()

{

System.out.println("@BeforeSuite gets executed only once ");

}

@BeforeTest

public void beforeTest()

{

System.out.println("gets executed only once before executing test nethod");

}

@BeforeMethod

public void BeforeMethod()

{

System.out.println("gets executed for each test method before executing test nethod");

}

@Test

public void testA() // method

{

System.out.println("in testA ");

}

@Test

public void testB()

{

System.out.println("in testB");

}

@AfterTest

public void AfterTest()

{

System.out.println("gets executed only once after executing test nethod");

}

@AfterMethod

public void AfterMethod()

{

System.out.println("gets executed for each test method after executing test nethod");

}

@AfterSuite

public void afterSuite()

{

System.out.println("@afterSuite gets executed only once ");

System.out.println("test\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

// [RemoteTestNG] detected TestNG version 7.0.0

// @BeforeSuite gets executed only once -@BeforeSuite

// gets executed only once before executing test nethod -- @BeforeTest

// gets executed for each test method before executing test nethod -- @BeforeMehd

// in testA

// gets executed for each test method after executing test nethod -- AfterMethod

// gets executed for each test method before executing test nethod =--@BeforeMehd

// in testB

// gets executed for each test method after executing test nethod -AfterMethod

// gets executed only once after executing test nethod -@afterTest

// @afterSuite gets executed only once

// test\*\*\*\*\*\*\*\*\*\*\*\*\*

//

// PASSED: testA

// PASSED: testB

//

// ===============================================

// Default test

// Tests run: 2, Failures: 0, Skips: 0

// ===============================================

//

// ===============================================

// Default suite

// Total tests run: 2, Passes: 2, Failures: 0, Skips: 0

// ===============================================

}

piority of annotations :

suite > test > class

HW : @before class @After class mixed all ?

Create Testng.xml file :

select 2 or more classes > Rt clk> Convert to Testng > it generates testng.xml structure with Selected classes > Finish

> testng.xml file created in Proj level

Open testng.xml

Run Testng.xml file > Run as testng

FAQ: tell me testng xml file structure?

<suite>

<test>

<classes>

<class name= "Pk.clasanme"

</classes>

</test>

</suite>

eX:

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<test thread-count="5" name="Test">

<classes>

<class name="TestNGBasics.TestAnnotationBasics1"/>

<class name="TestNGBasics.TestAnnotationBasics2"/>

</classes>

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

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

Testng.xnl file -- used to run group of classes

Run whoole pkg:

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<test thread-count="5" name="Test">

<packages>

<package name="TestNGBasics"></package>

</packages>

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

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

HW: if we run whole pkg (3 class - each has one test Method), check order of execution?

package TestNGBasics;

import static org.testng.Assert.assertTrue;

import org.testng.annotations.Test;

public class TestAnnotationWithDepedencyBasis {

@Test

public void login() {

System.out.println("login is done");

// make fail

assertTrue(false);

}

@Test (dependsOnMethods ="login")

public void testA() // method

{

System.out.println("in testA ");

}

// SKIPPED: testA

// java.lang.Throwable: Method TestAnnotationWithDepedencyBasis.testA()[pri:0,

// instance:TestNGBasics.TestAnnotationWithDepedencyBasis@71e9ddb4]

// depends on not successfully finished methods

}

package TestNGBasics;

import static org.testng.Assert.assertTrue;

import org.testng.annotations.Test;

public class TestAnnotationWithDepedencyBasis2 {

@Test

public void login() {

System.out.println("login is done");

// make fail

assertTrue(false);

}

// alwaysRun = true -- even if test method fails- it run s current test method

@Test (dependsOnMethods ="login",alwaysRun = true)

public void testA() // method

{

System.out.println("in testA ");

}

// [RemoteTestNG] detected TestNG version 7.0.0

// login is done

// in testA

// PASSED: testA

// FAILED: login

// java.lang.AssertionError: did not expect to find [true] but found [false]

//

// ===============================================

// Default test

// Tests run: 2, Failures: 1, Skips: 0

// ===============================================

//

//

// ===============================================

// Default suite

// Total tests run: 2, Passes: 1, Failures: 1, Skips: 0

// ===============================================

}

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Enabled:

package TestNGBasics;

import static org.testng.Assert.assertTrue;

import org.testng.annotations.Test;

public class TestAnnotationWithEnabled {

@Test

public void testA()

{

System.out.println("in testA");

}

@Test(enabled = false)

public void testB()

{

System.out.println("in testB");

}

@Test(enabled =true)

public void testC()

{

System.out.println("in testC");

}

// [RemoteTestNG] detected TestNG version 7.0.0

// in testA

// in testC

// PASSED: testA

// PASSED: testC

//

// ===============================================

// Default test

// Tests run: 2, Failures: 0, Skips: 0

// ===============================================

//

//

// ===============================================

// Default suite

// Total tests run: 2, Passes: 2, Failures: 0, Skips: 0

// ===============================================

}

package TestNGBasics;

import static org.testng.Assert.assertTrue;

import org.testng.annotations.Test;

public class TestAnnotationWithTimeOut {

@Test(timeOut = 3000) // test method must be executed with in 3 sec, it it takes > 3sec, it fails test

public void creditCardpayment() throws InterruptedException

{

Thread.sleep(4000);

System.out.println("in testA");

// .ThreadTimeoutException: Method TestNGBasics.TestAnnotationWithTimeOut.testA() didn't finish within the time-out 3000

}

// ex: Credit Card payment -- in 5 sec

}

package TestNGBasics;

import static org.testng.Assert.assertTrue;

import org.testng.annotations.Test;

public class TestAnnotationWithInvocationCount {

@Test(invocationCount = 3) // it runs given test method - given no of times

public void login()

{

System.out.println("in login");

}

// [RemoteTestNG] detected TestNG version 7.0.0

// in login

// in login

// in login

// PASSED: login

// PASSED: login

// PASSED: login

//

// ===============================================

// Default test

// Tests run: 3, Failures: 0, Skips: 0

// ==============================================

//

}

package TestNGBasics;

import static org.testng.Assert.assertTrue;

import org.testng.annotations.Test;

public class TestAnnotationWithGroupsBasics1 {

@Test(groups = "Smoke" )

public void login()

{

System.out.println("in Smoke TC-1");

}

@Test(groups = "Regression" )

public void CreateOrder()

{

System.out.println("Regression -1");

}

@Test(groups = "Smoke" )

public void logout()

{

System.out.println("in Smoke test-2");

}

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<groups>

<run>

<!-- <include name="Smoke"></include> -->

<include name="Regression"></include>

</run>

</groups>

<test thread-count="5" name="Test">

<classes>

<class name="TestNGBasics.TestAnnotationWithGroupsBasics1"/>

</classes>

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

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

package TestNGBasics;

import static org.testng.Assert.assertTrue;

import org.testng.annotations.Test;

public class TestAnnotationWithGroupsBasics2 {

@Test(groups = "Smoke" )

public void login()

{

System.out.println("in Smoke -2 TC-2.2");

}

@Test(groups = "Regression" )

public void CreateOrder()

{

System.out.println("Regression2 -2.2");

}

@Test(groups = "Smoke" )

public void logout()

{

System.out.println("in Smoke test-2.2");

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<groups>

<run>

<!-- <include name="Smoke"></include> -->

<include name="Regression"></include>

</run>

</groups>

<test thread-count="5" name="Test">

<classes>

<class name="TestNGBasics.TestAnnotationWithGroupsBasics1"/>

<class name="TestNGBasics.TestAnnotationWithGroupsBasics2"/>

</classes>

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

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

ex2:

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<test thread-count="5" name="Test -1">

<groups>

<run>

<include name="Regression"></include>

</run>

</groups>

<classes>

<class name="TestNGBasics.TestAnnotationWithGroupsBasics1"/>

</classes>

</test>

<test thread-count="5" name="Test -2">

<groups>

<run>

<include name="Smoke"></include>

</run>

</groups>

<classes>

<class name="TestNGBasics.TestAnnotationWithGroupsBasics1"/>

</classes>

</test>

<!-- Test -->

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

[RemoteTestNG] detected TestNG version 7.0.0

Regression -1

in Smoke TC-1

in Smoke test-2

===============================================

Suite

Total tests run: 3, Passes: 3, Failures: 0, Skips: 0

===============================================

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<test thread-count="5" name="Test -1">

<groups>

<run>

<exclude name="Smoke"></exclude>

</run>

</groups>

<classes>

<class name="TestNGBasics.TestAnnotationWithGroupsBasics1"/>

</classes>

</test>

<!-- Test -->

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

package TestNGBasics;

import org.testng.Reporter;

import org.testng.annotations.Test;

public class ReporterBasics1 {

@Test

public void testA()

{

System.out.println("in testA");

// Reporter : is predefined in testNG. can be used to send given user defiend msg into reports

// type of reports: 2 types emailable-report.html 2. index.html

// where : test-ouput folder -- //D:\Practise\FrameWorkDeisgnsPractiseWorkSpace\SasiSeleniumBasics\test-output

// Refresh : we can see test-output folder

Reporter.log("Enter user");

Reporter.log("Enter pwd");

Reporter.log("Clikc login button");

}

@Test

public void createJob()

{

System.out.println("in testA");

Reporter.log("Enter job ");

Reporter.log("Enter job description");

Reporter.log("Clikc Save btn");

}

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Brahma suite">

<test thread-count="5" name="Brahma Test -1">

<classes>

<class name="TestNGBasics.ReporterBasics1"/>

</classes>

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

<test thread-count="5" name="Brahma Test -2">

<classes>

<class name="TestNGBasics.ReporterBasics2"/>

</classes>

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

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

package TestNGBasics;

import org.testng.Assert;

import org.testng.Reporter;

import org.testng.annotations.Test;

public class HardAssertionsBasics {

@Test

public void testA()

{

System.out.println("starts ");

Assert.assertEquals("Rama", "Rama");

Assert.assertEquals("Rama", "Sita");// fail - it wont execute next stmts at all

System.out.println("Not got executed");

// FAILED: testA

// java.lang.AssertionError: expected [Sita] but found [Rama]

// this is also called hard assertion

//HW: expplore diff methods Assert class

}

}

11:pm

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Dec 23 9:30 PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package TestNGBasics;

import org.testng.Assert;

import org.testng.Reporter;

import org.testng.annotations.Test;

public class HardAssertionsBasics {

@Test

public void testA()

{

System.out.println("starts ");

Assert.assertEquals("Rama", "Rama");

//...

// read data from props

// ex: Assert.assertEquals(myvalFromTextbox, ExpecetdData\_FrompropsFile);

Assert.assertEquals("Rama", "Sita");// fail - it wont execute next stmts at all

System.out.println("Not got executed");

// FAILED: testA

// java.lang.AssertionError: expected [Sita] but found [Rama]

// this is also called hard assertion

//HW: expplore diff methods Assert class

Assert.assertTrue(true);// cond i- pass --

// ex: Assert.assertTrue(ele.isdiaplyed);

// Assert.assertTrue(false);// false =-- fail -- wont execute next stmts4

Assert.assertFalse(false);// cond - true

Assert.assertFalse(true);// cond false -- fail - it stops progr execution in that method -

//wont next next stmts in that method

// Assert.assertTrue(linkscnt >0);

// HW :

// driver= null;

// Aobj = null;

// assertnull

// Assert.assertnotnull

Assert.assertNotEquals("Ram", "Ram");// false --fail

}

}

Soft assertion

:

package TestNGBasics;

import org.testng.Assert;

import org.testng.Reporter;

import org.testng.annotations.Test;

import org.testng.asserts.SoftAssert;

public class SoftAssertionsBasics1 {

@Test

public void testA()

{

// hard assertions: if cond -fails- it wont execute next stmts..

// soft assertion : even if assertion fail-- we want to continue execution

SoftAssert sa = new SoftAssert();

sa.assertEquals("Ram", "Ram");

sa.assertEquals("Ram", "Sita");

System.out.println(" it gets executed after assertion fails");// executed even if assertion fail

System.out.println("Ends");

sa.assertTrue(false);// Fail

// HW explore all

// 1. AssertnotEquals , AssertFalse, ,

sa.fail("My Fail Msg : Lins cnt >10");

// i want to diplay all assertion errors in console

sa.assertAll();

// java.lang.AssertionError: The following asserts failed:

// expected [Sita] but found [Ram],

// did not expect to find [true] but found [false],

// My Fail Msg : Lins cnt >10

}

}

FAQ: diff b/w Hard Assertion and Soft assertion ?

1. if assert fail-- it wont execut next stmtt

even if assertion fial-- executes next stmts..

2. all gard asserion methods ---Static methods

Assert.assertEquals("Rama", "Sita");

SA: not static methods

3. assertAll()-- at end we have to call this method to diaplys all assertion

FAQ: WHen should we Go for hard assertion and soft assertion ?

critical functionality -- fail - i dont want to execute next stmt

normal functionality -- even if fails -- I want to continue my execution

--------------------------------------------------------------

----------------------

Assert - class

package TestNGBasics;

import org.testng.Assert;

import org.testng.Reporter;

import org.testng.annotations.Test;

import org.testng.asserts.Assertion;

public class HardAssertionsBasics2 {

@Test

public void testA()

{

System.out.println("starts ");

Assertion as= new Assertion();

// Assert.assertEquals(false, false);

//Note: Assert and Assertion both are classes

as.assertEquals("Ram", "Ram");

as.assertEquals("Ram", "Sita");

// java.lang.AssertionError: expected [Sita] but found [Ram]

// HW : explore assertnotequal, assertTrue, AssertFalse, AssertNull.....

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Run spicific method in class:

package TestNGBasics;

import org.testng.annotations.Test;

public class TestAnnotationRunMethods {

@Test

public void testA() // method

{

System.out.println("in testA ");

}

@Test

public void testB()

{

System.out.println("in testB");

}

}

ex:

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<test thread-count="5" name="Test -1">

<classes>

<class name="TestNGBasics.TestAnnotationRunMethods">

<methods>

<include name="testB">

</include>

</methods>

</class>

</classes>

</test>

<!-- Test -->

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

--------------------------------------

reg exp methods include:

package TestNGBasics;

import org.testng.annotations.Test;

public class TestAnnotationRunMethods {

@Test

public void testA() // method

{

System.out.println("in testA ");

}

@Test

public void testB()

{

System.out.println("in testB");

}

@Test

public void Mobile1()

{

System.out.println("in Mobile");

}

@Test

public void Mobile2()

{

System.out.println("in Mobile2");

}

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<test thread-count="5" name="Test -1">

<classes>

<class name="TestNGBasics.TestAnnotationRunMethods">

<methods>

<include name="Mobile.\*">

</include>

</methods>

</class>

</classes>

</test>

<!-- Test -->

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

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

FAQ: paramters :

Define parameter:

Use @parameters

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<parameter name="Browser" value="Chrome"></parameter>

<parameter name="QA1URL" value="https://testng.org/doc/documentation-main.html#parameters"></parameter>

<test thread-count="5" name="Test">

<classes>

<class name="TestNGBasics.TestParameters"/>

</classes>

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

</suite> <!-- Suite -->package TestNGBasics;

import org.testng.annotations.Parameters;

import org.testng.annotations.Test;

public class TestParameters {

@Parameters("Browser")

// @Parameters("browser") // paramter with name= browser is not found in xml file.. Sol: Must give exact param name

//note: if we run from class, [Utils] [ERROR] [Error] org.testng.TestNGException:

// Parameter &apos;browser&apos; is required by @Test on method testA but has not been marked @Optional or defined

@Test

public void testA(String myBrowser) // method

{

System.out.println("in testA myBrowser="+ myBrowser);

//in testA myBrowser=Chrome

}

@Parameters({"Browser","QA1URL"})

@Test

public void testB(String myBrowser, String myURL)

{

System.out.println("my browser ="+myBrowser + ", myURL="+myURL );

}

}

in testA myBrowser=Chrome

my browser =Chrome, myURL=https://testng.org/doc/documentation-main.html#parameters

---------------------

local param:

package TestNGBasics;

import org.testng.annotations.Parameters;

import org.testng.annotations.Test;

public class TestParameters {

@Parameters("Browser")

// @Parameters("browser") // paramter with name= browser is not found in xml file.. Sol: Must give exact param name

//note: if we run from class, [Utils] [ERROR] [Error] org.testng.TestNGException:

// Parameter &apos;browser&apos; is required by @Test on method testA but has not been marked @Optional or defined

@Test

public void testA(String myBrowser) // method

{

System.out.println("in testA myBrowser="+ myBrowser);

//in testA myBrowser=Chrome

}

@Parameters({"Browser","QA1URL","mybrowser1"})

@Test

public void testB(String myBrowser, String myURL, String mybrowser1)

{

System.out.println("my browser ="+myBrowser + ", myURL="+myURL + ", local param-mybrowser1="+mybrowser1);

}

}

package TestNGBasics;

import org.testng.annotations.Parameters;

import org.testng.annotations.Test;

public class TestParameters2 {

@Parameters("Browser")

@Test

public void testA(String myBrowser) // method

{

System.out.println("in testA myBrowser="+ myBrowser);

//in testA myBrowser=Chrome

}

@Parameters({"Browser","QA1URL","mybrowser2"})

@Test

public void testB(String myBrowser, String myURL, String mybrowser2)

{

System.out.println("my browser ="+myBrowser + ", myURL="+myURL + ",mybrowser2="+mybrowser2 );

}

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<parameter name="Browser" value="Chrome"></parameter>

<parameter name="QA1URL" value="https://testng.org/doc/documentation-main.html#parameters"></parameter>

<test thread-count="5" name="Test">

<parameter name="mybrowser1" value="Firefox"></parameter>

<classes>

<class name="TestNGBasics.TestParameters"/>

</classes>

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

<test name="test-1">

<parameter name="mybrowser2" value="IE"></parameter>

<classes>

<class name="TestNGBasics.TestParameters2"></class>

</classes>

</test>

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

// Note:

We cannot access local param mybrowser1 which defines test tag i.e mybrowser1 in side class TestNGBasics.TestParameters2"

vice versa dont use mybrowser2, in class TestNGBasics.TestParameters

---------------- ends 11PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 24 -2021 11:40

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package TestNGRunTestsParallel;

import java.util.Date;

import org.testng.annotations.Test;

public class RunTestsParallel

{

@Test

public void testA()

{

System.out.println("1.Executing test-1 at "+ new Date());

System.out.println("2. Executing test-1 at "+ new Date());

}

@Test

public void testB()

{

System.out.println("1.Executing test-2 at "+new Date());

System.out.println("2.Executing test-2 at "+new Date());

}

// 1.Executing test-1 at Fri Dec 24 11:48:41 IST 2021

// 2. Executing test-1 at Fri Dec 24 11:48:41 IST 2021

// 1.Executing test-2 at Fri Dec 24 11:48:41 IST 2021

// 2.Executing test-2 at Fri Dec 24 11:48:41 IST 2021

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

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

<test thread-count="5" name="Test">

<classes>

<class name="TestNGRunTestsParallel.RunTestsParallel"/>

</classes>

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

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

Note :

FAQ : how can u run test paralle ?

