Phase-2 Practice Project-TestNG

Repository: https://github.com/Joshnitha/Phase2_Practice-Projects/

Description

Create a TestNG framework that helps to test the bus ticket booking application in multiple environments.

Background of the problem statement:

As a part of developing TestNG and POM framework, the admin requires a resource like multiple virtual machines to execute it in different environments.

Source Code:

Class:TestBase

```
package com.ninjademo.qa.Base;


import java.awt.Desktop;

import java.io.File;

import java.io.IOException;

import java.lang.reflect.Method;


import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.testng.ITestContext;

import org.testng.ITestResult;

import org.testng.annotations.AfterMethod;

import org.testng.annotations.AfterSuite;

import org.testng.annotations.BeforeSuite;

import org.testng.annotations.BeforeTest;
```

```
import com.aventstack.extentreports.ExtentReports;

import com.aventstack.extentreports.ExtentTest;

import com.aventstack.extentreports.reporter.ExtentSparkReporter;


public class TestBase {

	public static WebDriver driver;

	public static ExtentReports extentreports;

	public static ExtentTest extentTest;

	public static void openBrowser()

	{

	   driver = new ChromeDriver();

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

		driver.get("https://tutorialsninja.com/demo/");

	}


	@BeforeTest

	public void getnameMethod(ITestContext context)

	{

		extentTest=	extentreports.createTest(context.getName());

	}


	@BeforeSuite  // this method will be excuted before suite begins its execution

	public void InitalizeExtentReport()

	{
```

```
		ExtentSparkReporter sparkreporter = new ExtentSparkReporter("reportpom.html");
		extentreports = new ExtentReports();
		extentreports.attachReporter(sparkreporter);
		// on the report display more information about OS, browser, java etc
		extentreports.setSystemInfo("OS", System.getProperty("os.name"));
		extentreports.setSystemInfo("JAVA", System.getProperty("java.version"));

}

@AfterSuite
public void generateReports() throws IOException
{
		extentreports.flush();
		Desktop.getDesktop().browse(new File("reportpom.html").toURI());
}
@AfterMethod
public void generateTestStatus(Method m,ITestResult result)
{
		if(result.getStatus() == ITestResult.FAILURE )
		{
			System.out.println("Capture Screenshot");
			extentTest.fail(result.getThrowable());
		}
		else if (result.getStatus() == ITestResult.SUCCESS) {
			extentTest.pass(m.getName() + " is passed");
```

```
                }
        }
}
```

Class: HomePage

```
package com.ninjademo.qa.Pages;

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 com.ninjademo.qa.Base.TestBase;
public class HomePage extends TestBase  {

        Actions a = new Actions(driver);
        @FindBy(xpath = "//span[text()='My Account']")
        WebElement myaccount;

        @FindBy(xpath = "//a[text()='Register']")
        WebElement register;

        @FindBy(xpath="//a[text()='Login']")
        WebElement login;

        @FindBy(xpath="//a[text()='Desktops']")
```

```
WebElement desktop;
@FindBy(linkText ="Mac (1)")
WebElement macdropdown;
public HomePage(WebDriver driver) {
	PageFactory.initElements(driver, this);
}
public void gettitle()
{
	String title = driver.getTitle();
	System.out.println(title);

}
public void clickonMyAccount()
{
	myaccount.click();
}
public void clickonLogin()
{
	login.click();
}
public void clickonRegister()
{
register.click();
}
public void clickOnMac() throws InterruptedException
```

```
        {
            a.moveToElement(desktop).build().perform();
            Thread.sleep(1500);
            macdropdown.click();
        }
}
```

Class: ProductPage

```
package com.ninjademo.qa.Pages;

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;

public class ProductPage {

        @FindBy(xpath="//input[@id='input-quantity']")
        WebElement quantity;

        @FindBy(xpath="//button[@id='button-cart']")
        WebElement addtoCart;


public ProductPage(WebDriver driver) {

                PageFactory.initElements(driver, this);

        }

public void addtocart() throws InterruptedException
```

```
{
	quantity.clear();
	quantity.sendKeys("5");
	Thread.sleep(1000);
	addtoCart.click();
}

}
```

