1. what are limitations in selenium webdriver

ex: theory only

It does not support and non web-based applications, it only supports web based applications.

Its an open source tool so in case of any technical issues you need to rely on the selenium community forums to get your issue resolved.

You need to know at least one of the supported language very well in order to automate your application successfully.

No inbuilt reporting capability so you need plugins like JUnit and TestNG for test reports.

Lot of challenges with IE browser

1. installing/configure selenium

ex: write down steps

First step:

Initially we need to download java and eclipse.then, we need to configure selenium with java

For that, we need to go to eclipse and create a package. Right click on the package explorer and go to build path and then click on configure Build path and click on add external jars. And you will be directed to selenium path we need to select files in that location and add them. In order to get selenium jar files, we need to download latest version of java and we need to unzip the folder and save it in a folder. In that way we can configure selenium

1. what are different ways of locating elements in selenium

ex : write code for all locators

1. By ID:

|  |  |
| --- | --- |
|  | driver.findElement(By.id("element id")) |

2. By CLASS:

|  |  |
| --- | --- |
|  | driver.findElement(By.className("element class")) |

3. By NAME:

|  |  |
| --- | --- |
|  | driver.findElement(By.name("element name")) |

4. By TAGNAME:

|  |  |
| --- | --- |
|  | driver.findElement(By.tagName("element html tag name")) |

5. By CSS Selector:

|  |  |
| --- | --- |
|  | driver.findElement(By.cssSelector("css selector")) |

6. By Link:

|  |  |
| --- | --- |
|  | driver.findElement(By.link("link text")) |

7. By XPath: driver.findElements(By.xpath(“xpath”))

1. which is fastest way to identify elements in web page?

Finding elements by XPath is useful for finding elements using very complex selectors, and is the most flexible selection strategy, but it has the potential to be very slow, particularly in IE. In IE 6, 7, or 8, finding by XPath can be an order of magnitude slower than doing the same in Firefox. IE provides no native XPath-over-HTML solution, so the project must use a JavaScript XPath implementation, and the JavaScript engine in legacy versions of IE really is that much slower.

1. what is absolute path and relative path in xpath

|  |  |
| --- | --- |
|  | An absolute xpath in HTML DOM starts with /html e.g.  /html/body/div[5]/div[2]/div/div[2]/div[2]/h2[1]  Relative xpath finds the closed id to the dom element and generates xpath starting from that element e.g.  .//\*[@id='answers']/h2[1]/a[1] |

1. different types of waits or synchronization in selenium webdriver

ex: package sysnpack;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

public class Example

{

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

{

WebDriver d=new FirefoxDriver();

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

// Thread.sleep(5000); Explicity

d.manage().timeouts().implicitlyWait(5, TimeUnit.SECONDS);

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

}

}

1. how to save screen shots using selenium webdriver

webDriver browser = new FirefoxDriver();

browser.get('http://www.google.com/')

browser.save\_screenshot('screenie.png')

browser.quit()

1. how to handle multiple windows in selenium webdriver

package advanced;

import java.util.Iterator;

import java.util.Set;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class MulipleWindow {

public static void main(String[] args)

{

System.setProperty("webdriver.chrome.driver", "C:\\Users\\HP\\Desktop\\testing\\chromedriver.exe");

WebDriver d=new ChromeDriver();

d.get("https://accounts.google.com/SignUp");

d.findElement(By.xpath(".//\*[@id='wrapper']/div[2]/div/div[1]/p/a")).click();

System.out.println(d.getTitle());

Set<String> id=d.getWindowHandles();

//windowHandles will

Iterator<String> itr=id.iterator();

String parentid=itr.next();

String childid=itr.next();

d.switchTo().window(childid);

System.out.println(d.getTitle());

}

}

1. how to lanuch webpage using chrome driver

System.setProperty("webdriver.chrome.driver","C:\\Users\\HP\\Desktop\\testing\\chromedriver.exe");