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

package TestNGRunTestsParallel;

import java.util.Date;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.testng.annotations.Parameters;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

public class CrossBrowserTesting

{

@Parameters("Browser")

@Test

public void testA(String myBrowser)

{

System.out.println("1.Executing test-1 at "+ new Date());

System.out.println("2. Executing test-1 at "+ new Date());

WebDriver driver = null;

if(myBrowser.equals("Chrome"))

{

//System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

// to down load chromdriver.exe file in run time

WebDriverManager.chromedriver().setup();

driver = new ChromeDriver();

}

else if(myBrowser.equals("Firefox"))

{

//System.setProperty("webdriver.gecko.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\geckodriver-v0.30.0-win64\\geckodriver.exe"); //

WebDriverManager.firefoxdriver().setup();

driver = new FirefoxDriver();

}

else if(myBrowser.equals("IE"))

{

//System.setProperty("webdriver.ie.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\IEDriverServer\_x64\_3.150.2\\IEDriverServer.exe"); //

WebDriverManager.iedriver().setup();

driver = new InternetExplorerDriver();

}

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

driver.findElement(By.name("q")).sendKeys("Ramu");

System.out.println("ends ");

}

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

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

<test thread-count="5" name="Test-1">

<parameter name="Browser" value="Chrome"></parameter>

<classes>

<class name="TestNGRunTestsParallel.CrossBrowserTesting"/>

</classes>

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

<!-- run in ff -->

<test thread-count="5" name="Test-2">

<parameter name="Browser" value="Firefox"></parameter>

<classes>

<class name="TestNGRunTestsParallel.CrossBrowserTesting"/>

</classes>

</test>

<!-- run in IE -->

<test thread-count="5" name="Test-3">

<parameter name="Browser" value="IE"></parameter>

<classes>

<class name="TestNGRunTestsParallel.CrossBrowserTesting"/>

</classes>

</test>

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

FAQ: @Dataprovider

package TestNGRunTestsParallel;

import java.util.Date;

import org.testng.annotations.Test;

public class ArrayBasics

{

@Test

public void testA()

{

// Array - 2 dimnesion array

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

// 3 rows - 0 -2

// 2 col -- 0-1

arr [0][0] = 00;

arr [0][1] = 01;

arr [1][0] = 10;

arr [1][1] = 11;

arr [2][0] = 20;

arr [2][1] = 21;

System.out.println("arr val="+ arr [2] [0]);// 20

// System.out.println("arr val="+ arr [2] [2]);

// ArrayIndexOutOfBoundsException: Index 2 out of bounds for length 2

// HW Define array - which has to store decimal nos

// Object Array

}

}

package TestNGRunTestsParallel;

import java.util.Date;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.testng.annotations.DataProvider;

import org.testng.annotations.Parameters;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

public class DataProviderBasics1

{

@DataProvider

public Object[][] getData()

{

// Object is class in java -- we can store any type of val, int , flao,String...

Object [][] dataArr= new Object [2] [2];

// 1st arg -- how many times to execte Test

// 2 nd arg - how many paramters

dataArr [0] [0] = "Ram";

dataArr [0] [1] = "mercury-1";

dataArr [1] [0] = "Sita";

dataArr [1] [1] = "mercury-2";

return dataArr;

}

@Test(dataProvider = "getData")

public void test1(String user,String pwd)

{

System.out.println("user= "+user + ",pwd="+pwd);

// ente user name and package

// enter pwd

// clk login

// create 3 new emplyees

}

// [RemoteTestNG] detected TestNG version 7.0.0

// user= Ram,pwd=mercury-1

// user= Sita,pwd=mercury-2

// PASSED: test1("Ram", "mercury-1")

// PASSED: test1("Sita", "mercury-2")

//

// ===============================================

// Default test

// Tests run: 2, Failures: 0, Skips: 0

// ===============================================

//

//

// ===============================================

// Default suite

// Total tests run: 2, Passes: 2, Failures: 0, Skips: 0

// ===============================================

}

FAQ: @DataProvider

1. Define Data using@DataProvider

@DataProvider

public Object [] [] getData()

{

// define obje ct aarr

Object oArr [ ][ ] = new Object [3] [2];

// 1st arg -- how many times

// 2nd arg - no of apramter to test method

retun oArr

}

@test(dataPRovider= "getData")

public void login(String user,String pwd)

{

// netr user//

enter pwd

//click login

}

// HW test login functionality with multiple users and pwd...?

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*ends 1 PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 26 2021 7AM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

HW : Can we use String array in getData() instead of Object [][]?

package TestNGListnersBasics.copy;

import java.util.Date;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.testng.annotations.Parameters;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

interface I1

{

// has only Abstr Metods

// just declare method name without writing body

int i=20;// default publi static final

void openBrowser();// abst meth

public abstract void closeBrowser();// abst meth

}

public class Chrome implements I1

{

// note : move the mouse over class name,

//add all unimplemented methods

// so it adds all unimplemented methods in class

@Override

public void openBrowser() {

System.out.println("openBrowser");

}

public void closeBrowser()

{

System.out.println("closeBrowser");

}

public static void main(String args[])

{

Chrome myChromeObj= new Chrome();

myChromeObj.openBrowser();

myChromeObj.closeBrowser();

System.out.println("Interface varible -a="+I1.i);

// 20

// Can we change Interface var -- no it is final var

// I1.i=30;//The final field I1.i cannot be assigned

}

}

package TestNGListnersBasics.copy;

public class IE implements I1

{

public static void main(String[] args) {

IE ieobj= new IE();

ieobj.openBrowser();

}

@Override

public void openBrowser() {

// TODO Auto-generated method stub

System.out.println("IE openBrowser");

}

@Override

public void closeBrowser() {

// TODO Auto-generated method stub

System.out.println("IE Close Browser");

}

}

-------------------

package TestNGListnersBasics.copy;

// public abstract myAbstr

//{

//

//}

public abstract class A {

int a=20;

// k/w

// conatins abstr Methods and non abstr Method

public abstract void m1();

// must abstr k.w

// void M2();// This method requires a body instead of a semicolon

/// so we must define abstract

/// non Abstr methdos

public void M3()

{

System.out.println("in M3 -non abst method");

}

}

package TestNGListnersBasics.copy;

public class B extends A

{

// gets all methods and var from Class -A

// var -a and M3()

public void m1() {

// TODO Auto-generated method stub

System.out.println("in M1");

}

public static void main(String[] args) {

B bobj= new B();

bobj.M3();

bobj.m1();

System.out.println("parent class - A var-="+bobj.a);

}

}

in M3 -non abst method

in M1

parent class - A var-=20

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 27 9:30 Pm

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

FAQ: What is abstact class a

FAQ Diff b/w Abbstra class and interface ?

Abstract class :

public abstact class A

{

// abst meth + non Abstr

public abstract void M2();

// non sbat

public void display()

{

syso("in dispay");

}

}

I :

Interface : only Abst methods

interface I1

{

// declare var

// default public static final

// abst Ethod

public abstract void openBrowser();

//

void closeAllBrowser();

//

// void getTitle() // Erro :Abstract methods do not specify a body

// {

// System.out.println("get ttile");

// }

}

2. absstr methods where we should define --- some class

Class B extends A{

public void M1() // OVEr riding -- defining parent class method in child class --

{

syso("in ")

}

}

I : class c implements I1

{

// we have define all abstr methdos ...

}

3. obj create -- A aobj =new A();// error :Cannot instantiate the type A

I : obj create -- No -I1 iOb= new I1();// erro Cannot instantiate the type I1

4. when to go Abstact class and Interface

AC: some method - I want implemenet and some methods I dont want to implemenet - We willl go absttr classs

I : when I wat to implement all methods ---

WebDriver -- I -- Abstr method

ChromeDriver -c implemenets webdriver

FirefoxDriver -c - implemenets webdriver

ex: DB Connect ---

ORacle --

MySql DB

4. final and static and non staic var

I : only public static final --

Abstract class doesn't support multiple inheritance. Interface supports multiple inheritance

- AC: We can achieve partial abstraction

I - We can achiev 100% abstaction

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ItestLister - Interface in interface i testng

default void onFinish​(ITestContext context)

Invoked after all the test methods belonging to the classes inside the <test> tag have run and all their Configuration methods have been called.

default void onStart​(ITestContext context)

Invoked before running all the test methods belonging to the classes inside the <test> tag and calling all their Configuration methods.

default void onTestFailedButWithinSuccessPercentage​(ITestResult result)

Invoked each time a method fails but has been annotated with successPercentage and this failure still keeps it within the success percentage requested.

default void onTestFailedWithTimeout​(ITestResult result)

Invoked each time a test fails due to a timeout.

default void onTestFailure​(ITestResult result)

Invoked each time a test fails.

default void onTestSkipped​(ITestResult result)

Invoked each time a test is skipped.

default void onTestStart​(ITestResult result)

Invoked each time before a test will be invoked.

default void onTestSuccess​(ITestResult result)

Invoked each time a test succeeds.

package TestNGListnersBasics;

import org.openqa.selenium.TakesScreenshot;

import org.testng.ITestContext;

import org.testng.ITestListener;

import org.testng.ITestResult;

public class MyTestListner implements ITestListener

{

public void onStart(ITestContext arg0) {

System.out.println("onStart -- only once");

}

public void onFinish(ITestContext arg0) {

System.out.println("onFinish only once ");

}

public void onTestSuccess(ITestResult arg0) {

// TODO Auto-generated method stub

System.out.println("\*\*\*\*\*\* onTestSuccess\*\*\*\*\*\*\*\*\*");

}

// FAQ how to cpature screen if test method -fails

public void onTestFailure(ITestResult res) {

System.out.println("\*\*\*\*\* onTestFailure \*\*\*\*\*\*\*\*\*\*");

// res.getName();

// res.getStatus();

System.out.println("onTestFailure getName=" +res.getName());// onTestFailure getName=testB

//// System.out.println("onTestFailure getTestName=" +res.getTestName());

//// System.out.println("onTestFailure getTestName=" +res.getTestName().toString());

System.out.println("onTestFailure getStatus=" +res.getStatus()); // 2

//

System.out.println("getMethodName ="+ res.getMethod().getMethodName());//getMethodName =testB

System.out.println("onTestFailure,getMessage="+res.getThrowable().getMessage());

//onTestFailure,getMessage=did not expect to find [false] but found [true]

//

// Take screen shot code

// Hw:

// (TakesScreenshot)driver

System.out.println(res.getName() + " -Failed");

}

public void onTestSkipped(ITestResult arg0) {

// TODO Auto-generated method stub

System.out.println("onTestSkipped");

}

public void onTestStart(ITestResult res) {

System.out.println( res.getName()+ " \*\*\*\*\*\* onTestStart\*\*\*\*\*\*\*\*\*");

// System.out.println("onTestStart getName=" +res.getName());

// System.out.println("onTestStart getTestName=" +res.getTestName());

// System.out.println("onTestStart getStatus=" +res.getStatus());

//

// System.out.println("getMethodName ="+ res.getMethod().getMethodName());

// System.out.println("getThrowable="+res.getThrowable().getMessage());

// onTestStart getName=createEmp

// onTestStart getTestName=null

// onTestStart getStatus=16

// getMethodName =createEmp

}

public void onTestFailedButWithinSuccessPercentage(ITestResult arg0) {

// TODO Auto-generated method stub

}

}

package TestNGListnersBasics;

import org.testng.Assert;

import org.testng.SkipException;

import org.testng.annotations.Test;

public class MyTC1 {

@Test

public void testA()

{

System.out.println("in TC1");

}

@Test

public void testB()

{

System.out.println("in TC2");

Assert.assertFalse(true);

if(true)

{

}

else {

// take screen shot code

}

}

@Test

public void testC()

{

System.out.println("in TC3");

throw new SkipException("Skipping - any msg");

}

// [RemoteTestNG] detected TestNG version 7.0.0

// onStart -- only once

// \*\*\*\*\*\* onTestStart\*\*\*\*\*\*\*\*\*

// in TC1

// \*\*\*\*\*\* onTestSuccess\*\*\*\*\*\*\*\*\*

// \*\*\*\*\*\* onTestStart\*\*\*\*\*\*\*\*\*

// in TC2

// \*\*\*\*\* onTestFailure \*\*\*\*\*\*\*\*\*\*

// \*\*\*\*\*\* onTestStart\*\*\*\*\*\*\*\*\*

// in TC3

// onTestSkipped

// onFinish only once

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<listeners>

<listener class-name="TestNGListnersBasics.MyTestListner"></listener>

</listeners>

<test thread-count="5" name="Test">

<classes>

<class name="TestNGListnersBasics.MyTC1"/>

</classes>

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

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

Revision :

Listerner: listent to events while calling test method -- before executing any test method -

Onstart()

onFinish gets executed only once - after executing all test methods ib class--

onTestStart () --gets eexected for each test Method --

onTestSuccess - - - if test methods gets passed succesfully

onTestFailure () -- if test nethods -fails

onTestSkipped -- if test mtehod gets skipped

public class myListner implemenets ItestListner

{

Onstart()

{

...

}

onFinish gets executed only once - after executing all test methods ib class--

onTestStart () --gets eexected for each test Method --

onTestSuccess - - - if test methods gets passed succesfully

onTestFailure () -- if test nethods -fails

onTestSkipped -- if test mtehod gets skipped

}

// test execute

public class MyTestListner

{

@Test

public void testA()

{

syso()

}

@Test

public void testB()

{

.. fail

}

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<listeners>

<listener class-name="TestNGListnersBasics.MyTestListner"></listener>

</listeners>

<test thread-count="5" name="Test">

<classes>

<class name="TestNGListnersBasics.MyTC1"/>

</classes>

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

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

// HW : how to define @Listners at class level ?

FAQ: Retry failueres:

package TestNGFailRetryBasics;

import org.testng.IRetryAnalyzer;

import org.testng.ITestResult;

public class MyRetry implements IRetryAnalyzer {

private int retryCount = 0;

private static final int maxRetryCount = 3;

public boolean retry(ITestResult result) {

if (retryCount < maxRetryCount) {

retryCount++;

return true;

}

return false;

}

}

package TestNGFailRetryBasics;

import static org.testng.Assert.assertEquals;

import org.testng.annotations.Test;

public class TC1

{

@Test(retryAnalyzer = MyRetry.class)

public static void testA()

{

System.out.println("Executing testA-");

assertEquals("Ram", "Sita");

System.out.println("ends testA-");

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Run multiple testng xml file s:

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<!-- // run multiple xml file -->

<suite-files>

<suite-file path="testng.xml"></suite-file>

<suite-file path="testng2.xml"></suite-file>

<suite-file path="testngForParameters.xml"></suite-file>

<suite-file path="D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiSeleniumBasics\\src\\TestNGRunTestsParallel\\testngForCrossBrowserTesting.xml"></suite-file>

</suite-files>

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

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ends 11 pm

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 29 2021 11:30 AM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Single data provider for multiple TCs

package TestNGRunTestsParallel;

import java.lang.reflect.Method;

import java.util.Date;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.testng.annotations.DataProvider;

import org.testng.annotations.Parameters;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

public class SingleDataProvider

{

@DataProvider

public Object[][] getData(Method m)

{

System.out.println("method name-"+m.getName());

if(m.getName().equals("test1"))

{ /// define data

// excel data --read.....

}

else if(m.getName().equals("test2"))

{

}

//........

// Object is class in java -- we can store any type of val, int , flao,String...