Class: RegisterPage

```
package com.ninjademo.qa.Pages;

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;

public class RegisterPage {

	@FindBy(xpath="//input[@id='input-firstname']")
	WebElement firstname;
	@FindBy(xpath="//input[@id='input-lastname']")
	WebElement lastname;
	@FindBy(xpath="//input[@id='input-email']")
	WebElement emailid;
	@FindBy(xpath="//input[@name='telephone']")
	WebElement phone;
	@FindBy(xpath="//input[@id='input-password']")
	WebElement passwd;
	@FindBy(xpath="//input[@id='input-confirm']")
	WebElement confirmpasswd;
```

```
	@FindBy(xpath="(//input[@name='newsletter'])[1]")
	WebElement subscriberadiobtn;
	@FindBy(xpath="//input[@name='agree']")
	WebElement policycheckbox;
	@FindBy(xpath="//input[@type='submit']")
	WebElement continuebutton;

	public RegisterPage(WebDriver driver) {

		PageFactory.initElements(driver, this);

	}

	public void regirsteruser(String name,String lname,String email,String ph,String
password,String cpasswd) throws InterruptedException {

		firstname.clear();
		firstname.sendKeys(name);
		lastname.clear();
		lastname.sendKeys(lname);
		emailid.clear();
		emailid.sendKeys(email);
		phone.clear();
		phone.sendKeys(ph);
		passwd.clear();
		passwd.sendKeys(password);
		confirmpasswd.clear();
		confirmpasswd.sendKeys(cpasswd);
		subscriberadiobtn.click();
		Thread.sleep(1000);
		policycheckbox.click();
```

```
                Thread.sleep(1000);
                continuebutton.click();


        }

}
```

Class: SearchPage

```
package com.ninjademo.qa.Pages;

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;

public class SearchPage {

        @FindBy(xpath="//input[@name='search']")
        WebElement searchbox;

        @FindBy(xpath="//button[@class='btn btn-default btn-lg']")
        WebElement searchboxbtn;


        @FindBy(linkText="iMac")
        WebElement product;

  public SearchPage(WebDriver driver) {

                PageFactory.initElements(driver, this);
```

```
        }
  public void searchproduct()
  {
        searchbox.sendKeys("mac");
        searchboxbtn.click();
  }
  public void selectproduct()
  {
        product.click();
  }
}
```

Class: HomePageTest

```
package com.ninjademo.qa.TestPages;

import org.testng.annotations.AfterMethod;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.Test;

import com.ninjademo.qa.Base.TestBase;
import com.ninjademo.qa.Pages.HomePage;

public class HomePageTest extends TestBase {

HomePage hp;

        @BeforeMethod
        public void OpenApp()
        {
                openBrowser();
                hp = new HomePage(driver);
```

```
}


@AfterMethod
public void CloseApp()
{
	driver.quit();
}

@Test(priority='1')
public void testTitle()
{
	hp.gettitle();
}
@Test(priority='2')
public void testRegisterLink()
{
	hp.clickonMyAccount();  // on homapge click on myaccount
	hp.clickonRegister();  // clcik on register
	hp.gettitle();  // get title
}
@Test(priority='3')
public void testLoginLink()
{
	hp.clickonMyAccount();  // on homapge click on myaccount
	hp.clickonLogin(); // clcik on login
	hp.gettitle();  // get title
}


@Test(priority='4')
```

```
	public void testMacLink() throws InterruptedException
	{
		hp.clickOnMac();
		hp.gettitle();  // get title
	}
}
```

