Selenium by durga soft

Manual testing:

Why we need to do testing ?

Identify the bugs or defects issue in the application (deviating )

Testing objective of application : quality of application

Manual testing :execute test case manully is nothing but maual testing

Automation testing: execute the test case using some automation or third party tools application

Test case : collection of test steps and it tells the expected result of the requirement

What is body of the test case : test template eg: test id ,test description,test steps, test input,actual result ,excepted result,status ,bug\_Id,excuted by,excuted date

Roles and responsible :

Requirement : what client needs

1.understand the req functionality

2.prepare the test case

3.exceute the test case we need to compare expected result vs actual result

4.if test case faile log in to bug assign bug to developer

5.retest the test case with same steps

Droug back :

Major : if you want to do regression testing frequently in manual testing is not possible then we move on to automation

Why regrestion testing is not possible by manual testing?

1.no of resources required

2.time consuming

3.expensive

4.repitable task are not possable

**Webdriver first session :**

Textdemo

Firefox is class come constractor . constractor will execute when the object is created

Webdreiver is an interface: it contains unimplemented method

The unimplemented is done in firefox driver

The object identification : == later class

Locators:

ID

Name

Link

Xpath

Css

Class name

Tag name

**Selenium second class:**

Test box

Text area

Check box

Drop Down

Radio Button

Hyperlink

1. Handle hykper link

Driver.findElement(by.linkText(“sign in”)).click();

2.Text box

Driver.findElement(by.name(“Name”).sendkeys(“8220228161”);

3.handel check box

Driver.findElement(by.name(“Name”)).click();

4.text area

Driver.findElement(by.name(“Name”).sendkeys(“welcome”);

5.Droup down

Droup down code is implemented in select class

Create constructor

//this is constractor insdie constractor they are asking for driver element

new select(driver.findelement(By.name(“country”) .selectbyidex or .selectbyvalue or.selectbyvisabletext(

6.radio button

Driver.findelement(By.xpath(“//inpux//”)).click();

**Third class selenium :**

**Extract text/object from web page using webdriver**

**1.get text:**

Get text will return string

String firstname=Driver.findelement(By.xpath

(‘//\*[@id=’sometext’])).gettext();

Syso(firstname);

String expectedname =”john”;

If(expectedname.equalignorecase(firsttname)){

Syso(“test case pass”);

}else{

Syso(‘test case fail’)

**2.Tool tip text:**

**Tool tip is nothing but if click on google it will highlight extrat tip about google that is called tool tip**

In most of the website the tool tip will be available in titile atribute

String tooltip =driver.findelement(By.xpath

(‘//\*[@id=’sometext’])).getattribute(‘title’);

Syso(tooltip);

**3.get name property:**

**//you will get the name value**

String namevalue =driver.findelement(By.xpath

(‘//\*[@id=’sometext’])).getattribute(‘name’);

**4.get the value from the text box:**

//enter the data from the url

Driver.getelement(by.id(‘dkag’)).sendkeys(‘selenium’);

//get the data from the text box

How to verify the reset?

Enter the username and password

Click on restbutton

Try to get username and password

If both are equal to null test case pass

String testdata =driver.findelement(By.xpath

(‘//\*[@id=’sometext’])).getattribute(‘value’);

**5.get back ground color :**

String backgroudcolour =driver.findelement(By.xpath

(‘//\*[@id=’sometext’])).getcssvalue(“background-colour”);

**Fourth class for selenium webdriver:**

Handle alert box

Verify the text box

//maximize the browser

Driver.manage().window().maximize();

//click search option

driver.findelement(by.id(“”)).click();

//handle alert you have to switch your fouces

//predefind api are implemented by selenium pepole

driver.switchto().alert().accept();

//verify the alert text

Alert alert =driver.switchto().alert();

syso(alert.gettext);

string actualresult=alert.gattext();

string expectedresult = “destination sources”;

if(condtion){

alert.accept();

}else{

syso(“test case fail”);

//select droupdown

new select(driver.findelement(by.id(“”))).selectvisabletext(“”);

two types of alert:

client side : we will not get property

serverside : we will get property

**2.confirm box:**

driver.switchto().alert().accept();

driver.switchto().alert().dismiss();

**fivth hour of selenium webdriver:**

keyboard api :

handling tap optation

handling copy past

//key are basically enum consupt

//tap operatation

driver.findelement(By.id(‘’).sendkeys(keys.Tap);

//copy and past actation

//enter the data on first textbox

driver.findelement(by.id(‘text’)).sendkeys(‘selenium’)

//copy the data and past in text box

driver.findelement(by.id(‘text’)).sendkeys(keys.control+”a”);

//copy the data

driver.findelement(by.id(‘text’)).sendkeys(keys.control+”c”);

//past the data

driver.findelement(by.id(‘past’)).sendkeys(keys.control+”p”);

**sixth hour:**

**Drag and drop potation**

actation builder = new actation(driver);

driver.findelement(by.cssselesctor(“body)).sendkeys(keys.escape);

webelement sources =driver.findelement(by.id(‘\_svg’));

webelement destination = dirver.findelement(by.id(‘\_list’));

builder.draganddrop(sources, destination).build().perform();