Object [][] dataArr= new Object [2] [2];

// 1st arg -- how many times to execte Test

// 2 nd arg - how many paramters

dataArr [0] [0] = "Ram";

dataArr [0] [1] = "mercury-1";

dataArr [1] [0] = "Sita";

dataArr [1] [1] = "mercury-2";

return dataArr;

}

}

package TestNGRunTestsParallel;

import java.util.Date;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.testng.annotations.DataProvider;

import org.testng.annotations.Parameters;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

public class TestSingleDataProviderBasics

{

@Test(dataProviderClass = SingleDataProvider.class, dataProvider = "getData")

public void test1(String user,String pwd)

{

System.out.println("user= "+user + ",pwd="+pwd);

}

}

package TestNGRunTestsParallel;

import java.util.Date;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

import org.testng.annotations.DataProvider;

import org.testng.annotations.Parameters;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

public class TestSingleDataProviderBasics2

{

@Test(dataProviderClass = SingleDataProvider.class, dataProvider = "getData")

public void test2(String user,String pwd)

{

System.out.println("user= "+user + ",pwd="+pwd);

}

}

method name-test2

user= Ram,pwd=mercury-1

user= Sita,pwd=mercury-2

PASSED: test2("Ram", "mercury-1")

PASSED: test2("Sita", "mercury-2")

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Excel Data :

package ExcelReader;

import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.IOException;

import org.apache.poi.EncryptedDocumentException;

import org.apache.poi.ss.usermodel.Sheet;

import org.apache.poi.ss.usermodel.Workbook;

import org.apache.poi.ss.usermodel.WorkbookFactory;

public class ExcelUtilities {

// Selenium - download selenium jar file

// read excel data-- We need Apache POI .jar file

// <!-- https://mvnrepository.com/artifact/org.apache.poi/poi -->

//<dependency>

//<groupId>org.apache.poi</groupId>

//<artifactId>poi</artifactId>

//<version>5.0.0</version>

//</dependency>

//

// <!-- https://mvnrepository.com/artifact/org.apache.poi/poi-ooxml -->

// <dependency>

// <groupId>org.apache.poi</groupId>

// <artifactId>poi-ooxml</artifactId>

// <version>4.1.1</version>

// </dependency>

//

// </dependencies>

public static void main(String s[]) throws EncryptedDocumentException, IOException

{

System.out.println("strats ");

String filePath ="D:\\Practise\\TestData.xlsx";

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet("Login");

// get all rows cnt

int getLastRowNum= sh.getLastRowNum();

System.out.println("getLastRowNum="+getLastRowNum);

// 3 ,act rows =4

// get col cnt

int Colcnt= sh.getRow(0).getLastCellNum();

System.out.println("Colcnt="+Colcnt);

// 2 /actual also =2

// 1,1 cell data

String data00= sh.getRow(0).getCell(0).getStringCellValue().toString();

System.out.println("data00="+data00);

data00= sh.getRow(0).getCell(1).getStringCellValue().toString();

System.out.println("data01="+data00);

data00= sh.getRow(1).getCell(0).getStringCellValue().toString();

System.out.println("data10="+data00);

data00= sh.getRow(1).getCell(1).getStringCellValue().toString();

System.out.println("data11="+data00);

// read 3,1 cell == 2,0

// 3,2 -- 2,1

}

}

----------------

OPtimise by defining separate method

package ExcelReader;

import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.IOException;

import org.apache.poi.EncryptedDocumentException;

import org.apache.poi.ss.usermodel.Sheet;

import org.apache.poi.ss.usermodel.Workbook;

import org.apache.poi.ss.usermodel.WorkbookFactory;

public class ExcelUtilities2 {

// get rows cnt

public static int getRowsCnt(String filePath,String sheetName) throws EncryptedDocumentException, IOException

{

//String filePath ="D:\\Practise\\TestData.xlsx";

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet(sheetName);

// get all rows cnt

int getLastRowNum= sh.getLastRowNum();

System.out.println("getLastRowNum="+getLastRowNum);

// 3 ,act rows =4 \*\*\*\*Note :

return getLastRowNum;

}

// get clumns cnt

public static int getColsCnt(String filePath, String sheetName) throws EncryptedDocumentException, IOException

{

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet(sheetName);

int colcnt= sh.getRow(0).getLastCellNum();

return colcnt;

}

// Read Data from xl based Rowno, Cell no

public static String readDataFromExcel(String filePath, String sheetName, int rowno, int cellno) throws EncryptedDocumentException, IOException

{

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet(sheetName);

String data= sh.getRow(rowno).getCell(cellno).getStringCellValue().toString();

return data;

}

public static void main(String s[]) throws EncryptedDocumentException, IOException

{

System.out.println("strats ");

String filePath ="D:\\Practise\\TestData.xlsx";

String SheetName= "Login";

int getLastRowNum = getRowsCnt(filePath, SheetName);

System.out.println("getLastRowNum="+getLastRowNum);//3

int colcnt= getColsCnt(filePath, SheetName);

System.out.println("colcnt="+colcnt);

// Read dara

String data= readDataFromExcel(filePath, SheetName, 0, 0);

System.out.println("data 00="+data);

data= readDataFromExcel(filePath, SheetName, 0, 1);

System.out.println("data 01="+data);

data= readDataFromExcel(filePath, SheetName, 1, 0);

System.out.println("data 10="+data);

// HW Read all data from all rows and all cells..

}

}

-----------------

Customisation:

package ExcelReader;

import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.IOException;

import org.apache.poi.EncryptedDocumentException;

import org.apache.poi.ss.usermodel.Sheet;

import org.apache.poi.ss.usermodel.Workbook;

import org.apache.poi.ss.usermodel.WorkbookFactory;

public class ExcelUtilities3Customised {

// get rows cnt

public static int getRowsCnt(String filePath,String sheetName) throws EncryptedDocumentException, IOException

{

//String filePath ="D:\\Practise\\TestData.xlsx";

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet(sheetName);

// get all rows cnt

int getLastRowNum= sh.getLastRowNum();

// 3 ,act rows =4 \*\*\*\*Note :

return getLastRowNum+1;

}

// get clumns cnt

public static int getColsCnt(String filePath, String sheetName) throws EncryptedDocumentException, IOException

{

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet(sheetName);

int colcnt= sh.getRow(0).getLastCellNum();

return colcnt;

}

// Read Data from xl based Rowno, Cell no

// 1,1-username -- row

// 2,1 -1,0

public static String readDataFromExcel(String filePath, String sheetName, int rowno, int cellno) throws EncryptedDocumentException, IOException

{

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet(sheetName);

String data= sh.getRow(rowno-1).getCell(cellno-1).getStringCellValue().toString();

return data;

}

public static void main(String s[]) throws EncryptedDocumentException, IOException

{

System.out.println("strats ");

String filePath ="D:\\Practise\\TestData.xlsx";

String SheetName= "Login";

int getLastRowNum = getRowsCnt(filePath, SheetName);

System.out.println("getLastRowNum="+getLastRowNum);//3

int colcnt= getColsCnt(filePath, SheetName);

System.out.println("colcnt="+colcnt);

// Read dara

String data= readDataFromExcel(filePath, SheetName, 1, 1);

System.out.println("data 11="+data);

data= readDataFromExcel(filePath, SheetName, 1, 2);

System.out.println("data 12="+data);

//data= readDataFromExcel(filePath, SheetName, 2,0 );

// error 0-1= -1 cell is not there

data= readDataFromExcel(filePath, SheetName, 2, 1);

System.out.println("data 21="+data);

data= readDataFromExcel(filePath, SheetName, 2, 2);

System.out.println("data 21="+data);

// HW Read all data from all rows and all cells..

}

}

//HW get all sheeets cnt

// HW :check sheet is exist or not

HW : get columnno based on Columns name

i.p : columnNAme -USerNAme -- o/p : Colno= 1-TC\_01

Password --o/p: 2-

HW: Read data cell contains number 10, 20.865 withou using toString()???

//sh.getRow(0).getCell(0).getNumericCellValue()

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dec 30 2021 11AM

-----------------------------

package ExcelReader;

import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.IOException;

import org.apache.poi.EncryptedDocumentException;

import org.apache.poi.ss.usermodel.Sheet;

import org.apache.poi.ss.usermodel.Workbook;

import org.apache.poi.ss.usermodel.WorkbookFactory;

public class ExcelUtilities3Customised {

// get rows cnt

public static int getRowsCnt(String filePath,String sheetName) throws EncryptedDocumentException, IOException

{

//String filePath ="D:\\Practise\\TestData.xlsx";

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet(sheetName);

// get all rows cnt

int getLastRowNum= sh.getLastRowNum();

// 3 ,act rows =4 \*\*\*\*Note :

return getLastRowNum+1;

}

// get clumns cnt

public static int getColsCnt(String filePath, String sheetName) throws EncryptedDocumentException, IOException

{

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet(sheetName);

int colcnt= sh.getRow(0).getLastCellNum();

return colcnt;

}

// Read Data from xl based Rowno, Cell no

// 1,1-username -- row

// 2,1 -1,0

public static String readDataFromExcel(String filePath, String sheetName, int rowno, int cellno) throws EncryptedDocumentException, IOException

{

FileInputStream fis = new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

Sheet sh= wb.getSheet(sheetName);

String data= sh.getRow(rowno-1).getCell(cellno-1).getStringCellValue().toString();

return data;

}

//

public static boolean isSheetExist(String filePath, String sheetName) throws EncryptedDocumentException, IOException

{

FileInputStream fis= new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

int index= wb.getSheetIndex(sheetName);

System.out.println("index no=" + index+ " of sheet name= "+sheetName );

if(index >=0)

{

System.out.println("Given sheet name=" +sheetName + " exist in excel file");

return true;

}

else

{

System.out.println("Given sheet name=" +sheetName+ " is not exist in excel file");

return false;

}

}

public static int getColnoBasedOnColumnName(String filePath, String sheetName,String ExpectedColName) throws EncryptedDocumentException, IOException

{

FileInputStream fis= new FileInputStream(filePath);

Workbook wb= WorkbookFactory.create(fis);

String ActualColName;

Sheet sh= wb.getSheet(sheetName);

// read all col names

int colCnt= getColsCnt(filePath, sheetName);//2

boolean ColFound =false;

int i;

for( i=1;i<=colCnt;i++) // 1 to 2

{

//

ActualColName= readDataFromExcel(filePath, sheetName,1 , i);// 1,1

if(ExpectedColName.equalsIgnoreCase(ActualColName))

{

System.out.println("Col name="+ExpectedColName + " found at Col no="+ i );

ColFound = true;

// break;

return i;

}

// else // Dont write

// {

// System.out.println("Col name="+ExpectedColName + " is not found at Col no="+ i );

// }

}

//

if(ColFound == true)

{

System.out.println("Col name="+ExpectedColName + " found at Col no" +i);

}

else

{

System.out.println("Col name="+ExpectedColName + " is not found at any Col no");

return -1;

}

return i;

}

public static void main(String s[]) throws EncryptedDocumentException, IOException

{

System.out.println("strats ");

String filePath ="D:\\Practise\\TestData.xlsx";

String SheetName= "Login";

int getLastRowNum = getRowsCnt(filePath, SheetName);

System.out.println("getLastRowNum="+getLastRowNum);//3

int colcnt= getColsCnt(filePath, SheetName);

System.out.println("colcnt="+colcnt);

// Read dara

String data= readDataFromExcel(filePath, SheetName, 1, 1);

System.out.println("data 11="+data);

data= readDataFromExcel(filePath, SheetName, 1, 2);

System.out.println("data 12="+data);

//data= readDataFromExcel(filePath, SheetName, 2,0 );

// error 0-1= -1 cell is not there

data= readDataFromExcel(filePath, SheetName, 2, 1);

System.out.println("data 21="+data);

data= readDataFromExcel(filePath, SheetName, 2, 2);

System.out.println("data 21="+data);

// HW Read all data from all rows and all cells..

// is shee

boolean isSheetExist= isSheetExist(filePath, "Login");

System.out.println("isSheetExist -Login =" +isSheetExist);

isSheetExist= isSheetExist(filePath, "CreateCustomer");

System.out.println("isSheetExist -CreateCustomer =" +isSheetExist);

isSheetExist= isSheetExist(filePath, "InvlaidLogin");

System.out.println("isSheetExist -InvlaidLogin =" +isSheetExist);

// index no=0 of sheet name= Login

// Given sheet name=Login exist in excel file

// isSheetExist -Login =true

// index no=1 of sheet name= CreateCustomer

// Given sheet name=CreateCustomer exist in excel file

// isSheetExist -CreateCustomer =true

// index no=-1 of sheet name= InvlaidLogin

// Given sheet name=InvlaidLogin is not exist in excel file

// isSheetExist -InvlaidLogin =false

//

// GetColno if we pass col name

getColnoBasedOnColumnName(filePath, SheetName, "UserName");

getColnoBasedOnColumnName(filePath, SheetName, "Password");

// -ve

getColnoBasedOnColumnName(filePath, SheetName, "InvlaiPassword");

// HW read all rows and and cells data

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Extra:

package ExcelReader;

import java.io.FileInputStream;

import java.io.IOException;

import org.apache.poi.ss.usermodel.Cell;

import org.apache.poi.ss.usermodel.CellType;

import org.apache.poi.ss.usermodel.FormulaEvaluator;

import org.apache.poi.ss.usermodel.Row;

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

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

public class XSSFWorkbookRead {

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

// TODO Auto-generated method stub

String filePath ="D:\\Practise\\TestData.xlsx";

String SheetName= "CreateCustomer";

// HSSF

// HSSFWorkbook

// xssWorkbook

FileInputStream fis= new FileInputStream(filePath);

XSSFWorkbook wb = new XSSFWorkbook(fis);

XSSFSheet sh=wb.getSheet(SheetName);

//HW: get rows cnt

// HW: get col cnt

// read data

String data00=sh.getRow(0).getCell(0).getStringCellValue();

System.out.println("data 00="+data00);

data00=sh.getRow(0).getCell(1).getStringCellValue();

System.out.println("data 01="+data00);

// data00=sh.getRow(1).getCell(2).getStringCellValue();

//IllegalStateException: Cannot get a STRING value from a NUMERIC cell

double d=sh.getRow(1).getCell(2).getNumericCellValue();

System.out.println("data 23="+d);

// data 23=10.0

//

// data00=sh.getRow(1).getCell(2).getStringCellValue().toString();

//IllegalStateException: Cannot get a STRING value from a NUMERIC cell

// System.out.println("data 01="+data00);

CellType ctype= sh.getRow(1).getCell(2).getCellType();

System.out.println("tyep="+ctype.NUMERIC);

if(ctype.NUMERIC.equals("NUMERIC"))

{

double d2=sh.getRow(1).getCell(2).getNumericCellValue();

System.out.println("data 23="+d2);

}

// 1,2 ..

// excel data -Date = getDateCellValue()

//evaluating cell type

FormulaEvaluator formulaEvaluator = wb.getCreationHelper().createFormulaEvaluator();

for (Row row: sh)

//iteration over row using for each loop

{

for (Cell cell: row) //iteration over cell using for each loop

{

switch (formulaEvaluator.evaluateInCell(cell).getCellType()) {

case Cell.CELL\_TYPE\_NUMERIC:

//field that represents numeric cell type

//getting the value of the cell as a number

System.out.print(cell.getNumericCellValue() + "\t\t");

break;

case Cell.CELL\_TYPE\_STRING:

//field that represents string cell type

//getting the value of the cell as a string

System.out.print(cell.getStringCellValue() + "\t\t");

break;

}

}

}

}

----------------------------------

Extent report :

package ExtentReportsBasics;

import org.testng.annotations.Test;

import com.relevantcodes.extentreports.ExtentReports;

import com.relevantcodes.extentreports.ExtentTest;

import com.relevantcodes.extentreports.LogStatus;

public class TC1

{

@Test

public void testA()

{

// poi - jar , Selenium jar

// Extent reports -- jar file

// import into project

// add depe -

////

// <!-- https://mvnrepository.com/artifact/com.relevantcodes/extentreports -->

// <dependency>

// <groupId>com.relevantcodes</groupId>

// <artifactId>extentreports</artifactId>

// <version>2.41.2</version>

// </dependency>

// to generate html reports in pie chart

// total test s passed / failed

// total execution time

// start // end

// who executes test///

// Pass- gree

// Fail- red

// pass given msgs in html reports

ExtentReports exReports = new ExtentReports("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports.html");

ExtentTest exTest= exReports.startTest("TC1: testA");

exTest.log(LogStatus.PASS, "1.Enter user name");

// send given status and msg to html report

// selenium code

exTest.log(LogStatus.PASS, "2.Enter password");

exTest.log(LogStatus.PASS, "3.clikc login btn");

// send Fail status and some msg

exTest.log(LogStatus.FAIL, "Login is failed");

System.out.println("ends");

exTest.log(LogStatus.INFO, " info msg");

// HW : Explore diff status - fatal , Error.

// tell html -- where we have to end report

exReports.endTest(exTest);

exReports.flush();// if we dont write, it does not genrate reports..

// after using flush(),, it will not log any msgs if we try to log

exTest.log(LogStatus.PASS, "check this stmt is coming html report");

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* TC2

// log TC2 steps

ExtentTest exTest2= exReports.startTest("TC2: Create Employee");

// logs

exTest2.log(LogStatus.PASS, "TC2: Step1: ");

exTest2.log(LogStatus.PASS, "TC2: Step2: ");

exReports.endTest(exTest2);

exReports.flush();

// TC3 ----repeat all steps

}

}

for 2 tcs's

HW: Define 2 classses , 2 test methods- before test..

Utilities: Define all generic / common methods for all webelements?

2. with try catch in all generic method .....

for -ve data

package Utilities;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class TestBase {

// Browser common/ generic methods

public static WebDriver openBrowser()

{

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("https://opensource-demo.orangehrmlive.com/");

return driver;

}

// textbox : enter, clear, getval from

// eX:

public void enter\_Val\_InTextbox(String Myxpath, String ValueToBeEntered)

{

try

{

}

catch (Exception e) {

// TODO: handle exception

}

}

public void enter\_Val\_InTextbox(WebElement textboxEle, String ValueToBeEntered)

{

}

public void Clear\_Val\_InTextbox(WebElement textboxEle, String ValueToBeEntered)

{

}

public void get\_Val\_From\_Textbox(WebElement textboxEle, String ValueToBeEntered)

{

}

// button

// checkbox

// Dropdown : sleect dropdown val

// Link

// Images

// ..... etc

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Jan 3 2022

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

reports :

package ExtentReportsBasics;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeTest;

import org.testng.annotations.Test;

import com.relevantcodes.extentreports.ExtentReports;

import com.relevantcodes.extentreports.ExtentTest;

import com.relevantcodes.extentreports.LogStatus;

public class TC2

{

public ExtentReports exReports;

public ExtentTest exTest;

@BeforeTest

public void setup()

{

exReports = new ExtentReports("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports.html");

exTest= exReports.startTest("TC1: testA");

}

@Test

public void testA()

{

// ExtentReports exReports = new ExtentReports("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports.html");

// ExtentTest exTest= exReports.startTest("TC1: testA");

exTest.log(LogStatus.PASS, "1.Enter user name");

exTest.log(LogStatus.PASS, "2.Enter password");

exTest.log(LogStatus.PASS, "3.clikc login btn");

// send Fail status and some msg

exTest.log(LogStatus.FAIL, "Login is failed");

System.out.println("ends");

exTest.log(LogStatus.INFO, " info msg");

// HW : Explore diff status - fatal , Error.