Class: ItestListenerClass

```
package com.ninjademo.qa.TestPages;

import org.testng.ITestContext;
import org.testng.ITestListener;
import org.testng.ITestResult;

public class ItestListenerClass implements ITestListener{

public void onTestStart(ITestResult result) {

		// if a @test method is started, it will record the log

		System.out.println("Test method has been started");

	}

	public void onTestSuccess(ITestResult result) {
		// if testmethod is success

		System.out.println("Test method is success");

	}
```

```
	public void onTestFailure(ITestResult result) {
	// if testmethod is failure

		System.out.println("Test method is failure");
		System.out.println("screenshot code");
	}

	public void onTestSkipped(ITestResult result) {
		System.out.println("Test method is sipped");
	}

	public void onTestFailedWithTimeout(ITestResult result) {
		System.out.println("Test method is failure due to timeout");
	}

	public void onStart(ITestContext context) {
		// this method will record events in the very begining of testing

		System.out.println("Testing has started");
	}

	public void onFinish(ITestContext context) {
		// this method will record events at end of testing

		System.out.println("Testing has ended");
	}
}
```

Class: TestProductPage

```
package com.ninjademo.qa.TestPages;
```

```
import org.testng.annotations.AfterMethod;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.Test;

import com.ninjademo.qa.Base.TestBase;
import com.ninjademo.qa.Pages.ProductPage;
import com.ninjademo.qa.Pages.SearchPage;

public class TestProductPage extends TestBase{

	SearchPage sp;
	ProductPage pp;

	@BeforeMethod
	public void OpenApp()
	{
		openBrowser();
		sp = new SearchPage(driver);
		pp = new ProductPage(driver);
	}


	@AfterMethod
	public void CloseApp()
	{
		driver.quit();
	}

	@Test
	public void testproduct_addtocart() throws InterruptedException
```

```
	{

		sp.searchproduct();
		Thread.sleep(1000);
		sp.selectproduct();
		Thread.sleep(1000);
		pp.addtocart();
	}
}
```

Class: TestRegisterPage

```
package com.ninjademo.qa.TestPages;

import java.io.IOException;

import org.apache.poi.EncryptedDocumentException;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.DataProvider;
import org.testng.annotations.Test;

import com.ninjademo.qa.Base.TestBase;
import com.ninjademo.qa.Pages.HomePage;
import com.ninjademo.qa.Pages.RegisterPage;
import com.ninjademo.qa.Utilities.Xls_DataProvider;

public class TestRegisterPage  extends TestBase{


	HomePage hp;
	RegisterPage rp;
```

```
@BeforeMethod
public void OpenApp()
{
	openBrowser();
	hp = new HomePage(driver);
	rp = new RegisterPage(driver);
}


@AfterMethod
public void CloseApp()
{
	driver.quit();
}
@Test(priority='1', dataProvider="testdata")
public void testregisterUser(String name,String lname,String email,String ph,String password,String cpasswd) throws InterruptedException
{
	hp.clickonMyAccount();
	hp.clickonRegister();
	rp.regirsteruser(name,lname,email,ph,password,cpasswd);
}

@DataProvider(name="testdata")
public Object[][] datasupplier() throws EncryptedDocumentException, IOException
{
	Object[] [] input = Xls_DataProvider.getTestData("Sheet1");
	return input;

}
```

```
}
```

Class: TestSearchPage

```
package com.ninjademo.qa.TestPages;

import org.testng.annotations.AfterMethod;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.Test;

import com.ninjademo.qa.Base.TestBase;
import com.ninjademo.qa.Pages.SearchPage;

public class TestSearchPage extends TestBase{

	SearchPage sp;
	@BeforeMethod
	public void OpenApp()
	{
		openBrowser();
		sp = new SearchPage(driver);
	}



	@AfterMethod
	public void CloseApp()
	{
		driver.quit();
	}

	@Test
	public void searchProduct() throws InterruptedException
	{
```

```
                sp.searchproduct();
                Thread.sleep(1000);
                sp.selectproduct();
        }
}
```