WebDriver d=new ChromeDriver();

d.get("http://www.tizag.com/javascriptT/javascriptalert.php");

1. what is desired capabilities in selenium webdriver

//Desired capabilities will let you know which browser to run, version and platform

DesiredCapabilities dc=DesiredCapabilities.firefox();

dc.setCapability("version", "5");

dc.setCapability("platform", "XP");

1. how to set language while opening website

**Using Firefox Browser :**

FirefoxProfile profile = new FirefoxProfile();  
//setting the locale french : ‘fr’  
profile.setPreference(“intl.accept\_languages”,”fr”);  
driver = new FirefoxDriver(profile);  
driver.get(“http://google.co.in”);  
**Using Chrome Browser :**

System.setProperty(“webdriver.chrome.driver”,”D:/DollarArchive/chromedriver.exe”);  
ChromeOptions options = new ChromeOptions();  
options.addArguments(“–lang= sl”);  
ChromeDriver driver = new ChromeDriver(options);  
driver.get(“http://google.co.in”);

1. how to handle windows based popups (upload and dropdown)

package advanced;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class DropDown {

public static void main(String[] args)

{

System.setProperty("webdriver.chrome.driver","C:\\Users\\HP\\Desktop\\testing\\chromedriver.exe");

WebDriver d=new ChromeDriver();

d.get("http://spicejet.com/");

d.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_ddl\_originStation1\_CTXT']")).click();

d.findElement(By.xpath("//a[@value='GOI']")).click();

d.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_ddl\_destinationStation1\_CTXT']")).click();

d.findElement(By.xpath(".//\*[@value='COK']")).click();

}

}

1. write code to verify any application login page is working or not

package loginPack;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

public class SampleTestClass

{

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

{

// WebDriver

WebDriver d=new FirefoxDriver();

// open Google

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

// click on sign in button

Thread.sleep(5000);

d.findElement(By.id("gb\_70")).click();

// send the emilid value to textbox

Thread.sleep(5000);

d.findElement(By.id("Email")).sendKeys("maheshprojectdeveloper@gmail.com");

// click on next

Thread.sleep(5000);

d.findElement(By.id("next")).click();

// type password

Thread.sleep(5000);

d.findElement(By.id("Passwd")).sendKeys("lakshmi@143");

// sign in button

Thread.sleep(5000);

d.findElement(By.id("signIn")).click();

// click on gmail link

Thread.sleep(5000);

d.findElement(By.linkText("Gmail")).click();

}

}

1. how to select items from dropdown/select box

package advanced;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class DropDown {

public static void main(String[] args)

{

System.setProperty("webdriver.chrome.driver", "C:\\Users\\HP\\Desktop\\testing\\chromedriver.exe");

WebDriver d=new ChromeDriver();

d.get("http://spicejet.com/");

d.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_ddl\_originStation1\_CTXT']")).click();

d.findElement(By.xpath("//a[@value='GOI']")).click();

d.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_ddl\_destinationStation1\_CTXT']")).click();

d.findElement(By.xpath(".//\*[@value='COK']")).click();

}

}

1. how to know if checkbox is checked or not in webpage

package test;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

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

public class Formsubmit {

public static void main(String[] args) {

System.setProperty("webdriver.chrome.driver", "C:\\Chromedriver.exe");

WebDriver driver=new ChromeDriver();

driver.get("http://spicejet.com/");

driver.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_ddl\_originStation1\_CTXT']")).click();

driver.findElement(By.xpath("//a[@value='GOI']")).click();

System.out.println(driver.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_chk\_IndArm']")).isSelected());

driver.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_chk\_IndArm']")).click();

System.out.println(driver.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_chk\_IndArm']")).isSelected());

driver.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_chk\_IndArm']")).click();

System.out.println(driver.findElement(By.xpath(".//\*[@id='ctl00\_mainContent\_chk\_IndArm']")).isSelected());

}

}

1. tell me code to pass values from parent window to child window

package advanced;

import java.util.Iterator;

import java.util.Set;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

public class MulipleWindow {

public static void main(String[] args)