//

// exReports.endTest(exTest);

// exReports.flush();// if we dont write, it does not genrate reports..

//

}

@AfterTest

public void endTest()

{

exReports.endTest(exTest);

exReports.flush();

}

}

package ExtentReportsBasics;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeTest;

import org.testng.annotations.Test;

import com.relevantcodes.extentreports.ExtentReports;

import com.relevantcodes.extentreports.ExtentTest;

import com.relevantcodes.extentreports.LogStatus;

public class TC3

{

public ExtentReports exReports;

public ExtentTest exTest;

@BeforeTest

public void setup()

{

exReports = new ExtentReports("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports.html");

exTest= exReports.startTest("TC1: testA");

}

@Test

public void testA()

{

// ExtentReports exReports = new ExtentReports("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports.html");

// ExtentTest exTest= exReports.startTest("TC1: testA");

exTest.log(LogStatus.PASS, "1.Enter user name");

exTest.log(LogStatus.PASS, "2.Enter password");

exTest.log(LogStatus.PASS, "3.clikc login btn");

// send Fail status and some msg

exTest.log(LogStatus.FAIL, "Login is failed");

System.out.println("ends");

exTest.log(LogStatus.INFO, " info msg");

// HW : Explore diff status - fatal , Error.

//

// exReports.endTest(exTest);

// exReports.flush();// if we dont write, it does not genrate reports..

//

}

@AfterTest

public void endTest()

{

exReports.endTest(exTest);

exReports.flush();

}

}

Disadva:

each test case -- creates nw report file

OPtmise uinsg ItestLister :

package ExtentReportsBasics;

import java.util.Date;

import org.testng.ITestContext;

import org.testng.ITestListener;

import org.testng.ITestResult;

import com.relevantcodes.extentreports.ExtentReports;

import com.relevantcodes.extentreports.ExtentTest;

public class ListenersTest implements ITestListener

{

// genreate report file name only once

public ExtentReports exReports;

public static ExtentTest exTest;

public void onStart(ITestContext context) {

System.out.println("on Start");

// TODO Auto-generated method stub

//Mon Jan 03 16:12:46 IST 2022.html

Date d= new Date();

System.out.println("da="+ d.toString().replace(":", "\_").replace(" ", "\_"));

// Mon Jan 03 1\_12\_46 IST 2022.html

//Mon\_Jan\_03\_1\_12\_46\_IST\_2022.html

String fileName= "D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports" +d.toString().replace(":", "\_").replace(" ", "\_")+ ".html";

// MyhtmlExtentReportsMon\_Jan\_03\_16\_16\_19\_IST\_2022.html

System.out.println("Report File path= "+fileName);

exReports = new ExtentReports(fileName);

// gets executed only once - so res file willl be genearetd only once

//

}

public void onTestStart(ITestResult result) {

// gets exuted

// exTest= exReports.startTest("TC1: testA");

// get test case name

String TCName= result.getName();

exTest= exReports.startTest(TCName);

System.out.println("startTest: " +TCName );

}

public void onFinish(ITestContext context) {

// TODO Auto-generated method stub

exReports.endTest(exTest);

exReports.flush();

}

public void onTestFailure(ITestResult result) {

// TODO Auto-generated method stub

}

public void onTestSkipped(ITestResult result) {

// TODO Auto-generated method stub

}

public void onTestSuccess(ITestResult result) {

}

public void onTestFailedButWithinSuccessPercentage(ITestResult result) {

// TODO Auto-generated method stub

}

}

----------

package ExtentReportsBasics;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeTest;

import org.testng.annotations.Test;

import com.relevantcodes.extentreports.ExtentReports;

import com.relevantcodes.extentreports.ExtentTest;

import com.relevantcodes.extentreports.LogStatus;

public class OptimisedTC1 extends ListenersTest

{

// public ExtentReports exReports;

// public ExtentTest exTest;// if we dont assign any val,, it has null by default

@BeforeTest

public void setup()

{

// exReports = new ExtentReports("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports.html");

// exTest= exReports.startTest("TC1: testA");

}

@Test

public void testA()

{

// ExtentReports exReports = new ExtentReports("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports.html");

// ExtentTest exTest= exReports.startTest("TC1: testA");

System.out.println("extest="+exTest);// extest=null

exTest.log(LogStatus.PASS, "1.Enter user name");

exTest.log(LogStatus.PASS, "2.Enter password");

exTest.log(LogStatus.PASS, "3.clikc login btn");

// send Fail status and some msg

exTest.log(LogStatus.FAIL, "Login is failed");

System.out.println("ends");

exTest.log(LogStatus.INFO, " info msg");

// HW : Explore diff status - fatal , Error.

//

// exReports.endTest(exTest);

// exReports.flush();// if we dont write, it does not genrate reports..

//

}

@AfterTest

public void endTest()

{

// exReports.endTest(exTest);

// exReports.flush();

}

}

-------------

package ExtentReportsBasics;

import org.testng.annotations.AfterTest;

import org.testng.annotations.BeforeTest;

import org.testng.annotations.Test;

import com.relevantcodes.extentreports.ExtentReports;

import com.relevantcodes.extentreports.ExtentTest;

import com.relevantcodes.extentreports.LogStatus;

public class OptimisedTC2 extends ListenersTest

{

// public ExtentReports exReports;

// public ExtentTest exTest;// if we dont assign any val,, it has null by default

@BeforeTest

public void setup()

{

// exReports = new ExtentReports("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports.html");

// exTest= exReports.startTest("TC1: testA");

}

@Test

public void testB()

{

// ExtentReports exReports = new ExtentReports("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports.html");

// ExtentTest exTest= exReports.startTest("TC1: testA");

System.out.println("extest="+exTest);// extest=null

exTest.log(LogStatus.PASS, "1.Enter user name");

exTest.log(LogStatus.PASS, "2.Enter password");

exTest.log(LogStatus.PASS, "3.clikc login btn");

// send Fail status and some msg

exTest.log(LogStatus.FAIL, "Login is failed");

System.out.println("ends");

exTest.log(LogStatus.INFO, " info msg");

// HW : Explore diff status - fatal , Error.

//

// exReports.endTest(exTest);

// exReports.flush();// if we dont write, it does not genrate reports..

//

}

@AfterTest

public void endTest()

{

// exReports.endTest(exTest);

// exReports.flush();

}

}

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<listeners>

<listener class-name="ExtentReportsBasics.ListenersTest"></listener>

</listeners>

<test thread-count="5" name="Test">

<classes>

<class name="ExtentReportsBasics.OptimisedTC1"/>

<class name="ExtentReportsBasics.OptimisedTC2"/>

</classes>

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

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

check generic methods --

develop 2 or 3 methods:

Dropdown:

is\_givenVal\_Exist\_Dropdown()

Verify\_GivenVals\_Are\_InDropdown("Honda,Hero");

// Hw: Verify Given values are in Ascending order ? ex: array,, List , drop down values

---------------------

Log4j :

01/12/2021 00:02:00 devpinoyLogger Executing TC1:

01/12/2021 00:02:00 devpinoyLogger Step1: Enter user name

01/12/2021 00:02:00 devpinoyLogger 2.Enter pwd

01/12/2021 00:02:00 devpinoyLogger debug Msg1

01/12/2021 00:02:00 devpinoyLogger Error :1

01/12/2021 00:04:07 Brahma Executing TC1:

01/12/2021 00:04:07 Brahma Step1: Enter user name

01/12/2021 00:04:07 Brahma 2.Enter pwd

01/12/2021 00:04:07 Brahma debug Msg1

01/12/2021 00:04:07 Brahma Error :1

01/12/2021 00:08:53 devpinoyLogger Executing TC1:

01/12/2021 00:08:53 devpinoyLogger Step1: Enter user name

01/12/2021 00:08:53 devpinoyLogger 2.Enter pwd

01/12/2021 00:08:53 devpinoyLogger debug Msg1

down laod log 4j :

Add log4j. jar file in Pom.xml

<!-- https://mvnrepository.com/artifact/log4j/log4j -->

<dependency>

<groupId>log4j</groupId>

<artifactId>log4j</artifactId>

<version>1.2.17</version>

</dependency>

2. addd log4j.proerties files into src/test/resources

add below lines

#Root logger

log4j.rootLogger=DEBUG,file

log4j.appender.file=org.apache.log4j.RollingFileAppender

log4j.appender.file.File=D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyLogs\\Selenium.logs

log4j.appender.file.maxFileSize=900KB

log4j.appender.file.maxBackupIndex=5

log4j.appender.file.layout=org.apache.log4j.PatternLayout

#log4j.appender.file.layout.ConversionPattern=%d{ABSOLUTE} %5p %c<strong>{1}</strong>:%L - %m%n

log4j.appender.file.layout.ConversionPattern=%d{ABSOLUTE} %5p %c:%L - %m%n

#04:57:16,754 DEBUG devpinoyLogger <strong>{1}</strong>:12 - TC1: step-1

log4j.appender.file.Append=false

#Application Logs

log4j.logger.devpinoyLogger=DEBUG, dest1

log4j.appender.dest1=org.apache.log4j.RollingFileAppender

log4j.appender.dest1.maxFileSize=900KB

log4j.appender.dest1.maxBackupIndex=6

log4j.appender.dest1.layout=org.apache.log4j.PatternLayout

log4j.appender.dest1.layout.ConversionPattern=%d{dd/MM/yyyy HH:mm:ss} %c %m%n

log4j.appender.dest1.File=D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyLogs\\Manual.logs

log4j.appender.dest1.Append=false

code:

package Log4jBasics;

import org.apache.log4j.Logger;

public class Log4jBasics1 {

public static void main(String[] args) {

// TODO Auto-generated method stub

// Logger log=Logger.getLogger("devpinoyLogger");

Logger log =Logger.getLogger("devpinoyLogger");

// can w use diff name other than devpinoyLogger..

// Logger log =Logger.getLogger("Brahma"); // not getting manual.logs file

log.info("check append");

log.info("Tc1: Enter user name");

log.info("2.Enter pwd");

log.debug("3.Click login btn");

log.error("4.passing error");

System.out.println("ends");

}

}

Reference:

https://www.guru99.com/tutorial-on-log4j-and-logexpert-with-selenium.html

// HW : add selenium code anf log msgs ---- check Selenium.logs file

types of log file:

1. selenium/log

2 Manual.log

Hw2: we can log msgs using log4j.xml ?

Revise:

how to log:

1 ehat jar file?

2. what props file log4j.properties

how to create props file ?

what lines u will add :

where we have to create log file -- log file path

maxfile size

appned -- true/false

date and time format ---

3. code: what clasanme

Logger log= Logger.getLogger("devpinoyLogger");

// to send msgs to log file

log.info("enter user")

log.info("enter pwd")

log.debug(" bedgu msh");

log.error("" calling error"");

Run check log file creates ro not

Mnaul.log ---- what msgs we have sent

Selenium.log --- our msgs and alos http request and http response .....

package Log4jBasics;

import org.apache.log4j.Logger;

import org.testng.annotations.Test;

public class Log4jTC1 {

@Test

public void testA()

{

// TODO Auto-generated method stub

// Logger log=Logger.getLogger("devpinoyLogger");

Logger log =Logger.getLogger("devpinoyLogger");

// can w use diff name other than devpinoyLogger..

// Logger log =Logger.getLogger("Brahma"); // not getting manual.logs file

log.info("check append");

log.info("Tc1: Enter user name");

log.info("2.Enter pwd");

log.debug("3.Click login btn");

log.error("4.passing error");

System.out.println("ends");

}

}

package Log4jBasics;

import org.apache.log4j.Logger;

import org.testng.annotations.Test;

public class Log4jTC2 {

@Test

public void testB()

{

Logger log =Logger.getLogger("devpinoyLogger");

// can w use diff name other than devpinoyLogger..

// Logger log =Logger.getLogger("Brahma"); // not getting manual.logs file

log.info("check append");

log.info("Tc1: Enter user name");

log.info("2.Enter pwd");

log.debug("3.Click login btn");

log.error("4.passing error");

System.out.println("ends");

}

}

Optimised :

package Log4jBasics;

import org.apache.log4j.Logger;

import org.testng.annotations.Test;

import Utilities.TestBase;

public class OptimsedLog4jTC1 extends TestBase

{

@Test

public void testA()

{

//

// Logger log =Logger.getLogger("devpinoyLogger");// added in test base class

//create object for testbase

// way1: access log obj from TestBase-class through Object creation

// TestBase tb= new TestBase();

//// tb. /// ????

// tb.log.info("testin thru obj creeation");

// tb.log.info("check append");

// way2 : get log var ffrom TestBase-class through Inheritance

log.info("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* TC1: \*\*\*\*\*\*\*\*\*\*\*\*\*\*");

log.info("Tc1: Enter user name");

log.info("2.Enter pwd");

log.debug("3.Click login btn");

// log.error("4.passing error");

System.out.println("ends");

}

}

package Log4jBasics;

//import org.apache.log4j.Logger;

import org.testng.annotations.Test;

import Utilities.TestBase;

public class OptimsedLog4jTC2 extends TestBase

{

@Test

public void testA()

{

// TODO Auto-generated method stub

// // Logger log =Logger.getLogger("devpinoyLogger");// added in test base class

// TestBase tb= new TestBase();

//// tb. /// ????

// tb.log.info("testin thru obj creeation");

// tb.log.info("check append");

//

log.info("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* TC2: \*\*\*\*\*\*\*\*\*\*\*\*\*\*");

log.info("TC2: check append");

// log.info("Tc1: Enter user name");

log.info("2.Enter pwd");

log.debug("3.Click login btn");

log.error("4.passing error");

System.out.println("ends");

}

}

package Utilities;

import org.apache.log4j.Logger;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class TestBase {

// add extent report

// add log4j class

public Logger log =Logger.getLogger("devpinoyLogger");

// Browser common/ generic methods

public static WebDriver openBrowser()

{

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.get("https://opensource-demo.orangehrmlive.com/");

return driver;

}

// textbox : enter, clear, getval from

// eX:

public void enter\_Val\_InTextbox(String Myxpath, String ValueToBeEntered)

{

try

{

}

catch (Exception e) {

}

}

public void enter\_Val\_InTextbox(WebElement textboxEle, String ValueToBeEntered)

{

}

public void Clear\_Val\_InTextbox(WebElement textboxEle, String ValueToBeEntered)

{

}

public void get\_Val\_From\_Textbox(WebElement textboxEle, String ValueToBeEntered)

{

}

// button

// checkbox

// Dropdown : sleect dropdown val

// Link

// Images

// ..... etc

}

2.HW : Log4j.xml ???

REfer:

https://www.seleniumeasy.com/log4j-tutorials/how-to-configure-log4j-xml-file-in-java-example

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

JAn 4 2022 12PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

webbased popup : swicthto().alert();

windows based Popup:

Robot class :

package FileUploading;

import java.awt.AWTException;

import java.awt.Robot;

import java.awt.Toolkit;

import java.awt.datatransfer.StringSelection;

import java.awt.event.KeyEvent;

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.interactions.Actions;

public class SimpleFileUploading {

public static void setClipboardData(String string) {

//StringSelection is a class that can be used for copy and paste operations.

