31-----

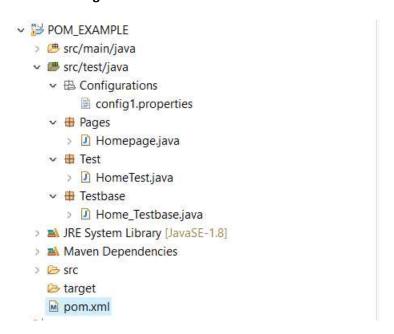
Submitted By TANUJA SHARMA

Que1. What Is Page Object Model (POM)? Explain with practical example?

Ans1= Page Object Model (POM): POM is a design pattern, It's used in automation for creating the object repositories for Web UI elements. It reduces code duplication and improves test maintenance.

Practical example: Same as below.

Que2. Go to 'http://www.orangeHRM.com/' Identify all the test cases of Home page and create it using POM Framework



CODE Home_Testbase.java:

package Testbase;

import java.io.FileInputStream;

import java.io.FileNotFoundException;

```
import java.io.IOException;
import java.util.Properties;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.chrome.ChromeOptions;
import io.github.bonigarcia.wdm.WebDriverManager;
public class Home_Testbase {
       public static WebDriver drive;
       public static Properties prop;
       public static void initialization() throws IOException, InterruptedException
       {
               try
               {
                       FileInputStream fs=new
FileInputStream("D:\\workspace\\POM_EXAMPLE\\src\\test\\java\\Configurations\\config1.pro
perties");
                       prop=new Properties();
                       prop.load(fs);
               }
               catch(FileNotFoundException e)
               {
                       System.out.println("File not found");
                       //e.printStackTrace();
               }
```

```
WebDriverManager.chromedriver().setup();
                                                      ChromeOptions chromeoptions= new ChromeOptions();
                                                      chromeoptions. add Arguments ("--remote-allow-origins=*"," ignore-certificate-allow-origins=*"," ignore-ce
errors");
                                                      drive= new ChromeDriver(chromeoptions);
                                                      drive.manage().window().maximize();
                                                      drive.get(prop.getProperty("url"));
                           }
                           public static void Toclose()
                           {
                                                      drive.quit();
                           }
}
CODE Homepage.java:
 package Pages;
 import org.openqa.selenium.WebElement;
 import org.openqa.selenium.support.FindBy;
 import org.openqa.selenium.support.PageFactory;
 import Testbase.Home_Testbase;
public class Homepage extends Home_Testbase {
                           @FindBy(xpath="//a[@class='navbar-brand nav-logo']")
```

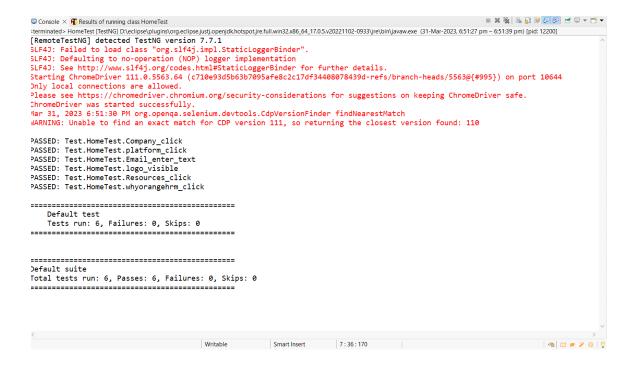
```
WebElement logo;
@FindBy(xpath="//input[@id='Form getForm Email']")
WebElement emailtextbox;
@FindBy(xpath="//a[text()='Platform']")
WebElement platform;
@FindBy(xpath="//a[text()='Why OrangeHRM']")
WebElement whyorangehrm;
@FindBy(xpath="//a[text()='Resources']")
WebElement resources;
@FindBy(xpath="//a[text()='Company']")
WebElement company;
public Homepage()
{
     PageFactory.initElements(drive,this);
}
public WebElement logo()
{
     return logo;
}
```

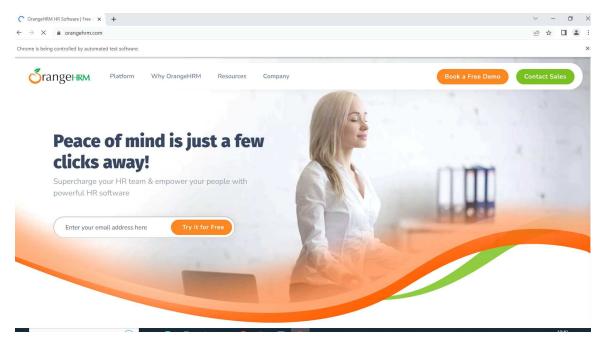
```
public WebElement email()
     {
           return emailtextbox;
     }
     public WebElement platform()
     {
           return platform;
     }
     public WebElement Whyorangehrm()
     {
           return whyorangehrm;
     }
     public WebElement Resources()
     {
           return resources;
     }
     public WebElement Company()
     {
           return company;
     }
}
CODE HomeTest.java:
```