{

System.setProperty("webdriver.chrome.driver", "C:\\Users\\HP\\Desktop\\testing\\chromedriver.exe");

WebDriver d=new ChromeDriver();

d.get("https://accounts.google.com/SignUp");

d.findElement(By.xpath(".//\*[@id='wrapper']/div[2]/div/div[1]/p/a")).click();

System.out.println(d.getTitle());

Set<String> id=d.getWindowHandles();

//windowHandles will

Iterator<String> itr=id.iterator();

String parentid=itr.next();

String childid=itr.next();

d.switchTo().window(childid);

System.out.println(d.getTitle());

}

}

1. write code to find out if all links are working or not

import java.net.URL;

import java.util.List;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.firefox.FirefoxDriver;

public class VerifyLinks {

public static void main(String[] args)

{

WebDriver driver=new FirefoxDriver();

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

driver.get("http://www.google.co.in/");

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

System.out.println("Total links are "+links.size());

for(int i=0;i<links.size();i++)

{

WebElement ele= links.get(i);

String url=ele.getAttribute("href");

verifyLinkActive(url);

}

}

public static void verifyLinkActive(String linkUrl)

{

        try

        {

           URL url = new URL(linkUrl);

           HttpURLConnection httpURLConnect=(HttpURLConnection)url.openConnection();

           httpURLConnect.setConnectTimeout(3000);

           httpURLConnect.connect();

           if(httpURLConnect.getResponseCode()==200)

           {

               System.out.println(linkUrl+" - "+httpURLConnect.getResponseMessage());

            }

          if(httpURLConnect.getResponseCode()==HttpURLConnection.HTTP\_NOT\_FOUND)

           {

               System.out.println(linkUrl+" - "+httpURLConnect.getResponseMessage() + " - "+ HttpURLConnection.HTTP\_NOT\_FOUND);

            }

        } catch (Exception e) {

        }

    }

}

1. write code on how to use javascriptexecutor?

executeScript

This method executes JavaScript in the context of the currently selected frame or window in Selenium. The script used in this method runs in the body of an anonymous function (a function without a name). We can also pass complicated arguments to it.

JavascriptExecutor js = (JavascriptExecutor) driver;

js.executeScript(Script,Arguments);

difference between assert and verify?

|  |
| --- |
| package stmTutorial;    import org.openqa.selenium.WebDriver;  import org.openqa.selenium.firefox.FirefoxDriver;  import org.testng.Assert;  import org.testng.annotations.Test;    public class AssertionExample {  @Test  public void assertion(){  //Instantiation of driver object. To launch Firefox browser  WebDriver driver = new FirefoxDriver();  //To open the URL  driver.get("http://www.softwaretestingmaterial.com");  //Actual title is "Software Testing Material - A site for Software Testers"  //We took title as "Software Testing Material" to make the test fail  String Title = "Software Testing Material";  String GetTitle = driver.getTitle();  System.out.println("Assertion starts here...");  Assert.assertEquals(Title, GetTitle);  System.out.println("A blog for Software Testers");                  driver.quit();  }  } |

1. difference between driver.close and driver.quit methods?

close( ) WebDriver command closes the Browser window which is in focus.  
If there are more than one Browser window opened by the Selenium Automation, then the close( ) command will only close the Browser window which is having focus at that time. It wont close the remaining Browser windows.  
Where as quit( ) WebDriver command is generally used to shut down the WebDrivers instance. Hence it closes all the Browser windows that are opened by the Selenium Automation.  
close( ) and quit( ) work in the similar way when Selenium Automation opens only single Browser window. They differ in their functionality when there are more than one Browser windows opened by the Selenium Automation.

1. common exceptions in selenium?