StringSelection stringSelection = new StringSelection(string);

Toolkit.getDefaultToolkit().getSystemClipboard().setContents(stringSelection, null);

}

public static void uploadFile(String fileLocation) {

try {

//Setting clipboard with file location

setClipboardData(fileLocation);

//native key strokes for CTRL, V and ENTER keys

Robot robot = new Robot();

robot.keyPress(KeyEvent.VK\_CONTROL);

robot.keyPress(KeyEvent.VK\_V);

robot.keyRelease(KeyEvent.VK\_V);

robot.keyRelease(KeyEvent.VK\_CONTROL);

robot.keyPress(KeyEvent.VK\_ENTER);

robot.keyRelease(KeyEvent.VK\_ENTER);

} catch (Exception exp) {

exp.printStackTrace();

}

}

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// 1. file uplaoding

// driver.findElement(By.name("uploadname")).sendKeys("D:\\Practise\\TestFile.txt");

// 2. using Robot -- through keyboard

//driver.findElement(By.id("fileid")).click();// nok

WebElement chooseFileBtn= driver.findElement(By.id("fileid"));

Actions act = new Actions(driver);

act.click(chooseFileBtn).perform();

Thread.sleep(2000);

uploadFile("D:\\Practise\\TestFile.txt");

// Hw : use actions class , enter file name and press enter

// 3 AutoIT tool

}

}

auto It :

package FileUploading;

import java.awt.AWTException;

import java.awt.Robot;

import java.awt.Toolkit;

import java.awt.datatransfer.StringSelection;

import java.awt.event.KeyEvent;

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.interactions.Actions;

public class SimpleFileUploadingAutoIT {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// 1. file uplaoding

// driver.findElement(By.name("uploadname")).sendKeys("D:\\Practise\\TestFile.txt");

// 2. using Robot -- through keyboard

//driver.findElement(By.id("fileid")).click();// nok

WebElement chooseFileBtn= driver.findElement(By.id("fileid"));

Actions act = new Actions(driver);

act.click(chooseFileBtn).perform();

Thread.sleep(2000);

uploadFile("D:\\Practise\\TestFile.txt");

// Hw : use actions class , enter file name and press enter

// 3 AutoIT tool -- 3 rd party tool-

// by using this, we can automated windowd based componenets/ ccontrols

// winodws btn, windows text boox, .... b

// cannnot be inspected- rt clk > inpsect option is not there

// down load and install -- easy

// C:\Program Files (x86)\AutoIt3

// code : C:\Program Files (x86)\AutoIt3\SciTE\SciTE

// open editor:

// create new file and add code > Save

// autoIT -- file extension .au3

// Run("notepad.exe")

//

// WinWaitActive("Untitled - Notepad","",10)

// WinWaitActive(

//

// Send("This is notepad")

// WinClose("Untitled - Notepad")

//

// WinWaitActive("Notepad", "Save")

//

//

// ; alt + n - click no ! n ==

// Send("!n")

// ;open notepad File

// Run("notepad.exe")

// WinWait("Untitled - Notepad","",10)

// Send("this is Ram")

// WinClose("[CLASS:Notepad]","")

// ;click Dont save btn

// ;ControlClick("Notepad","","Button2")

//

// ;Click Save btn

// ControlClick("Notepad","","Button1")

// Complie code : Tools > complile > it creates .exe file

// dbl clk .exe file appl -- it runs the code

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

JAn 5 2021 3PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package FileUploading;

import java.awt.AWTException;

import java.awt.Robot;

import java.awt.Toolkit;

import java.awt.datatransfer.StringSelection;

import java.awt.event.KeyEvent;

import java.io.IOException;

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.interactions.Actions;

public class RunNotepadFileUsingAutoIT {

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

// To run .exe

Runtime.getRuntime().exec("D:\\SeleniumSoftwares\\AutoIT\\Sasi\\NotepadBasics1.exe");

}

}

uplaod file usng auto It:

package FileUploading;

import java.awt.AWTException;

import java.awt.Robot;

import java.awt.Toolkit;

import java.awt.datatransfer.StringSelection;

import java.awt.event.KeyEvent;

import java.io.IOException;

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.interactions.Actions;

public class SimpleFileUploadingAutoIT {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// 1. file uplaoding

// driver.findElement(By.name("uploadname")).sendKeys("D:\\Practise\\TestFile.txt");

// 2. using Robot -- through keyboard

//driver.findElement(By.id("fileid")).click();// nok

WebElement chooseFileBtn= driver.findElement(By.id("fileid"));

Actions act = new Actions(driver);

act.click(chooseFileBtn).perform();

//

//; wait for open title

//;WinActivate("title")

//;WinActivate("Open")

//

//;WinWaitActive("title","text", "timeout in sec")

//WinWaitActive("Open","", 10)

//

//

//; enter file in Filename textbox

//;ControlSetText("Title","text", "ctrlId", "new text")

//;ControlSetText("Open", "", "Edit1","E:\videos\Must Learn Sept 2020\Interview All notes\Selenium Preparation All notes\log 4j.txt")

//

//;ControlSend("Title","text", "ctrlId", "new text")

//ControlSend("Open", "", "Edit1","E:\videos\Must Learn Sept 2020\Interview All notes\Selenium Preparation All notes\log 4j.txt")

//

//;click open button

//;ControlClick"Title","text", "ctrlId")

//;cotrlId = Class +Instanace value

//ControlClick("Open","","Button1")

//Sleep(2000)

// To run .exe

Runtime.getRuntime().exec("D:\\SeleniumSoftwares\\AutoIT\\Sasi\\UploadFile.exe");

}

}

---------------

Revise:

1open note pad -- run("..exe")

wait for window -- winwaitactive("ttile", 2000) in milli sec

2. send data to notepad -- Send("This is ram")

3. close notepad -- winlcose --WinClose ( "title" [, "text"] )

4. clikc save button -- contolclick("ttitle", "text", "control")

-----------------

upload dile :

wait for active window or set focus on window

winwaitactive("ttile", 2000)

or ControlFocus("ttile", "text","controlid")

1. enter filePath -- ControlSetText("Title","text", "ctrlId", "Value to be entered")

2. clk open -- contolclick("tile", "text","ctrlId")

ctrlID= class + instance val

save

complile> Tools> compile >> creates .exe with the same name

Run .exe appl

RunTime.getRuntime().exec("....\.exe")

--------------------

Debugging :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package DebuggingBasics;

public class testA {

public int a=10;

public String ename="Ram";

public int add(int a, int b)

{

System.out.println("in add method");

int res= a+b;

System.out.println("res="+res);

res= a+b;

System.out.println("res="+res);

res= a+b;

System.out.println("res="+res);

res= a+b;

System.out.println("res="+res);

return res;

}

public int sub(int a, int b)

{

System.out.println("in sub method");

int res= a-b;

System.out.println("res="+res);

return res;

}

}

package DebuggingBasics;

public class testB {

public static void main(String[] args) {

testA tobj = new testA();

int a=10;

int b=20;

System.out.println("starts");

tobj.add(a,b);

System.out.println("after add method");

tobj.sub(4,2);

System.out.println("after sub method");

// step into :

// normal stmt- execute one stmt at a time and stops prog r execution in next line

// method -- goes to inside method and stops at fist line

// step over:

// normal stmt: execute one stmt at a time and stops prog r execution in next line

// method call: goes to method and executes all stmts line by line and stops next line

// step return: option is available when u r inside method;

// executes all the smts inside method line by line- and it comes out of the mthod and stops next stmt

// can we check variable value?

// varibles : we cann all variable name and values till the brk point

// expression: : we can enter some expresion a+b,, it gets evaluated..

// breakpoints: we can see all break points

}

}

--------------------------------------

auto suggestion names:

package AllWebElemens;

import java.util.ArrayList;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class AutoSuggestionBasics1 {

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

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

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

// type Rama

driver.findElement(By.name("q")).sendKeys("Rama");

Thread.sleep(3000);

// get all auto suggestion text count

List<WebElement> allAutoSugeestions= driver.findElements(By.xpath("//\*[@class='pcTkSc']"));

System.out.println("allAutoSugeestions cnt= "+allAutoSugeestions.size());

// get all auto suggestions text

for(WebElement Eachele : allAutoSugeestions)

{

System.out.println("get auto sug="+ Eachele.getText());

}

// allAutoSugeestions cnt= 11

// get auto sug=Srinivasa Ramanujan

// Indian mathematician

// get auto sug=Ramayana

// Indian television series

// get auto sug=Ramachandrapuram

// Town in India

// get auto sug=Ramappa Temple

// Hindu temple · Mulugu, Telangana

// get auto sug=Ramayana

// Verse by Valmiki

// get auto sug=Ramayana: The Legend of Prince Rama

// 1992 film

// get auto sug=ramayya vasthavayya naa songs

// get auto sug=Ramana Maharshi

// get auto sug=Ramanarayanam

// Hindu temple · Vizianagaram, Andhra Pradesh

// get auto sug=Ramachandra College of Engineering Eluru | RCEE

// College · Eluru, Andhra Pradesh

// get auto sug=

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Jan 6 2022 2PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

HW : install jenkins ....

sample Bank applocation:

https://www.globalsqa.com/angularJs-protractor/BankingProject/#/login

read all data from xl store into hashtable and use in the script:

public static Hashtable<String, String> readDatafromExcelStoreIntoHashTable(String filePath, String sheetName) throws EncryptedDocumentException, IOException

{

System.out.println("readDatafromExcelStoreIntoHashTable");

int RowsCnt= getRowsCnt(filePath, sheetName);

Hashtable<String, String> htable = new Hashtable<String, String>();

for(int i=1;i<= RowsCnt;i++)// 1 to 4

{

String Col1Data= readDataFromExcel(filePath, sheetName, i, 1);// 1,1 2,1 ,,3,1

String Col2Data= readDataFromExcel(filePath, sheetName, i, 2);// 1.2 , 2,2, ,3,2

System.out.println("Col1Data="+Col1Data + ", Col2Data="+Col2Data);

htable.put(Col1Data, Col2Data);

}

System.out.println("htable="+ htable);

return htable;

}

main:

Hashtable<String, String> empDataTable= readDatafromExcelStoreIntoHashTable(filePath, "CreateEmp");

// htable={employee=Ram, password=manager, empid=101, username=admin}

System.out.println("empDataTable="+empDataTable);

// get

System.out.println("get user="+empDataTable.get("username"));

System.out.println("get employee="+empDataTable.get("employee"));

System.out.println("get empid="+empDataTable.get("empid"));

// get user=admin

// get employee=Ram

// get empid=101

HW: get col1 all values into list obje and return list:

HW get col2 " " ""

------------------------------------------

static varible:

Refer:

https://www.javatpoint.com/static-keyword-in-java

package ExcelReader;

public class StaticVariabelBasics {

int eno;

String name="Ram";

static String CollegeName = "JNTU HYD"; // static var

public static void M1() // static ethod

{

System.out.println("in M1- static ");

}

public static void main(String[] args) {

StaticVariabelBasics stobj= new StaticVariabelBasics();

System.out.println("eno=" +stobj.eno);

System.out.println("name=" +stobj.name);

// eno=0

// name=Ram

System.out.println("CollegeName=" +stobj.CollegeName);

stobj.CollegeName="Osmania";

StaticVariabelBasics stobj2= new StaticVariabelBasics();

// sttaic k/w

// it create only one copy in the menmory -- static area

// and it can be access across all objects -

System.out.println("CollegeName=" +stobj2.CollegeName);

/// save memory

// obj - gets created heap area

System.out.println("CollegeName=" +stobj.CollegeName);

// statci var can be accessed using classname.statsi var

//

System.out.println("CollegeName using class name="+StaticVariabelBasics.CollegeName);

// CollegeName=JNTU HYD

// CollegeName=Osmania

// CollegeName=Osmania

// CollegeName using class name=Osmania

// can we use static var in statoc mehod directly? yes

System.out.println("static var in static metod="+CollegeName);

// call static methods

// 1.obj

// 2. class name

// 3.directly use in static metohd

stobj.M1();

StaticVariabelBasics.M1();

M1();

}

}

1.

static

{

System.out.println("in static block");

}

gets excuted before main()

when to use static : common name or comoon val needs to be used across multiple objects..

create only once copy in the memory and needs to be shared across all objects....

ex: student s1 = new Student();

student s2 = new Student();

student s3 = new Student();

sttaic String Collegname= "JNTu"

---------------------------

Jan 7 2021 6PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

HW:

POM: extent report use in test case ---- > done

tets base ----> Done

- pages level --> done

, log msgs

in test case ---- > done

tets base ----> Done

- pages level --> done

package Utilities;

import java.util.Date;

import org.testng.ITestContext;

import org.testng.ITestListener;

import org.testng.ITestResult;

import com.relevantcodes.extentreports.ExtentReports;

import com.relevantcodes.extentreports.ExtentTest;

import com.relevantcodes.extentreports.LogStatus;

public class ListenersTest implements ITestListener

{

// genreate report file name only once

public static ExtentReports exReports;

public static ExtentTest exTest;

static Date d = new Date();

public static String fileName = "Extent\_" + d.toString().replace(":", "\_").replace(" ", "\_") + ".html";

public void onStart(ITestContext context) {

System.out.println("on Start");

// TODO Auto-generated method stub

//Mon Jan 03 16:12:46 IST 2022.html

Date d= new Date();

System.out.println("da="+ d.toString().replace(":", "\_").replace(" ", "\_"));

// Mon Jan 03 1\_12\_46 IST 2022.html

//Mon\_Jan\_03\_1\_12\_46\_IST\_2022.html

// String fileName= "D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\MyExtentReports\\MyhtmlExtentReports" +d.toString().replace(":", "\_").replace(" ", "\_")+ ".html";

// MyhtmlExtentReportsMon\_Jan\_03\_16\_16\_19\_IST\_2022.html

System.out.println("Report File path= "+fileName);

exReports = new ExtentReports(fileName);

// gets executed only once - so res file willl be genearetd only once

//

}

public void onTestStart(ITestResult result) {

// gets exuted

// exTest= exReports.startTest("TC1: testA");

// get test case name

String TCName= result.getName();

System.out.println("before startTest: " +TCName + ",exTest="+exTest);

exTest= exReports.startTest(TCName);

System.out.println("after startTest: " +TCName + ",exTest="+exTest);

}

public void onFinish(ITestContext context) {

// TODO Auto-generated method stub

exReports.endTest(exTest);

exReports.flush();

}

public void onTestFailure(ITestResult result) {

// TODO Auto-generated method stub

}

public void onTestSkipped(ITestResult result) {

// TODO Auto-generated method stub

}

public void onTestSuccess(ITestResult result) {

}

public void onTestFailedButWithinSuccessPercentage(ITestResult result) {

// TODO Auto-generated method stub

}

public static void extentLog\_Pass(String msg)

{

exTest.log(LogStatus.PASS, msg);

}

public static void extentLog\_Fail(String msg)

{

exTest.log(LogStatus.FAIL, msg);

}

}

-------------------

package Utilities;

import org.apache.log4j.Logger;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import com.relevantcodes.extentreports.ExtentTest;

import com.relevantcodes.extentreports.LogStatus;

import com.relevantcodes.extentreports.model.Log;

public class TestBase extends ListenersTest

{

// add extent report

// public ExtentTest extest;// null

// add log4j class

public static Logger log =Logger.getLogger("devpinoyLogger");

// Browser common/ generic methods

public static WebDriver openBrowser()

{

// how get / acces extetes obj in current clas

// ListenersTest li = new ListenersTest();

// li.exTest.log(LogStatus.PASS, "I am in open browser");

//way2:

exTest.log(LogStatus.PASS, "I m ain open browser");

log.info("I m ain open browser");

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// run time we can download

WebDriver driver = new ChromeDriver();// open chrome browser

System.out.println("extest="+exTest);

exTest.log(LogStatus.PASS, "Open chrome browser");

log.info("Open chrome browser");

System.out.println("Open chrome browser");

String url= "https://opensource-demo.orangehrmlive.com/";

exTest.log(LogStatus.PASS, "Open url="+ url);

log.info("Open url="+ url);

driver.get(url);

return driver;

}

// textbox : enter, clear, getval from

// eX:

public void enter\_Val\_InTextbox(String Myxpath, String ValueToBeEntered)

{

try

{

exTest.log(LogStatus.PASS, "enter\_Val\_InTextbox ="+ValueToBeEntered );

}

catch (Exception e) {

exTest.log(LogStatus.FAIL, "Failed.not able to enter vale in text box.Could you please check xpath="+Myxpath);

}

}

public void enter\_Val\_InTextbox(WebElement textboxEle, String ValueToBeEntered)

{

}

public void Clear\_Val\_InTextbox(WebElement textboxEle, String ValueToBeEntered)

{

}

public void get\_Val\_From\_Textbox(WebElement textboxEle, String ValueToBeEntered)

{

}

// button

// checkbox

// Dropdown : sleect dropdown val

// Link

// Images

// ..... etc

// call Extent reporrts msh

}

-----------------------

package AllPages;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

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

import com.relevantcodes.extentreports.LogStatus;

import Utilities.ListenersTest;

import Utilities.TestBase;

public class LoginPage extends TestBase

{

ListenersTest li = new ListenersTest();

public WebDriver driver;

// 1. define elemnsts with locatos

@FindBy(name="txtUsername")

public WebElement username\_Textboox;

@FindBy(id="txtPassword")

public WebElement pwd\_Textboox;

@FindBy(xpath="//input[@name='Submit']")

public WebElement loginBtn;

@FindBy(id="welcome")

public WebElement WelcomeMsg;

//2 intilaise element // constr

public LoginPage(WebDriver driver)

{

PageFactory.initElements(driver, this);

// PageFactory.initElements(driver, LoginPage.class);

}

//3 .. use all elemsnt in methods

public void enter\_userName(String user)

{

// driver.findElement(null).sendKeys("");// dont neeed to write driver.findEleemnt()

System.out.println("enter\_userName ="+user);

System.out.println("driver="+driver + ",username\_Textboox="+username\_Textboox);

// exTest.log(LogStatus.PASS, "enter\_userName ="+user);

extentLog\_Pass("enter\_userName ="+user);

log.info("enter\_userName ="+user);

// driver=null,username\_Textboox=null

username\_Textboox.sendKeys(user);

// enter\_Val\_InTextbox(user, user);

// Exception in thread "main" java.lang.NullPointerException: Cannot invoke "org.openqa.selenium.WebElement.sendKeys(java.lang.CharSequence[])"

//because "this.username\_Textboox" is null

}

public void enter\_password(String pwd)

{

System.out.println("enter\_password ="+pwd);

log.info("enter\_password ="+pwd);

// ListenersTest li = new ListenersTest();

// li.exTest.log(LogStatus.PASS,"enter\_password ="+pwd);

extentLog\_Pass("enter\_password ="+pwd);

pwd\_Textboox.sendKeys(pwd);

}

public void click\_Login()

{

System.out.println("click\_Login");

// ListenersTest li = new ListenersTest(); // dont create obj again again ..create in class level

// li.exTest.log(LogStatus.PASS, "click\_Login");

extentLog\_Pass("click\_Login =");

loginBtn.click();

}

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Method Name : LogintoOrangeHRMSAppl

// Arguments :

// Return Type : void

// Author : Brahma

//

// Modfied Date :

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

public void logintoOrangeHRMSAppl(String user,String pwd)

{

enter\_userName(user);

enter\_password(pwd);

click\_Login();

// WebDriverWait wait = new webdri

if(WelcomeMsg.isDisplayed()) // no such ele

{

System.out.println("Login is successfull for user="+user);

extentLog\_Pass("Login is successfull");

}

else

{

System.out.println("Login is not successfull");

extentLog\_Fail("Login is not successfull for user="+user);

}

}

}

-----------------

package AllPages;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

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

import org.openqa.selenium.support.ui.Select;

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

import Utilities.TestBase;

public class HomePage extends TestBase

{

public static WebDriver driver;

// 1 Define elemenst

@FindBy(xpath="//\*[@id=\"menu\_admin\_viewAdminModule\"]")

public WebElement admin\_Tab;

@FindBy(css ="#menu\_admin\_UserManagement")

public WebElement UserManagementLink;

@FindBy(id ="menu\_admin\_viewSystemUsers")

public WebElement usersList;

@FindBy(id="searchSystemUser\_userName")

public WebElement UsernameSearchboxEle;

@FindBy(id="btnAdd")

public WebElement AddBtn;

@FindBy(id="systemUser\_userType")

public WebElement userRole\_Dropdown;