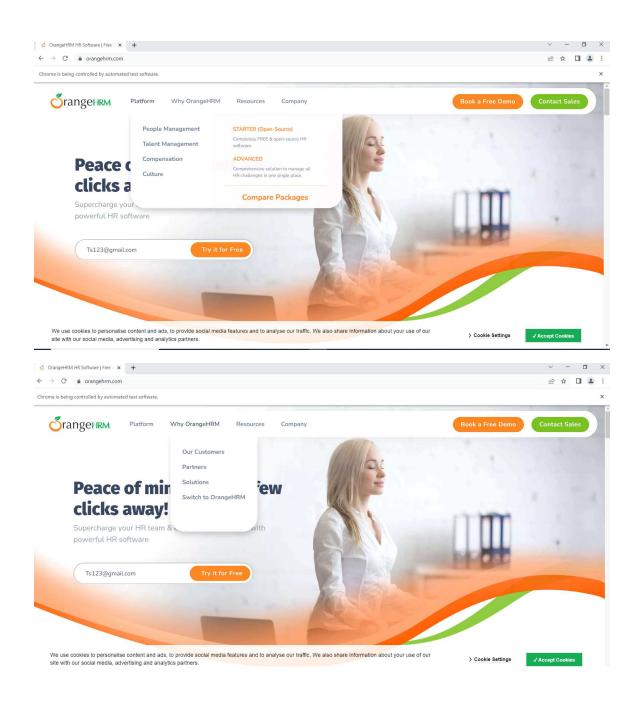
```
package Test;
import java.io.IOException;
import org.testng.annotations.AfterSuite;
import org.testng.annotations.BeforeSuite;
import org.testng.annotations.Test;
import Pages.Homepage;
public class HomeTest extends Homepage{
HomeTest Ht;
     @BeforeSuite
     public void Launch() throws IOException,
InterruptedException
     {
           initialization();
           Ht= new HomeTest();
     }
     @Test
     public void logo_visible()
     {
           System.out.println(Ht.logo().getText());
     }
```

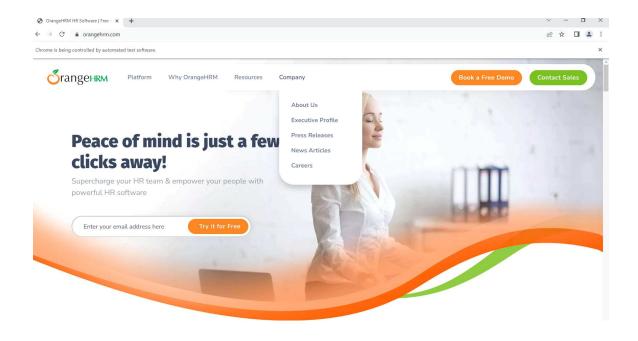
```
@Test
public void Email enter text() throws InterruptedException
{
     Ht.email().sendKeys("Ts123@gmail.com");
     Thread.sleep(200);
}
@Test
public void platform_click() throws InterruptedException
{
     Ht.platform().click();
     Thread.sleep(200);
}
@Test
public void whyorangehrm_click() throws InterruptedException
{
     Ht.Whyorangehrm().click();
     Thread.sleep(200);
}
@Test
public void Resources_click() throws InterruptedException
{
     Ht.Resources().click();
     Thread.sleep(200);
```

```
}
     @Test
     public void Company_click() throws InterruptedException
     {
           Ht.Company().click();
           Thread.sleep(200);
     }
     @AfterSuite
     public void Close_quit()
     {
           Toclose();
     }
}
CODE config1.properties:
url=https://www.orangehrm.com/
OUTPUT SCREENSHOTS:
```









Que3. What are Page Factory Classes?

Ans3= Page Factory Classes: Page Factory Class is provided by Selenium WebDriver to implement the Page Object Model (POM). By using Page factory we can initialize the Page Objects . In POM, we create separate java classes for different pages of a website. These different classes contain the locators for different web elements present on the page and the methods to perform actions on these elements. By doing that, we can simplify our code and segregate the test methods and the object repository.

Que4. What is a framework and its advantages.

Ans4= Framework: A framework is a set of guidelines, assumptions, & concept that provide support for automated s/w testing.

Advantages of Framework:

- •It provides control over the testcases to be executed.
- •To get customized test execution report.
- •For better maintenace of test data and test objects.
- •execution of testcase with multiple sets of data.

Que5. Explain diff. types of Frameworks?

Ans5= The different types of Frameworks are:

Keyword-Driven Framework: It is also known as table-driven testing. It is suitable only for small projects or applications. The automation test scripts performed are based on the keywords specified in the excel sheet of the project.

Linear Automation Framework: It is commonly used in the testing of small applications. It is also called as a Record and playback framework.

Modular Driven Framework: In this Framework, the tester can create test scripts module wise by breaking down the whole application into smaller modules as per the client requirements and create test scripts individually.

Behavior Driven framework: It is to create a platform, which allows Developers or Testers to participate actively. It also increases collaboration between the tester and the developers on our project.

Data-Driven Framework: Generally, Test Data is read from the external files like Excel Files, Text Files. It allows us to create test automation scripts by passing different sets of test data.

Hybrid Testing Framework: It is concept where we are using the advantages of both keyword and data driven framework. Each and every framework has its own positives and negatives. We can take the positive points from each of these framework & create a customized framework. The customized framework is called hybrid framework.