**NoSuchElement** : An element could not be located on the page using the given search parameters.

**NoSuchFrame** : A request to switch to a frame could not be satisfied because the frame could not be found.

**StaleElementReference** : An element command failed because the referenced element is no longer attached to the DOM.

**Firefox Not Connected** : Firefox browser upgraded toop new version.

**ElementIsNotSelectable** : An attempt was made to select an element that cannot be selected.

**UnknownCommand** : The requested resource could not be found, or a request was received using an HTTP method that is not supported by the mapped resource.

**ElementNotVisible** : An element command could not be completed because the element is not visible on the page.

1. how to handle Ajax calls in selenium?

The Selenium WebDriver's Advanced User Interactions API allows us to perform operations from

keyboard events and simple mouse events to complex events such as dragging-and-dropping,

holding a key and then performing mouse operations by using the Actions class, and building

a complex chain of events exactly like a user doing these manually.

The Actions class implements the builder pattern to create a composite action containing a

group of other actions

We need to create an instance of the Actions class by passing the instance of driver class

to the constructor in the following way:

Actions builder = new Actions(driver);

1. How to assign the value to textbox other than sendkeys method?

driver.get("http://www.qajudge.com/");

WebElement cssValue= driver.findElement(By.xpath(".//\*[@id='s']"));

JavascriptExecutor jse = (JavascriptExecutor) driver;

jse.executeScript("document.getElementById('s').value=’” Testing

sending'");

1. Selenium grid, how to execute scripts on multiple browser

import java.io.File;

import java.net.MalformedURLException;

import java.net.URL;

import java.util.concurrent.TimeUnit;

import org.junit.Test;

import org.openqa.selenium.Platform;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.firefox.FirefoxProfile;

import org.openqa.selenium.remote.DesiredCapabilities;

import org.openqa.selenium.remote.RemoteWebDriver;

import org.testng.annotations.AfterMethod;

import org.testng.annotations.BeforeMethod;

public class Testparallel {

//protected ThreadLocal<RemoteWebDriver> threadDriver = null;s

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

WebDriver driver;

DesiredCapabilities capabilities = DesiredCapabilities.firefox();

capabilities.setCapability(FirefoxDriver.BINARY,new File("C:\\Program Files (x86)\\Mozilla Firefox\\firefox.exe").getAbsolutePath());

driver = new RemoteWebDriver(new URL("http://192.168.0.106:5566/wd/hub"), capabilities);

driver.get("http://google.com");

System.out.println(driver.getTitle());

}

}

1. Write code for drag/drop in selenium

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.interactions.Actions;

public class DemoDragDrop {

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

// Initiate browser

WebDriver driver=new FirefoxDriver();

// maximize browser

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

// Open webpage

driver.get("http://jqueryui.com/resources/demos/droppable/default.html");

// Add 5 seconds wait

Thread.sleep(5000);

// Create object of actions class

Actions act=new Actions(driver);

// find element which we need to drag

WebElement drag=driver.findElement(By.xpath(".//\*[@id='draggable']"));

// find element which we need to drop

WebElement drop=driver.findElement(By.xpath(".//\*[@id='droppable']"));

// this will drag element to destination

act.dragAndDrop(drag, drop).build().perform();

}

}

1. Write code for right click in seelnium

package advanced;

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 MouseHoverFun {

public static void main(String[] args)

{

System.setProperty("webdriver.chrome.driver", "C:\\Users\\HP\\Desktop\\testing\\chromedriver.exe");

WebDriver d=new ChromeDriver();

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

Actions act=new Actions(d);

WebElement web=d.findElement(By.xpath(".//\*[@id='nav-link-accountList']"));

act.moveToElement(web).build().perform();

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

act.keyDown(Keys.SHIFT).moveToElement(ele).sendKeys("amoolya").build().perform();

//keyDown shift is nothing but you can enter Caps letters and build, perform is used to compile and execute

act.contextClick(ele);

//contextClick means right click of mouse action

act.doubleClick(ele);

}

}

Write code fro scroll to specific element

WebDriver driver = new FirefoxDriver();

JavascriptExecutor jse = (JavascriptExecutor)driver;

jse.executeScript("window.scrollBy(0,250)", "");