@FindBy(id="systemUser\_employeeName\_empName")

public WebElement employeeName\_Textbox;

@FindBy(id="systemUser\_userName")

public WebElement Username\_Textbox;

@FindBy(id="systemUser\_status")

public WebElement Status\_Dropdown;

@FindBy(id="systemUser\_password")

public WebElement Password\_Textbox;

@FindBy(id="systemUser\_confirmPassword")

public WebElement ConfirmPassword\_Textbox;

@FindBy(id="btnSave")

public WebElement SaveBtn;

@FindBy(id="btnDelete")

public WebElement deleteBtn;

@FindBy(id="dialogDeleteBtn")

public WebElement OKBtnDeleteRecords;

//2 initiall all lee -- const

public HomePage(WebDriver driver1)

{

PageFactory.initElements(driver1, this);

this.driver=driver1;

}

//3 use all those eleents in methods

public void mouse\_Over\_AdminTab()

{

System.out.println("mouse\_Over\_AdminTab");

System.out.println("driver ="+driver);

extentLog\_Pass("mouse\_Over\_AdminTab");

log.info("mouse\_Over\_AdminTab");

Actions act = new Actions(driver);

act.moveToElement(admin\_Tab).perform();

act.moveToElement(UserManagementLink).perform();

extentLog\_Pass("click usersList");

usersList.click();

if(UsernameSearchboxEle.isDisplayed())

{

System.out.println("User page is displayed");

extentLog\_Pass("User page is displayed");

}

else

{

System.out.println("Users page is not displayed");

extentLog\_Fail("Users page is not displayed");

}

}

public void create\_New\_User(String emplName,String userName) throws InterruptedException

{

System.out.println("Click add btn");

extentLog\_Pass("Click add btn");

AddBtn.click();

System.out.println("Select user role");

extentLog\_Pass("Select user role");

Select sel = new Select(userRole\_Dropdown);

sel.selectByVisibleText("Admin");

System.out.println("enter employee name");

extentLog\_Pass("enter employee name");

employeeName\_Textbox.sendKeys(emplName);

System.out.println("enter user name="+userName);

extentLog\_Pass("enter user name="+userName);

Username\_Textbox.sendKeys(userName);

Select sel2 = new Select(Status\_Dropdown);

sel2.selectByVisibleText("Enabled");

userName=userName+"@123321" ;

extentLog\_Pass("enter user name="+userName);

Password\_Textbox.sendKeys(userName);

ConfirmPassword\_Textbox.sendKeys(userName);

Thread.sleep(3000);

//SaveBtn.click();

Actions act = new Actions(driver);

act.click(SaveBtn).perform();

// wait for data to be visible

WebDriverWait wait = new WebDriverWait(driver, 20);

String myxpath= "//table[@id='resultTable']//td/a[text()='"+ userName +"']";

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath(myxpath)));

System.out.println("Verify user is exist in table or not");

if(driver.findElement(By.xpath(myxpath)).isDisplayed())

{

System.out.println("User=" + userName+ " created ");

extentLog\_Pass("User=" + userName+ " created ");

}

else

{

System.out.println("User=" + userName+ " is not created ");

extentLog\_Fail("User=" + userName+ " is not created ");

}

}

public void delete\_User(String user)

{

String myxpath ="//table[@id='resultTable']//td/a[text()='" + user +"']/../preceding-sibling::td/input";

driver.findElement(By.xpath(myxpath)).click();

deleteBtn.click();

OKBtnDeleteRecords.click();

// Successfully Deleted

// verify user is delete or not

String userXpath= "//table[@id='resultTable']//td/a[text()='"+ user +"']";

// if(driver.findElement(By.xpath(userXpath)).isDisplayed()) // exeption

// {

// System.out.println("Fail.User=" + user+ " is exist in table ");

// }

// else

// {

// System.out.println("Pass.User=" + user+ " is not exist in table ");

// }

// try

// {

// driver.findElement(By.xpath(userXpath)).isDisplayed();

// System.out.println("Fail.User=" + user+ " is exist in table ");

//

// }

// catch (Exception e) {

// System.out.println("Pass.User=" + user+ " is not exist in table ");

// }

// using cnt

int cnt= driver.findElements(By.xpath(userXpath)).size();// 0 or 1

if(cnt ==0 )

{

System.out.println("Pass.User=" + user+ " is not exist in table ");

}

else

{

System.out.println("Fail.User=" + user+ " is exist in table ");

}

}

// HW: is\_User\_Exist\_UseraTable()

// Hw1: is\_User\_Not\_Exist\_UseraTable()

// HW: Search

public void search\_Valid\_User()

{

}

// HW:

public void search\_InValid\_User()

{

}

// HW : add job title

public void createNewJobTitle()

{

}

// Hw: open given job

}

---------------

package AllTestCases;

import org.openqa.selenium.WebDriver;

import org.testng.annotations.Test;

import AllPages.LoginPage;

import Utilities.TestBase;

public class LoginTC01 extends TestBase

{

@Test

public void loginTC01()

{

extentLog\_Pass("loginTC01 started execution ");

log.info("loginTC01 started execution ");

// public static void main(String[] args) {

// System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe");

// // run time we can download

// WebDriver driver1 = new ChromeDriver();// open chrome browser

//

// driver1.get("https://opensource-demo.orangehrmlive.com/");

// TestBase tb= new TestBase();

// WebDriver driver =tb.openBrowser();

// 2nd way use inheritance call openBrowser

extentLog\_Pass("Step1:open browser");

WebDriver driver = openBrowser();

// // enter user

// LoginPage loginPage= new LoginPage(driver);

// loginPage.enter\_userName("Admin");

// // enter pwd

// loginPage.enter\_password("admin123");

// // lcick login

// loginPage.click\_Login();

// optimise code

LoginPage loginPage= new LoginPage(driver);

extentLog\_Pass("logintoOrangeHRMSAppl");

loginPage.logintoOrangeHRMSAppl("Admin", "admin123");

extentLog\_Pass("loginTC01 is executed successfully");

log.info("loginTC01 is executed successfully");

}

}

---------------

package AllPages;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.FindBy;

import org.openqa.selenium.support.PageFactory;

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

import org.openqa.selenium.support.ui.Select;

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

import Utilities.TestBase;

public class HomePage extends TestBase

{

public static WebDriver driver;

// 1 Define elemenst

@FindBy(xpath="//\*[@id=\"menu\_admin\_viewAdminModule\"]")

public WebElement admin\_Tab;

@FindBy(css ="#menu\_admin\_UserManagement")

public WebElement UserManagementLink;

@FindBy(id ="menu\_admin\_viewSystemUsers")

public WebElement usersList;

@FindBy(id="searchSystemUser\_userName")

public WebElement UsernameSearchboxEle;

@FindBy(id="btnAdd")

public WebElement AddBtn;

@FindBy(id="systemUser\_userType")

public WebElement userRole\_Dropdown;

@FindBy(id="systemUser\_employeeName\_empName")

public WebElement employeeName\_Textbox;

@FindBy(id="systemUser\_userName")

public WebElement Username\_Textbox;

@FindBy(id="systemUser\_status")

public WebElement Status\_Dropdown;

@FindBy(id="systemUser\_password")

public WebElement Password\_Textbox;

@FindBy(id="systemUser\_confirmPassword")

public WebElement ConfirmPassword\_Textbox;

@FindBy(id="btnSave")

public WebElement SaveBtn;

@FindBy(id="btnDelete")

public WebElement deleteBtn;

@FindBy(id="dialogDeleteBtn")

public WebElement OKBtnDeleteRecords;

//2 initiall all lee -- const

public HomePage(WebDriver driver1)

{

PageFactory.initElements(driver1, this);

this.driver=driver1;

}

//3 use all those eleents in methods

public void mouse\_Over\_AdminTab()

{

System.out.println("mouse\_Over\_AdminTab");

System.out.println("driver ="+driver);

extentLog\_Pass("mouse\_Over\_AdminTab");

log.info("mouse\_Over\_AdminTab");

Actions act = new Actions(driver);

act.moveToElement(admin\_Tab).perform();

act.moveToElement(UserManagementLink).perform();

extentLog\_Pass("click usersList");

usersList.click();

if(UsernameSearchboxEle.isDisplayed())

{

System.out.println("User page is displayed");

extentLog\_Pass("User page is displayed");

}

else

{

System.out.println("Users page is not displayed");

extentLog\_Fail("Users page is not displayed");

}

}

public void create\_New\_User(String emplName,String userName) throws InterruptedException

{

System.out.println("Click add btn");

extentLog\_Pass("Click add btn");

AddBtn.click();

System.out.println("Select user role");

extentLog\_Pass("Select user role");

Select sel = new Select(userRole\_Dropdown);

sel.selectByVisibleText("Admin");

System.out.println("enter employee name");

extentLog\_Pass("enter employee name");

employeeName\_Textbox.sendKeys(emplName);

System.out.println("enter user name="+userName);

extentLog\_Pass("enter user name="+userName);

Username\_Textbox.sendKeys(userName);

Select sel2 = new Select(Status\_Dropdown);

sel2.selectByVisibleText("Enabled");

userName=userName+"@123321" ;

extentLog\_Pass("enter user name="+userName);

Password\_Textbox.sendKeys(userName);

ConfirmPassword\_Textbox.sendKeys(userName);

Thread.sleep(3000);

//SaveBtn.click();

Actions act = new Actions(driver);

act.click(SaveBtn).perform();

// wait for data to be visible

WebDriverWait wait = new WebDriverWait(driver, 20);

String myxpath= "//table[@id='resultTable']//td/a[text()='"+ userName +"']";

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath(myxpath)));

System.out.println("Verify user is exist in table or not");

if(driver.findElement(By.xpath(myxpath)).isDisplayed())

{

System.out.println("User=" + userName+ " created ");

extentLog\_Pass("User=" + userName+ " created ");

}

else

{

System.out.println("User=" + userName+ " is not created ");

extentLog\_Fail("User=" + userName+ " is not created ");

}

}

public void delete\_User(String user)

{

String myxpath ="//table[@id='resultTable']//td/a[text()='" + user +"']/../preceding-sibling::td/input";

driver.findElement(By.xpath(myxpath)).click();

deleteBtn.click();

OKBtnDeleteRecords.click();

// Successfully Deleted

// verify user is delete or not

String userXpath= "//table[@id='resultTable']//td/a[text()='"+ user +"']";

// if(driver.findElement(By.xpath(userXpath)).isDisplayed()) // exeption

// {

// System.out.println("Fail.User=" + user+ " is exist in table ");

// }

// else

// {

// System.out.println("Pass.User=" + user+ " is not exist in table ");

// }

// try

// {

// driver.findElement(By.xpath(userXpath)).isDisplayed();

// System.out.println("Fail.User=" + user+ " is exist in table ");

//

// }

// catch (Exception e) {

// System.out.println("Pass.User=" + user+ " is not exist in table ");

// }

// using cnt

int cnt= driver.findElements(By.xpath(userXpath)).size();// 0 or 1

if(cnt ==0 )

{

System.out.println("Pass.User=" + user+ " is not exist in table ");

}

else

{

System.out.println("Fail.User=" + user+ " is exist in table ");

}

}

// HW: is\_User\_Exist\_UseraTable()

// Hw1: is\_User\_Not\_Exist\_UseraTable()

// HW: Search

public void search\_Valid\_User()

{

}

// HW:

public void search\_InValid\_User()

{

}

// HW : add job title

public void createNewJobTitle()

{

}

// Hw: open given job

}

----------------------------------

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<listeners>

<listener class-name="Utilities.ListenersTest"></listener>

</listeners>

<test thread-count="5" name="Test">

<classes>

<class name="AllTestCases.LoginTC01"/>

<class name="AllTestCases.HomePageNavigationTC02"/>

<!-- <class name="AllTestCases.CreateNewEmployeeTC03"/> -->

</classes>

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

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

--------------------------------------

Downloads: Fiefox. chrome , IE

package DownloadFileBasics;

import java.util.HashMap;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;

import org.openqa.selenium.JavascriptException;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.chrome.ChromeOptions;

import org.openqa.selenium.interactions.Actions;

public class DownloadFilesInChrome {

public static void main(String[] args) {

// HashMap<String, Object> hm = new HashMap<String, Object>();

// hm.put("profile.default\_content\_settings.popups", 0);

// hm.put("download.default\_directory", System.getProperty("user.dir"));

//

// System.out.println("downloads folder="+System.getProperty("user.dir"));

//

// ChromeOptions options = new ChromeOptions();

// options.setExperimentalOption("prefs", hm);

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

// WebDriver driver = new ChromeDriver(options);

WebDriver driver = new ChromeDriver();

driver.get("https://www.w3schools.com/howto/tryit.asp?filename=tryhow\_html\_download\_link2");

driver.manage().timeouts().implicitlyWait(5, TimeUnit.SECONDS);

// driver.findElement(By.xpath("//\*[@alt='W3Schools']")).click();/// nok

driver.switchTo().frame("iframeResult");

WebElement ele= driver.findElement(By.xpath("//\*[@alt='W3Schools']"));

Actions act = new Actions(driver);

act.click(ele).perform();// nok

// act.doubleClick(ele).perform();

JavascriptExecutor js = (JavascriptExecutor)driver;

// js.executeScript("arguments[0].click();", ele);

System.out.println("ends");

// HW firefox

//HW: IE

}

}

------------------------------------ 7:3o pm

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Jan 10 2022 3PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

package DownloadFiles;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.firefox.FirefoxOptions;

import org.openqa.selenium.ie.InternetExplorerOptions;

import org.openqa.selenium.interactions.Actions;

import io.github.bonigarcia.wdm.WebDriverManager;

//import io.github.bonigarcia.wdm.WebDriverManager;

public class DownloadFilesInChrome {

public static void main(String[] args) {

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

//

// HashMap<String, Object> hm= new HashMap<String, Object>();

// hm.put("profile.default\_content\_settings.popups", 0);

// hm.put("download.default\_directory", "D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\src\\test\\resources\\AllDownloads");

//

//

// ChromeOptions choptions = new ChromeOptions();

// choptions.setExperimentalOption("prefs", hm);

//

// // pass chromoptin obj to chromedriver

// WebDriver driver= new ChromeDriver(choptions);

//

// driver.get("https://www.w3schools.com/howto/tryit.asp?filename=tryhow\_html\_download\_link2");

// //

// driver.manage().timeouts().implicitlyWait(5, TimeUnit.SECONDS);

// // driver.findElement(By.xpath("//\*[@alt='W3Schools']")).click();/// nok

// //

// driver.switchTo().frame("iframeResult");

// WebElement ele= driver.findElement(By.xpath("//\*[@alt='W3Schools']"));

// Actions act = new Actions(driver);

// act.click(ele).perform();// ok

// // verify file is exist or not

// File f = new File("D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiMavenProject\\src\\test\\resources\\AllDownloads\\w3logo.jpg");

//

// boolean isFileExist= f.exists();

// System.out.println("isFileExist="+isFileExist);//

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// HW firefox very old code - may no work

// to view firefox browser seting > about:connfig

// old code

// FirefoxProfile profile = new FirefoxProfile();

//to down load set =2

// profile.setPreference("browser.download.folderList", 2);

//to which dir, u want to download

// profile.setPreference("browser.download.dir","D:\\test");

//dont ask em where to download, u wont get any dialog box. it downloads directly rsp folder

// "application/msword,application/x-rar-compressed,application/octet-stream,application/csv,text/csv");

// profile.setPreference("browser.helperApps.neverAsk.saveToDisk", "application/msword,application/x-rar-compressed,application/octet-stream,application/csv,text/csv");

//chk by going praremters...we can't see .to chk values are updated..

// MIME :Multipurpose Internet Mail Extensions (MIME)

// A MIME type is a label used to identify a type of data. It is used so software can know how to handle the data. It serves the same purpose on the Internet that file extensions do on Microsoft Windows.

// So if a server says "This is text/html" the client can go "Ah, this is an HTML document,

// .txt Text, (generally ASCII or ISO 8859-n) text/plain

// .csv Comma-separated values (CSV) text/csv

// .doc Microsoft Word application/msword

// .docx Microsoft Word (OpenXML) application/vnd.openxmlformats-officedocument.wordprocessingml.document

// .jar Java Archive (JAR) application/java-archive

// .xml XML application/xml

// .avi AVI: Audio Video Interleave video/x-msvideo

// .bmp Windows OS/2 Bitmap Graphics image/bmp

// .jpeg .jpg JPEG images image/jpeg

//

// WebDriverManager.firefoxdriver().setup();

// MIME-Multipurpose Internet Mail Extensions

// WebDriver driver2 = new FirefoxDriver(profile);// old veriosn

// error

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

WebDriverManager.firefoxdriver().setup();

// instance of FirefoxOptions class

FirefoxOptions ffOptions = new FirefoxOptions();

// adding browser preferences with addPreference method profile.addPreference("browser.download.folderList", 2);

// location of downloaded file

//to down load set =2//

ffOptions.addPreference("browser.download.folderList", 2);

ffOptions.addPreference("browser.download.dir", "D:\\Practise\\Download FromSelenium");

// ffOptions.addPreference("browser.helperApps.neverAsk.openFile", "text/csv,application/x-msexcel,application/excel," + "application/x-excel,application/vnd.ms-excel," + "image/png,image/jpeg,text/html,text/plain," + "application/msword,application/xml");

// even if u dont write also ,, works fine

ffOptions.addPreference("browser.helperApps.neverAsk.saveToDisk", "text/csv,application/x-msexcel," + "application/excel," + "application/x-excel," +"application/vnd.ms excel,image/png,image/jpeg,text/html," +"text/plain,application/msword,application/xml");

//

// // connecting browser options to webdriver

WebDriver driver2 = new FirefoxDriver(ffOptions);

//

driver2.get("https://www.w3schools.com/howto/tryit.asp?filename=tryhow\_html\_download\_link2");

//

driver2.manage().timeouts().implicitlyWait(5, TimeUnit.SECONDS);

driver2.switchTo().frame("iframeResult");

WebElement ele= driver2.findElement(By.xpath("//\*[@alt='W3Schools']"));

Actions act = new Actions(driver2);

act.click(ele).perform();

//

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//HW: IE

InternetExplorerOptions ieOptions = new InternetExplorerOptions();

//ieOptions.set

System.out.println("ends");

}

}

Down laod fie : file , file locations

aplly setting to browser

hashmpa<String , object>

hm = new hashmpa<String , object>()(;

hm.put("content.setting ppups",0)

hm.put("downlaods.defaultdirectoy" , " Download location")

chromeoptions choption = new ch();

ch.setExperimentalOption("prefs", hm)

-------

FirefoxOptions options ffOptions = new FirefoxOptions();

ffOptions.addPreference("browser.download.folder", 2)

ffOptions.addPreference("browser.download.dir", "download location")

ffOptions.addPreference("browser.helperApps.neverAsk.saveToDisk", " MIME type ")

text -- text/plain

csv text/csv

doc -- application/msword

.jar - applications/ java-archive

xml /xml

jpg image.jpeg

bmp / image/bmp

-----------------

certificate error/ SSL certificate : in all browsers:

ceriticate eror : if website is not secured one, we will get certifictae error.

how to know website is secured or not : hhttps://

secured.