Class: Xls_DataProvider

```
package com.ninjademo.qa.Utilities;

import java.io.FileInputStream;
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 Xls_DataProvider
{

        static Workbook book;
        static Sheet sheet;

        public static String testdata_sheet_path =
"C:\\Users\\DELL\\Desktop\\mytestdata\\Registerninja.xlsx";

        public static Object[][] getTestData(String sheetName ) throws
EncryptedDocumentException, IOException
        {

                FileInputStream file = null;
```

```
                file =      new FileInputStream(testdata_sheet_path);

                book = WorkbookFactory.create(file);

                sheet = book.getSheet(sheetName);

                //create an array which will store number of rows and cols
                // dataType[][] arrayname = new datatype[lengthrow][lengthcol]

                Object[][] inputdata = new
Object[sheet.getLastRowNum()][sheet.getRow(0).getLastCellNum()];

                for(int i=0;i<sheet.getLastRowNum();i++)
                {
                        for(int j=0;j<sheet.getRow(0).getLastCellNum();j++)
                        {
                                inputdata[i][j] = sheet.getRow(i+1).getCell(j).toString();
                        }
                }

                return inputdata;

        }

}
```

XML-File:

```
<suite name="test1" verbose="1">
<listeners>
<listener class-name="com.ninjademo.qa.TestPages.ItestListenerClass"></listener>
```

</listeners>

<test name="POMframework">

<classes>

<class name="com.ninjademo.qa.TestPages.TestRegisterPage"></class>

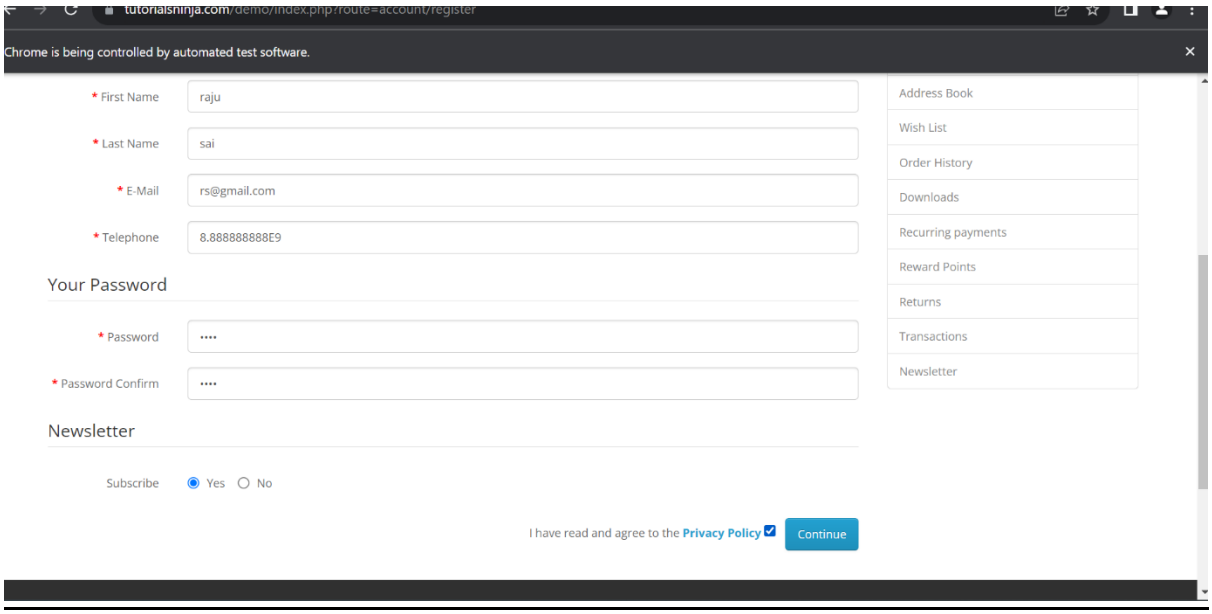
<class name="com.ninjademo.qa.TestPages.TestProductPage"></class>