**seventh class of selenium webdriver:**

**how to download file suing selenium webdriver?**

//enter the data java download in search box

driver.findelement(by.id(‘”).sendkeys(‘java download’);

//click on the enter optation in search box

driver.findelement(by.id(‘”).sendkeys(‘keys.enter’);

//click on the link

driver.findelement(by.id(‘”)).click();

//click on the button

driver.findelement(by.id(‘”)).click();

//click on save button

this is window based pop don’t excpect any property

using selenium you cant handle window based popup

u can use

1.robot //built in java this is coming from awt java

2.skiuli // download third party app

3.autoit // this is based on vb this fail in auto intergration

//handling window based control

Robot robotobj =new robot(); //you have created object to use that class

robotobj.keypress(keyevent.vk\_Tab);

thread.sleep(5000);

//click on enter

robotobj.keypress(keyevent.vk\_enter);

**how to handle pop up /multiple window using webdriver?**

//click on pop up potation

driver.findelement(by.id(‘\_sxdf’)).click();

//click on credit card link which navigate for new tap

//but it will open in new window selenium will fouces on same browser not on new window that why its not clicking on new customer

driver.findelement(by.id(‘\_sxdf’)).click();

//selenium people created api at run time for window

//get parent window property

string parentwindow =driver.getwindowhandle();

syso(parenwindow);

//get childwindow property

for(string childwin: driver.getwindowhandles){

syso(“childwindow” +chidwin)

driver.switchTo().window(childwindow);

}

//this concept is called enhanced for loop or advance for loop

//datetype temname :whatyou want to itearate

for(string temp: a){

}

//click on new customer

driver.findelement(by.name(‘surya’).click();

//go back for the old window

//select aprent window

driver.switchto().window(parendproperty);

thread.sleep(5000);

//click on register link

driver.findelement(by.name(‘surya’).click();

**Data driven:**

This can be used for multiple data in one test case eg: we will creat one script for 20 user. tha 20 data will be stored in excel using poi jar file

File the form asusal like name password and login

After that use 2 dimansial array

You should take only object type coz if you use string it take only string or if you use int it will take only num but login bay be any type

@DataProvider(name =wordpress)

Public object [][] passdata(){

Object[][] data =new Object[3]rows[2]colums;

//now create data

Data[0]row[0]colume =”admin”;

Data[0]row[1]colume =”pASS”;

Data[1]row[0]colume =”admin”;

Data[1]row[1]colume =”admin”;

Return data;

}

So in actual script @test this will be dependent on dataProvider=”wordpress”

Like this

Public class wordpress{

//Globale variable

Webdriver driver ;

@test(dataProvider=”wordpress”)

//you have to the username and password to login form

Public void logininfor(string username, string password){

driver=new chromedriver();

driver.findelement(By.id(“q”)).sendkeys(username);

driver.findelement(By.id(“q”)).sendkeys(password);

assert.asserttrue(driver.gettitle().contains.(“dashboard”), “user not able to login”;

@aftermethod

Public void down(){

Driver.quit(); //you will get error coz webdriver will only assign in test annotation so use wedriver as globale keyword

}

}

**Testng introduction :**

Why testng

How to install testng

Annotation of testng

Testng is actuall unit testing framework

What is the use testng ?

You can organize the test case

1. 1000 test suite

500 = high priorty

We can execute selective test case

2.ingnore the test case

3. precondition == 1.admin 2. Lead 3.viewer

You can have the setting that’s only for admin and lead but not for viewer

Postcondition

4.report /test result

5. verification

6. cross browser

Annotation of testng

@Test

@beforemethod

@aftermethod

@beforeclass

@afterclass

@beforetest

@aftertest

@beforesuite

@aftersuite

How to install testng

Go to eclipse than go for help in that you can see eclipse marketplace click than search for testng and downloads

How to use annotation?

First import testng annotation

Annotation means giving automatic instruction to compiler

@test means it thing this as test case you can use many test

@beformethod is used for precondition like browser running or webdriver set up

@aftermethod is used for posconditon like quiting the browser or closing

@berforeclass will execute very first and only once in the test case

Only @test will execute but not before and after these are pre and poscondtion

Before and after will only excute if there is @test if ont they will not exeute

If you want to skip the test case

@test(enabled =false)

Xpath

There are two types of xpath

Absolute xpath means from root //

Relative xpath means from beging to end

Absolute xpath

//tagname [@attribute name= value]

//instead of tagname you can use \*that’s spacifies all in tagname

Input[@id =”lsd”]

Parent child relation

//parent tagname[@attribute name= value]/childname/chidnamae

1. Table

//tr[2]//td[3]

1. //tagname[@attribute name=value][@attribute name=’value’]
2. //tagname[@attribute name=’value’ or @attribute name=’value’]
3. //tagname[@attribute name=’value’ and @attribute name=’value’]
4. For dynamic tag use contains
5. //tagname[@contains(@href= “forgotvalue”)][text()=post]

8.//\*[text()=’anytext’]//following::a[contains(href=”forgotvalue”)][tex()=’post’]

9.//a[contains(text(),’dorgotpassword’)]

10. //\*[contains(@ id,’edit’)]

11.//\*[starts-with(@id, ‘edit’)]

12 //\*[text()=’forgotpassword’]