SSL Certificate :

SSL (Secure Sockets Layer) is a standard security protocol for establishing a secure connection between the server and the client which is a browser.

SSL (Secure Socket Layer) Certificate ensures secure transformation of data across the server and client application using strong encryption standard or digital signature. One has to install an SSL certificate or a code signing certificate

if open un trusted websirtes: we will error :

This website is untrused.

This website does not ahve SSL certificate.

Do you want me to proceed ..

package DownloadFiles;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.chrome.ChromeOptions;

import org.openqa.selenium.firefox.FirefoxOptions;

import org.openqa.selenium.ie.InternetExplorerOptions;

import org.openqa.selenium.remote.CapabilityType;

import org.openqa.selenium.remote.DesiredCapabilities;

public class HandlingSSLCertificateError {

public static void main(String[] args) {

// TODO Auto-generated method stub

// System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

// //

// WebDriver driver = new ChromeDriver();

// driver.get("https://expired.badssl.com/");

// String getTitle=driver.getTitle();

// System.out.println("getTitle="+getTitle);

// //getTitle=Privacy error

// //Your connection is not private

// //Attackers might be trying to steal your information from expired.badssl.com

// //(for example, passwords, messages, or credit cards)

//

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// handing SSL in chrome:

// System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

////

//// // Create the object of DesiredCapabilities class using chrome

// DesiredCapabilities capability=DesiredCapabilities.chrome();

////

//// // Set ACCEPT\_SSL\_CERTS variable to true

// capability.setCapability(CapabilityType.ACCEPT\_SSL\_CERTS, true);

////

////

// WebDriver driver=new ChromeDriver(capability);

// driver.get("https://expired.badssl.com/"); //Care":???? not handled..

// // getting SSL erro getTitle=Privacy error

// String getTitle=driver.getTitle();

// System.out.println("getTitle="+getTitle);;

//

// way2: prev code is not working --

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\All Selenium Jar Files\\chromedriver\_win32V96\\chromedriver.exe"); //

ChromeOptions chOptions = new ChromeOptions();

chOptions.setAcceptInsecureCerts(true);

WebDriver driver = new ChromeDriver(chOptions);

driver.get("https://expired.badssl.com/");

// SSL certificcate error got handled

//

String getTitle=driver.getTitle();

System.out.println("getTitle="+getTitle);

//getTitle=expired.badssl.com

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//HW: firefox

FirefoxOptions ffOptions = new FirefoxOptions();

//HW IE:

// InternetExplorerOptions

}

}

FAQ: how do u handle certificate Erro / SSL certificate error?

chromeoptions

setAcceptInsecureCerts(true)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 5:20 Pm

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Jan 21 20222 9 PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Password Encoding in selenium:

package DownloadFiles;

import org.apache.commons.codec.binary.Base64;

public class PasswordEncodingDecoding {

public static void main(String[] args) {

// TODO Auto-generated method stub

// String orig = "temp@1234";

//

// //encoding byte array into base 64

// byte[] encoded = Base64.encodeBase64(orig.getBytes());

//

//

// System.out.println("Original String: " + orig );

// System.out.println("Base64 Encoded String : " + new String(encoded));

//

// //decoding byte array into base64

// byte[] decoded = Base64.decodeBase64(encoded);

// System.out.println("Base 64 Decoded String : " + new String(decoded));

//

//// Original String: temp@1234

//// Base64 Encoded String : dGVtcEAxMjM0

//// Base 64 Decoded String : temp@1234

String origPWd= "password";

// encode pwd

byte[] encodeArr= Base64.encodeBase64(origPWd.getBytes());

String encodeString = new String ( encodeArr);

System.out.println(" encodeString="+ encodeString); // dGVtcEAxMjM0

// decode

byte[] decodeArr= Base64.decodeBase64(encodeArr);

String decodeString =new String (decodeArr);

System.out.println("decodeString="+decodeString);

// Revision:

// encoding -- base64

// / decodeBase64

}

}

-----------------------------------------

Jan 22 3PM

-----------------

cookies handling : --Done

what is cookie ?

refer in chrome

firefox :

package DownloadFiles;

import java.util.Set;

import org.apache.commons.codec.binary.Base64;

import org.openqa.selenium.Cookie;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.chrome.ChromeOptions;

public class CookiesHanlding {

public static void main(String[] args) {

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\Alldrivers\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver = new ChromeDriver();

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

// get cookies name . value...

Set<Cookie> getCookies= driver.manage().getCookies();

// HW get all cookies count ?

// get val from set var

for(Cookie eachCookie : getCookies)

{

// name

String cookieName = eachCookie.getName();

// value

String cookieValue = eachCookie.getValue();

System.out.println("cookieName="+cookieName + ",cookie Vlaue="+cookieValue);

// get path

// HW get expiry date

// HW get domain

// Hw is secured

}

// cookieName=ud\_cache\_campaign\_code,cookie Vlaue=INDIANEWLEARNER

// cookieName=ud\_cache\_brand,cookie Vlaue=INen\_US

// cookieName=ud\_cache\_price\_country,cookie Vlaue=IN

// cookieName=\_\_cfruid,cookie Vlaue=356d013675de11ba976e3481a710e6cb21303547-1642782330

// cookieName=ud\_cache\_language,cookie Vlaue=en

// cookieName=ud\_firstvisit,cookie Vlaue=2022-01-21T16:25:29.531997+00:00:1nAwjC:GRSyTDImAbYqOwsomVkp8rFgLAY

// cookieName=\_\_cf\_bm,cookie Vlaue=SeoHpax91O5dYiJCUAVO6UXoRY3AOH7HxjEdSNufrzU-1642782335-0-AQ5IaxdW/Hfqvmy21cbJMJU5Ntb3+lHFI7gEmwNg2BnqQwf14wgavAHafbo9WONW2z19AwBNWE3+MTkj6lvz8KcZmLD8Vj5ZxgNqkRmcFNvCEgJjWz45bTL/5ZFcFekfGyjcVbaw0PW49LDSpAEs+c9TTGwpRjDQKqgeWYWfRxz/pzA5SR77PiQhGeTHx1Itqg==

// cookieName=ud\_cache\_device,cookie Vlaue=None

// cookieName=ud\_rule\_vars,cookie Vlaue=eJx9jcsOgyAQRX\_FsG01A-IDvsWEDIiW1JR0QDfGf69J26Srbm\_uOWdnGWn22Y9mCynkSLqFvpZe2oarWgL2dup652BE2Vtec6VdjPfgmS7YPrApUMpv1oyY\_XDuAxMgRAm8FLzgrRaNFqpqRNu14gKgAQZ2PV8LnmiOq7uZTDhNwZkUV3LebEgB7fKxRZrxEdwPRP65-vS3WEMFkiulvsWDHS9-gUef:1nAwjC:jGstOZpOi9eN--zsIIgJNfMKPsM

// cookieName=ud\_cache\_modern\_browser,cookie Vlaue=1

// cookieName=\_\_udmy\_2\_v57r,cookie Vlaue=60834e4b519340a8bf78cc0da48b1319

// cookieName=seen,cookie Vlaue=1

// cookieName=ud\_cache\_marketplace\_country,cookie Vlaue=IN

// cookieName=ud\_cache\_logged\_in,cookie Vlaue=0

// cookieName=\_\_udmy\_1\_a12z\_c24t,cookie Vlaue=VGhlIGFuc3dlciB0byBsaWZlLCB0aGUgdW5pdmVyc2UsIGFuZCBldmVyeXRoaW5nIGlzIDQy

// cookieName=ud\_cache\_user,cookie Vlaue=""

// cookieName=evi,cookie Vlaue="3@qCbhFJJmdW7Hu6IlbdKjGbc61Ks7dqXv6YpdFkeE6l5iE1EOeeiy2Ui8jwcjp9fnkRg0llMxbpov1opyJNEGWmjoRiwRXemlVEATXYqzOYPQGq9sCyhrRE47VqnqKx8Lt9s="

// cookieName=ud\_cache\_release,cookie Vlaue=414fcb435404edaed81f

// cookieName=csrftoken,cookie Vlaue=9eEZ5VfIIBUc8c7zgxxuqvUCSpUzF863ZkfpUXZqSerGkKJ1CFzPFia7npwVMbwY

// cookieName=ud\_cache\_version,cookie Vlaue=1

// deleet all cookies

driver.manage().deleteAllCookies();

getCookies= driver.manage().getCookies();

System.out.println("cookies cnt="+ getCookies.size());

// deleet cookie

driver.manage().deleteCookieNamed("ud\_cache\_version");

getCookies= driver.manage().getCookies();

System.out.println("get cnt= "+getCookies.size());// 20-1 =19

//add cookie

Cookie ck = new Cookie("MyCookie", "Ramsita");

driver.manage().addCookie(ck);

getCookies= driver.manage().getCookies();

System.out.println("get cnt= "+getCookies.size());// 21 after adding

System.out.println("ends here");

}

}

HW: firefox. ie

-----------------------------

Selenium Excpetions:

-----------------------

WebdriverException -- when the browswer is closed by manually by mistake then if u tryin to perform action on browser -

NoSuchElement Exceptions

NoSuchAlert

NoSuchFrameException

NoSuchwindow

NoAlertPresentException

ElementNotInteractableException

Elementnotclickcbale exeption

Dropdwon val is not there --???-// NoSuchElementException: Cannot locate option with text: Merecedes

element not visible ?????

.ElementNotVisibleException

ElementNotSelectableException

TimeoutException

NoSuchSessionException

org.openqa.selenium.NoSuchSessionException

This exception is thrown when a method is called after quitting the browser by WebDriver.quit(). This can also happen due to web browser issues like crashes and WebDriver cannot execute any command using the driver instance.

--------------------------------------------------

InvalidSelectorException:

Hw: Open browser, enter last name sita :

driver.findEleemnt(by.xpath("//input[@name='last]")).sendKeys("sita");

// check getiong this exception InvalidSelectorException:

ii f xpath is wrong -- check

--------------------------------------

Stale Element reference exceptions:

package DownloadFiles;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class StaleEle {

public static void main(String[] args) {

// TODO Auto-generated method stub

System.setProperty("webdriver.chrome.driver", "D:\\SeleniumSoftwares\\Alldrivers\\chromedriver\_win32V96\\chromedriver.exe"); //

WebDriver driver= new ChromeDriver();

driver.get("file:///D:/Practise/qtp%20practise/web%20apps/ALL%20Web%20objects.html");

// get all links names

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

for(int i=0;i<=allLinks.size()-1 ;i++)

{

System.out.println("click link ="+allLinks.get(i).getText());

allLinks.get(i).click();

driver.navigate().back();

System.out.println("go back to homepage");

//StaleElementReferenceException: stale element reference: element is not attached to the page document

allLinks= driver.findElements(By.tagName("a"));

}

System.out.println("Ends ");

}

}

-----------------------------------------------

FAQ: Ajax control handling:

What is Ajax?

AJAX stands for Asynchronous JavaScript & XML, and

it allows the Web page to retrieve small amounts of data from the server without reloading the entire page

- creating fast and dynamic web pages.

uses a combination of Javascript and XML .

It will updates the part/s of a web page without reloading the whole page.

Some of the famous applications that uses AJAX technique are Gmail, Google Maps, Facebook, Youtube, etc.

ex: webdriverWait, Fluent wait

wait.untill(expectedconditions.visibility( By.xpath("")))

// specific elee

ExpectedConditions.textToBePresentInElement(ele, "Ramu")

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 4: 42Pm

JAn 23 2:30 Pm

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Finding response Headers/ response code:

http status codes:

200 - ok -

300 -- Redirection

400 - client erros ex: bad request (invalid url), bad n/w

500 - Server errors

FAQ: Tell me server error number or http status code?

FAQ: how can you check broken link in the page ?

get status code ?

--- Apache fluent API jar file

Add dep in pom.xml file?

<!-- https://mvnrepository.com/artifact/org.apache.httpcomponents/fluent-hc -->

<dependency>

<groupId>org.apache.httpcomponents</groupId>

<artifactId>fluent-hc</artifactId>

<version>4.2.1</version>

</dependency>

Code:

package DownloadFiles;

import java.io.IOException;

import java.net.HttpURLConnection;

import java.net.URL;

import org.apache.http.client.ClientProtocolException;

import org.apache.http.client.fluent.Request;

public class BrokenLinks2Practise2 {

public static int getStatusCode(String url) throws ClientProtocolException, IOException

{

try

{

int statuscode=Request.Get(url).execute().returnResponse().getStatusLine().getStatusCode();

System.out.println("statuscode="+statuscode);

if(statuscode == 200)

{

System.out.println("url "+ url+" is not broken. and succefully return status code 200");

return statuscode;

}

else

{

System.out.println("url "+ url+" is broken link.Status code="+statuscode );

}

return statuscode;

}

catch(Exception e)

{

System.out.println("url "+ url+" is broken link" );

}

return 0;

}

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

System.out.println("strats");

int code= getStatusCode("https://www.google.com/");

System.out.println("code="+code);

code= getStatusCode("https://www.google123Invalid.com/");

System.out.println("code="+code);

//

// Exception in thread "main" java.net.UnknownHostException: No such host is known (www.google123Invalid.com)

// statuscode=200

// url https://www.google.com/ is not broken. and succefully return status code 200

// code=200

// url https://www.google123Invalid.com/ is broken link

// code=0

System.out.println("ends");

}

}

https://www.toolsqa.com/selenium-webdriver/find-broken-links-in-selenium/

Revise:

Broken link : what

when

send request -- it return response -- with some msg and Staus code --

sttaus codeS:

200 -- ok

300 -- Redirection

400 -- client errors

500 -- server errors

jar file : fluent api

int status code= Request.get("url").execute().

reeturnReponse().getStatusLine().getStausCode();

2. way :

URL urlobj = new URL("url");

HttpURLConnection httpurlConObj= (HttpURLConnection) urlobj .openConnection();

httpurlConObj.settimeout(5000);

httpurlConObj.connect();

httpurlConObj.getResponseCode();

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-compiler-plugin</artifactId>

<version>3.8.1</version>

<configuration>

<verbose>true</verbose>

<fork>true</fork>

<executable>${JAVA\_HOME}\bin\javac</executable>

<compilerVersion>1.3</compilerVersion>

</configuration>

</plugin>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>3.0.0-M5</version>

<configuration>

<suiteXmlFiles>

<suiteXmlFile>testng.xml</suiteXmlFile>

</suiteXmlFiles>

</configuration>

</plugin>

</plugins>

</build>

Maven commands:

-----------------------------

mvn clean - delete all temp files in target

--- maven-clean-plugin:2.5:clean (default-clean) @ MavenBasicProject ---

[INFO] Deleting C:\Users\brahma\eclipse-workspace\MavenBasicProject\target

[INFO] ------------------------------------------------------------------------

[INFO] BUILD SUCCESS

--------------------

mvn compile :

-------------------------------------------:

- compile all casses in ur project - creates class files for each java class

javac myfirst.java

java myfirst.java

Chck :

src/test/java -

C:\Users\brahma\eclipse-workspace\MavenBasicProject\target\test-classes\MyTests

src/test/main

C:\Users\brahma\eclipse-workspace\MavenBasicProject\target\classes

\*\*\*\* imp

mvn test- used to execute tests

mvn test -- src/test/java --- if any class name endsith "test" -- executes all those classses

create 2 classes :

MobileTest.java

LaptopTest.java

Note:

error: if we are getting any erorr while running cmd - mvn tetst or

You can replace the environment from jre to jdk in Eclipse IDE as follows if it also shows compiler unavailable :

(right-click) your\_project\_name > Build Path > Configure Build Path > Libraries > (double-click) JRE System Libraries > Alternate Jre : jdk 1.8 >ok

Then from Installed JRES option in Libraries select jdk 1.8

Project > Clean

Maven > Update

--------------------------

HW: Recehck -- src/main/java --????

an. we cann not run src/main/java -- class file s by using mvn test cmd

mvn build : after code si ready-Devlopers build the project

: Build: Clean -->compile > test > -- create .jar/ .war / .exe

.jar - java archive file

.war -- web archive file (jenkins installations -- we have download jenkins.war )

Hw: can we use the jar file in other project ?

We can import jar file in other project as asame as selenium jar file

Recehck -- how to use those packages and classes ??????????????? doubts

--------------------------------

mvn package --- > compile and test + build

creates: jar file in C:\Users\brahma\eclipse-workspace\MavenBasicProject\target\MavenBasicProject-0.0.1-SNAPSHOT.jar

FAQ: What is maven life cycle ?