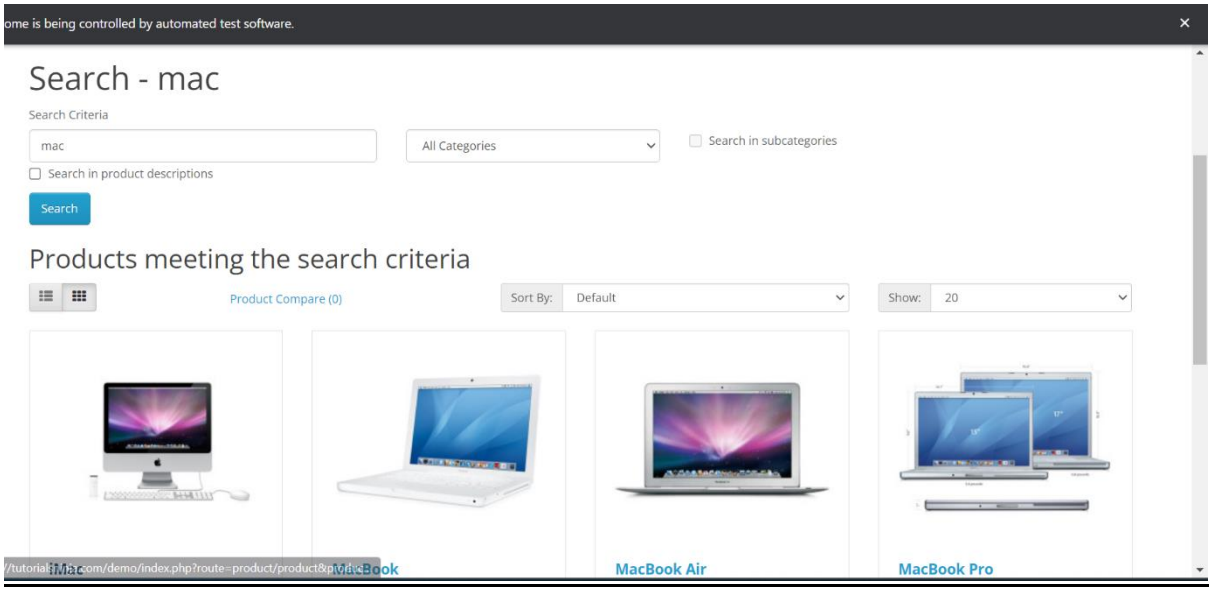
</classes>

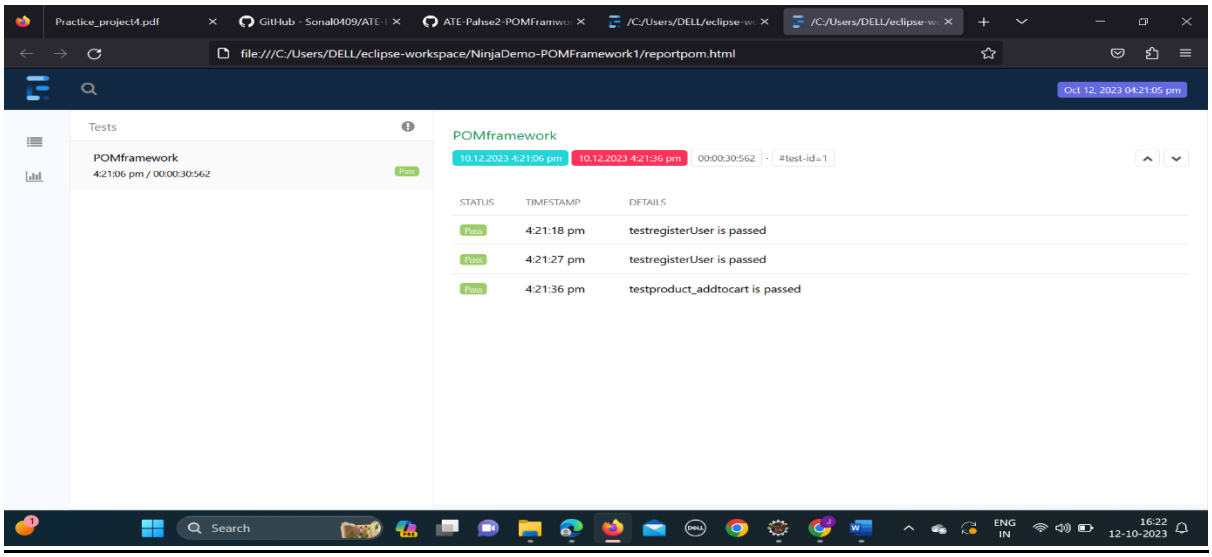
</test>

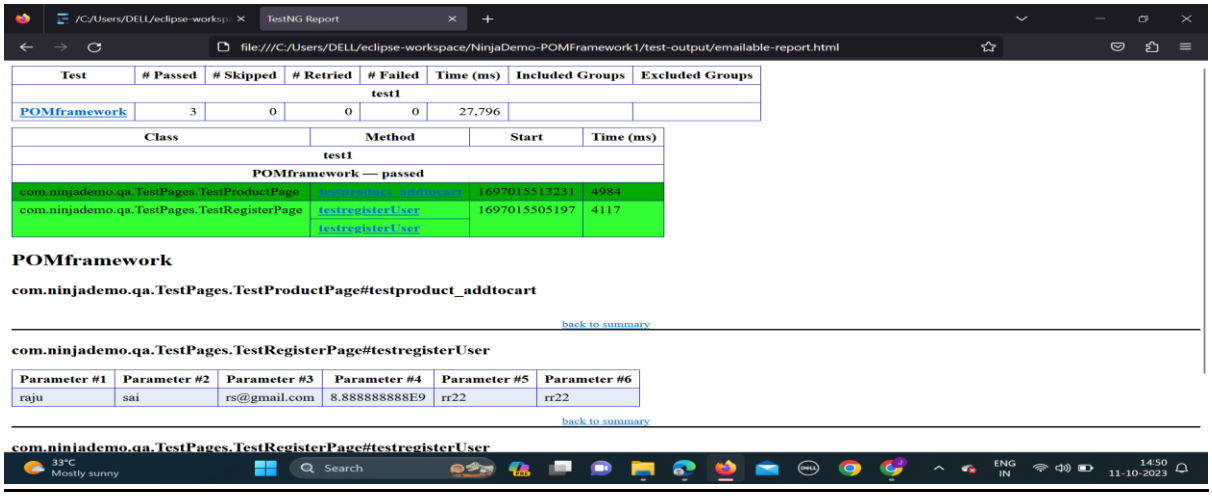
</suite>

Output Screenshots:




ome is being controlled by automated test software.
Search - mac
Search Criteria
mac
All Categories
Search in subcategories
Search in product descriptions
Search
Products meeting the search criteria
Product Compare (0)
Sort By:
Default
Show:
20
MacBook Air
MacBook Pro


Practice_project4.pdf
file:///C:/Users/DELL/eclipse-workspace/NinjaDemo-POMFramework1/reportpom.html
Oct 12, 2023 04:21:05 pm
Tests
POMframework
4:21:06 pm / 00:00:30:562
Pass
POMframework
10.12.2023 4:21:06 pm
10.12.2023 4:21:36 pm
00:00:30:562
#test-id=1
STATUS
TIMESTAMP
DETAILS
Pass
4:21:18 pm
testregisterUser is passed
Pass
4:21:27 pm
testregisterUser is passed
Pass
4:21:36 pm
testproduct_addtocart is passed
Search
ENG
IN
16:22
12-10-2023


TestNG Report
file:///C:/Users/DELL/eclipse-workspace/NinjaDemo-POMFramework1/test-output/emailable-report.html
Test
Passed
Skipped
Retried
Failed
Time (ms)
Included Groups
Excluded Groups
test1
POMframework
3
0
0
0
27,796
Class
Method
Start
Time (ms)
test1
POMframework — passed
com.ninjademo.qa.TestPages.TestProductPage
testproduct_addtocart
1697015513231
4984
com.ninjademo.qa.TestPages.TestRegisterPage
testregisterUser
1697015505197
4117
testregisterUser
POMframework
com.ninjademo.qa.TestPages.TestProductPage#testproduct_addtocart
back to summary
com.ninjademo.qa.TestPages.TestRegisterPage#testregisterUser
Parameter #1
Parameter #2
Parameter #3
Parameter #4
Parameter #5
Parameter #6
raju
sai
rs@gmail.com
8.888888888E9
rr22
rr22
back to summary
com.ninjademo.qa.TestPages.TestRegisterPage#testregisterUser
33°C
Mostly sunny
Search
ENG
IN
14:50
11-10-2023