Refer in you tube:

720p - RealTime Tools Maven Free WorkShop by Nagoor Babu Sir - YouTube - Shortcut

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\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 4:30 Pm

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Jan 26 2021 4 PM

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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Maven sure fire plugin

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run specific testng.xml file -- run as testng

We cna go for --Maven sure fire plugin

Add plugin in pom.xml

The Surefire Plugin is used during the test phase of the build lifecycle to execute the unit tests of an application. It generates reports in two different file formats:

Plain text files (\*.txt)

XML files (\*.xml)

By default, these files are generated in ${basedir}/target/surefire-reports/TEST-\*.xml.

Add below tags in <build> </build>

This is the only step that is required to get started - you can now create tests in your test source directory (e.g., src/test/java). As long as they are named in accordance with the defaults such as \*Test.java they will be run by Surefire as TestNG tests.

If you'd like to use a different naming scheme, you can change the includes parameter, as discussed in the Inclusions and Exclusions of Tests example.

Using Suite XML Files

Another alternative is to use TestNG suite XML files. This allows flexible configuration of the tests to be run. These files are created in the normal way, and then added to the Surefire Plugin configuration:

<plugins>

[...]

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>3.0.0-M5</version>

<configuration>

<suiteXmlFiles>

<suiteXmlFile>testng.xml</suiteXmlFile>

</suiteXmlFiles>

</configuration>

</plugin>

[...]

</plugins>

----------

addd these out of depenedecies tags in pom.xml

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>3.0.0-M5</version>

<configuration>

<suiteXmlFiles>

<suiteXmlFile>testng.xml</suiteXmlFile>

</suiteXmlFiles>

</configuration>

</plugin>

</plugins>

</build>

so it will run given testng.xml file

------------------------------------------

HW: Can we run 2 or 3 testng.xml files ?

YEs:

<suiteXmlFiles>

<suiteXmlFile>testng.xml</suiteXmlFile>

<suiteXmlFile>testng2.xml</suiteXmlFile>

</suiteXmlFiles>

--------------------------

testng.xml

------------------------------

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<test thread-count="5" name="Test">

<classes>

<class name="MyTests.LaptopTest"/>

<class name="MyTests.MobileTest"/>

</classes>

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

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

------------

testng2.xml

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite -2">

<test thread-count="5" name="Test">

<classes>

<class name="MyTests.AndroidTest"/>

</classes>

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

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

-------------------------

Pom.xml

--------------------

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.hcl</groupId>

<artifactId>MavenBasicProject</artifactId>

<version>0.0.1-SNAPSHOT</version>

<dependencies>

<dependency>

<groupId>org.testng</groupId>

<artifactId>testng</artifactId>

<version>6.9.8</version>

<scope>test</scope>

</dependency>

<!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java -->

<dependency>

<groupId>org.seleniumhq.selenium</groupId>

<artifactId>selenium-java</artifactId>

<version>3.141.59</version>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>3.0.0-M5</version>

<configuration>

<suiteXmlFiles>

<suiteXmlFile>testng.xml</suiteXmlFile>

<suiteXmlFile>testng2.xml</suiteXmlFile>

</suiteXmlFiles>

</configuration>

</plugin>

</plugins>

</build>

</project>

Run as maven test -- it executes all testng xml fiels which are given in Suitexmlfiles tag

-----------------------------------------

FAQ:

What is maven?

Main adavantages of POM ?

FAQ What is the use of maven-surefire-plugin ?

where will u add maven-surefire-plugin

<build>

<plugins>

<plugin>

<groupId>

<artifactId>

<version>

<configuartion>

<suiteXmlFiles>

<suiteXmlFile> testng file path </suiteXmlFile>

</suiteXmlFiles>

</configuartion>

</plugin>

</plugins>

</build>

-------------------------------

<suiteXmlFile>testng.xml</suiteXmlFile>

<suiteXmlFile>testng2.xml</suiteXmlFile>

Can we run testng.xml file from other folder ?

<suiteXmlFile>C:\Users\brahma\eclipse-workspace\MavenBasicProject\src\test\resources\Runner\testng3.xml</suiteXmlFile>

or

<suiteXmlFile>src\test\resources\Runner\testng3.xml</suiteXmlFile>

Note: if given xml file is not there, it throws belwo errorSuite file C:\Users\brahma\eclipse-workspace\MavenBasicProject\src\test\resources\Runner\testng3Invalid.xml is not a valid file

[ERROR] org.apache.maven.surefire.booter.SurefireBooterForkException: There was an error in the forked process

[ERROR] Suite file C:\Users\brahma\eclipse-workspace\MavenBasicProject\src\test\resources\Runner\testng3Invalid.xml is not a valid file

------------------------------------------

Create batch file in maven project:

1.Run testng.xml file through cmd --> Done

Go to maven project folder > Go to folder path on top > type 'cmd'

> it opens cmd propmt in the given fodler path -- it points to current project folder > mvn test

ex:

C:\Users\brahma\eclipse-workspace\MavenBasicProject>mvn test

-----------------------------------------

2. create batch file and run --> done

cmd:

---------------

D:

Pause

---------------------

savas .bat file -- it creates batch file

Run batch file > dbl click on batch file

------------------------------------

Execute mvn test cmd uisng batch file :

------------------------

mvn test

Pause

-----------------

Save as RunTestNgXmlBatchFile.bat

run > RunTestNgXmlBatchFile

--------------------------

Run batch file from other folder:

Keep this code in D: and create a new batch file -RunBatchFileFromOtherFolders.bat

------------------

C:

cd C:\Users\brahma\eclipse-workspace\MavenBasicProject

mvn test

----------------------------------------

-------------------------------------------------------------------

3. Schedule batch file in windows --> Done

task scheduler > create task > add batch file > give time or daily or weely some options

------------------------------------------------------

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Jenkins:

The leading open source automation server, Jenkins provides hundreds of plugins to support building, deploying and automating any project.

Continuous Integration and Continuous Delivery tool -- we can deliver the appl very fast..

Plugins:

maven integartion plugin

html reports

install : jenkins.war

download

java -jar "jenkins.war"

fully up and running

open browser: localhost:8080

enter user, pwd clcik login

-------------

add JDK. Maven\_Home in Globalconfiguration:

Manage jenkins >Global Tool Configuration

JDK installations >name: JAVA\_HOME

Java\_Home: C:\Program Files\Java\jdk-11.0.13

-------------

set Maven\_Home

clk Maven installations >

name: MAVEN\_HOME

MAVEN\_HOME : D:\SeleniumSoftwares\JarFilesJul2019\Maven36

-----------------

Add plugin:

------------

CLk Manage Jenkins: > CLk 'Manage plugins' > Go to Availabel section> type=maven integration > Select check box for maven inteartion plugin > click 'install with out restart' or 2nd option

-------------------------

create a job : or project

Building in workspace C:\Users\brahma\.jenkins\workspace\SasiMavenProjectFirst

[SasiMavenProjectFirst] $ cmd /c call C:\Users\brahma\AppData\Local\Temp\jenkins18076536033190598713.bat

C:\Users\brahma\.jenkins\workspace\SasiMavenProjectFirst>mvn test

[INFO] Scanning for projects...

[INFO] ------------------------------------------------------------------------

[INFO] BUILD FAILURE

[INFO] ------------------------------------------------------------------------

[INFO] Total time: 0.230 s

[INFO] Finished at: 2022-01-26T21:03:28+05:30

[INFO] ------------------------------------------------------------------------

[ERROR] The goal you specified requires a project to execute but there is no POM in this directory (C:\Users\brahma\.jenkins\workspace\SasiMavenProjectFirst). Please verify you invoked Maven from the correct directory. -> [Help 1]

---------------------------

check here there is no pom.xml file and any code in this path

C:\Users\brahma\.jenkins\workspace\SasiMavenProjectFirst>mvn test

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1. Run simple java file from Jenkins: --> done

---------------------------

javac HelloWorld.java

java HelloWorld.java

Crate job:

C:\Users\brahma\.jenkins\workspace\SasiFirstProject\RunSimpleJavaFile

[RunSimpleJavaFile] $ cmd /c call C:\Users\brahma\AppData\Local\Temp\jenkins8495662658410407158.bat

C:\Users\brahma\.jenkins\workspace\SasiFirstProject\RunSimpleJavaFile>javac HelloWorld.java

error: file not found: HelloWorld.java

Usage: javac <options> <source files>

Fix:

copy Helloworld.java file in destination folder

2. Run batchfile from jenkins: --> done

--------------------------------------

cmd:

RunBatchFileFromOtherFolders.bat

C:\Users\brahma\.jenkins\workspace\SasiFirstProject\RunBatchFile>RunBatchFileFromOtherFolders.bat

'RunBatchFileFromOtherFolders.bat' is not recognized

sol:

copy batch file in 'C:\Users\brahma\.jenkins\workspace\SasiFirstProject\RunBatchFile'

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3. Run pom.xml file :

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The goal you specified requires a project to execute but there is no POM in this directory

(C:\Users\brahma\.jenkins\workspace\SasiFirstProject\TestMavenPRojectinFreestyle).

use custom work space:

1. copy project in jenkins\_home:

----------------------------------------

${JENKINS\_HOME}/Projname

${JENKINS\_HOME}/SasiMavenProject

or

C:\Users\brahma\.jenkins\workspace\SasiFirstProject\SasiMavenProject

${JENKINS\_HOME}\workspace\SasiFirstProject\SasiMavenProject

run: ????????

failing: Unknown lifecycle phase "mvn". You must specify a valid lifecycle phase or a goal in the format <plugin-prefix>:<goal> or <plugin-group-id>

Sol:

goals : test -- Note: dont use mvn test it, if is failing

----------------------------------------------------

If need, we can see testng reports by configuring testng plugns

To view testng results:

Go to Jenkins dir > SasiMavenProject> target >surefire reports -- refer index.html ..

jenkinsL

In Post-Build Actions, simply enable Publish TestNG Results. This option allows you to configure the following properties:

Build

In the project/build page you can see a summary of passed/fail tests as well as passed/fail configuration methods.

Refresh browser : we can see TestNG Results

to view extent reports:

-------------------------------------------

add plugin:

HTML PublisherVersion 1.28

Build Reports :This plugin publishes HTML reports.

configure Build reports:

Post-build Actions > Publish HTML reports > clk Add

-------------------

if extetn reports are not displayed properly --??

sol:

start jenkins server with below cmd :

java -jar jenkins.war

java -Dhudson.model.DirectoryBrowserSupport.CSP="sandbox; default-src 'self';" -jar jenkins.war

---------------------------------

2. give eclipse code full path in jenkins: -- done

--------------------------------

3.2 point ur local code :

-----------------------

[ERROR] COMPILATION ERROR :

[INFO] -------------------------------------------------------------

[ERROR] Source option 5 is no longer supported. Use 6 or later.

[ERROR] Target option 1.5 is no longer supported. Use 1.6 or later.

[INFO] 2 errors

sol:

<properties>

<maven.compiler.source>1.6</maven.compiler.source>

<maven.compiler.target>1.6</maven.compiler.target>

</properties>

---------------------------------------------------------------

3.3 check ur mail ??????????????????????//

HW: add : Email Extension plugin :

?????????????????????

----------------------------------------------------------

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Feb 2 20222

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4. Run multiple POM.xml files

POMTc2.xml > Define

Tc2testngXmlforPom.xml file

<class name="AllTestCases.LoginTC01"/>

<class name="AllTestCases.HomePageNavigationTC02"/>

4.1POMTc2.xml

Tc3testngxmlForPom.xml file: --testnf.xml

<class name="AllTestCases.createNewEmployeeTC03"/>

<class name="AllTestCases.DeleteUserTC04"/>

FAQ: Can we have only one pom.xml or multiple pom.xml file ?

------------------------------------------

4.1.2 HW try to use suitexml files -- and check ---------------> Later

run 50 xml files

Run multiple testng xml files

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name="Suite">

<!-- // run multiple xml file -->

<suite-files>

<suite-file path="testng.xml"></suite-file>

<suite-file path="testng2.xml"></suite-file>

<suite-file path="testngForParameters.xml"></suite-file>

<suite-file path="D:\\Practise\\FrameWorkDeisgnsPractiseWorkSpace\\SasiSeleniumBasics\\src\\TestNGRunTestsParallel\\testngForCrossBrowserTesting.xml"></suite-file>

</suite-files>

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

4.2 check testng reponse --> Done --ok

4.3 check extent reports ---> done -- ok

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Later :: ???????????????

5. Run github code from jenkins

5.1 convert maven project to git

Team > share -->

6. Run git code 2 tcs from

7. copy prevous job -- done -- ok

8. Build depends on other jobs -- ok

Configure > Job3

projects to watch : Job2

Build after other projects are built?

Note: if we run Job 2 , it triggers jobs 3

job 3 is dependent job 2

9.add parameters from jenkins ----->

Run Browser = Chrome

IE

Firefox

choice paramter:

name:Run Browser

choices:

Chrome

IE

Firefox

CLk build > Run Browser dropdown will displayed with given choices:

ex:

testng.xml

<parameter name="brwoser" value="chrome" />

Read paramters from jenkins ---> brahma side pending ??????????????????????????????????

------------------------------------------------------------------

10. Create folder in under project -- ok

Folder plugin:

new Item > Enter job name > clk create new folder :

Go to New Job, choose Folder as the job type as in Creating a new Folder.

--------------------------------------------------------

move existing jobs to new folder:

create new folder > folder1

open exitsing job > clkc 'move' > it displays all existing fodler 'Where do you want to move the Project ‘copyTC1’ to?'

> select desired folder where u want to move -> check whther job has been moved to desired folder

------------------------------------------

parametrise testng.xml file uisng single pom.xml file :

refer: https://www.seleniumeasy.com/maven-tutorials/choose-selected-testng-xml-files-to-execute-using-maven

<suiteXmlFiles>

<!-- Need to pass testng.xml files as argument from command line -->

<suiteXmlFile>${suiteXmlFile}</suiteXmlFile>

</suiteXmlFiles>

cmd:

Below is the command to execute only single testng.xml file: -

mvn clean test -Dsurefire.suiteXmlFiles=mytestng.xml

Below is command to parametrize multiple testng.xml files using Maven :-

mvn clean test -Dsurefire.suiteXmlFiles=mytestng1.xml,mytestng2.xml

mvn clean test -Dsurefire.suiteXmlFiles=testng2.xml

ex: POM.xml has testng.xml parameterised.

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.hcl</groupId>

<artifactId>MavenBasicProject</artifactId>

<version>0.0.1-SNAPSHOT</version>

<properties>

<maven.compiler.source>1.6</maven.compiler.source>

<maven.compiler.target>1.6</maven.compiler.target>

</properties>

<dependencies>

<dependency>

<groupId>org.testng</groupId>

<artifactId>testng</artifactId>

<version>6.9.8</version>

<scope>test</scope>

</dependency>

<!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java -->

<dependency>

<groupId>org.seleniumhq.selenium</groupId>

<artifactId>selenium-java</artifactId>

<version>3.141.59</version>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>3.0.0-M5</version>

<configuration>

<suiteXmlFiles>

<suiteXmlFile>${suiteXmlFile}</suiteXmlFile>

<!--

<suiteXmlFile>testng.xml</suiteXmlFile>

<suiteXmlFile>testng2.xml</suiteXmlFile>

-->

</suiteXmlFiles>

</configuration>

</plugin>

</plugins>

</build>

</project>

Hw: Do in jenkins for 2 jobs run diff xml files with paramterosation?

jenkins cmd: clean test -Dsurefire.suiteXmlFiles=testng.xml

-----------------------------

10. Run git gub: ???????????????????????

From Manage Jenkins > Global Tool Configuration, please provide the right Path to Git executable.

C:\Program Files\Git\bin\git.exe

------------------------------------------------ 3PM

interface webdriver extends SearchContext -I

public class ChromeDriver extends ChromiumDriver

public class ChromiumDriver extends RemoteWebDriver

public class RemoteWebDriver extends java.lang.Object

implements WebDriver, JavascriptExecutor, HasInputDevices, HasCapabilities, HasVirtualAuthenticator, Interactive, PrintsPage, TakesScreenshot

public class ChromiumDriver extends RemoteWebDriver

public class FirefoxDriver extends RemoteWebDriver

public class InternetExplorerDriver extends RemoteWebDriver

public class SafariDriver extends RemoteWebDriver

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Selenium Grid :

DB connection :

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Selenium 3 and Selenium 4 architecture :

Refer: change log in diff versions: in offiial web site

Selenium 4 new features:

z

constructor:

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Check IE setttings : ?????????????

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REcheck : @beforeSuite () and BeforeTest diff?

note: create 2 classes and run 2 classes ?

Java coding programs:

---------------------------------

Swap 2 number with temp var

swap 2 nos with out temp variable

Swap 2 Strings with temp var

with out tmp

reverse of String

fibonacci series

factorial

String:

Count of vowels and consonants

get numbers of String

get numbers of String by Regular expression

get aplhabets from String

get special chars from String

count of each character

count of given char

Ascending

Descending order

2nd highest number

Ascendig order os String

asc oder numbers and Strings

desc order of Strings

numbers and stringSelection

Java all FAQ:

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Microsoft Windows [Version 6.1.7601]

Copyright (c) 2009 Microsoft Corporation. All rights reserved.

D:\SeleniumSoftwares\JarFilesJul2019>java -jar selenium-server-standalone-3.141.

59.jar -role hub

16:45:09.375 INFO [GridLauncherV3.parse] - Selenium server version: 3.141.59, re

vision: e82be7d358

16:45:09.644 INFO [GridLauncherV3.lambda$buildLaunchers$5] - Launching Selenium

Grid hub on port 4444

2022-01-12 16:45:10.789:INFO::main: Logging initialized @2362ms to org.seleniumh

q.jetty9.util.log.StdErrLog

16:45:11.834 INFO [Hub.start] - Selenium Grid hub is up and running

16:45:11.836 INFO [Hub.start] - Nodes should register to http://192.168.225.202:

4444/grid/register/

16:45:11.838 INFO [Hub.start] - Clients should connect to http://192.168.225.202

:4444/wd/hub

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}