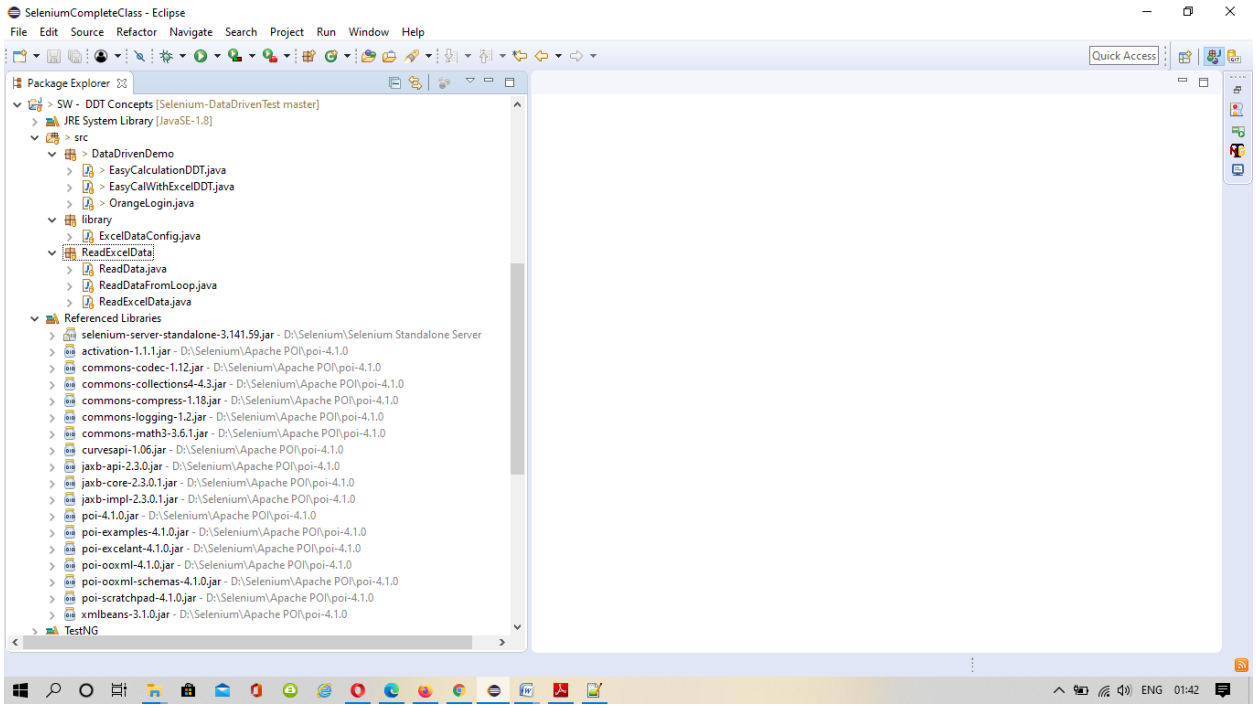
Data Driven Testing in Selenium WebDriver



package DataDrivenDemo

```
package DataDrivenDemo;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.Assert;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.DataProvider;
import org.testng.annotations.Test;

public class EasyCalculationDDT {

	WebDriver driver;

	@Test(dataProvider = "EasyCalculation")
	public void Browser(String UserName, String Password) throws Exception {
		System.setProperty("webdriver.chrome.driver",
		"D:\\Selenium\\Selenium Browsers Jars\\Chrome 84\\chromedriver.exe");
```

```
		driver = new ChromeDriver();

	driver.get("https://www.login.hiox.com/login?referrer=easycalculation.com");
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

		driver.findElement(By.id("log_email")).sendKeys(UserName);
		driver.findElement(By.id("log_password")).sendKeys(Password);
		driver.findElement(By.xpath("//input[@name='log_submit']")).click();

		Thread.sleep(5000);

		Assert.assertTrue(driver.getTitle().contains("Free Online Math
Calculator and Converter"),
				"User Not able to login Sucessfully - Invalid
Credentails");

		System.out.println("User Able to login Sucessfully - Valid
Credentails");

	}

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

	@DataProvider(name = "EasyCalculation")
	public Object[][] passData() {
		Object[][] data = new Object[3][2];

		data[0][0] = "9740673180";
		data[0][1] = "raghubn";

		data[1][0] = "9740673180";
		data[1][1] = "raghubn@123";

		data[2][0] = "raghubn2";
		data[2][1] = "raghubn";

		return data;
	}
}
```

```
package DataDrivenDemo;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.Assert;
```

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

import library.ExcelDataConfig;

public class EasyCalWithExcelDDT {
	WebDriver driver;

	@Test(dataProvider = "LoginHRM")
	public void Browser(String UserName, String Password) throws Exception {
		System.setProperty("webdriver.chrome.driver",
		"D:\\Selenium\\Selenium Browsers Jars\\Chrome 84\\chromedriver.exe");
		driver = new ChromeDriver();
	driver.get("https://www.login.hiox.com/login?referrer=easycalculation.com");
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

		driver.findElement(By.id("log_email")).sendKeys(UserName);
		driver.findElement(By.id("log_password")).sendKeys(Password);
		driver.findElement(By.xpath("//input[@name='log_submit']")).click();
		Thread.sleep(5000);

		Assert.assertTrue(driver.getTitle().contains("Free Online Math
Calculator and Converter"),
				"User Not able to login Sucessfully - Invalid
Credentails");

		System.out.println("User Able to login Sucessfully - Valid
Credentails");
	}

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

	@DataProvider(name = "LoginHRM")

	public Object[][] passData() {
		ExcelDataConfig config = new ExcelDataConfig(
	"D:\\SeleniumCompleteClass\\SW -  DDT Concepts\\OrangeTestData\\OrangeHRM
TestData.xlsx");
		int rows = config.getRowCount(0);

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

		for(int i=0; i<rows; i++) {

			data[i][0] = config.getData(0, i, 0);
			data[i][1] = config.getData(0, i, 1);
				}
		return data;
	}
}
```

```java
package DataDrivenDemo;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.Assert;
import org.testng.annotations.Test;

public class OrangeLogin {


	@Test
	public void Browser() throws Exception {
		System.setProperty("webdriver.chrome.driver",
		"D:\\Selenium\\Selenium Browsers Jars\\Chrome 84\\chromedriver.exe");
		WebDriver driver = new ChromeDriver();
		driver.navigate().to("https://opensource-
demo.orangehrmlive.com/index.php/auth/login");
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

		driver.findElement(By.id("txtUsername")).sendKeys("Admin");
		driver.findElement(By.id("txtPassword")).sendKeys("admin123");

	driver.findElement(By.xpath("//input[contains(@id,'btnLogin')]")).click();

		Thread.sleep(5000);

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


		Assert.assertTrue(driver.getTitle().contains("OrangeHRM"),
				"User Not able to login Sucessfully - Invalid
Credentails");

		System.out.println("User Able to login Sucessfully - Valid
Credentails");

		driver.quit();
	}
}
```

```java
package library;

import java.io.File;
import java.io.FileInputStream;
import org.apache.poi.xssf.usermodel.XSSFSheet;
import org.apache.poi.xssf.usermodel.XSSFWorkbook;

public class ExcelDataConfig {
	XSSFWorkbook wb;
	XSSFSheet sheet1;

	public ExcelDataConfig(String excelpath) {
		try {
			File src = new File(excelpath);
			FileInputStream fis = new FileInputStream(src);
			wb = new XSSFWorkbook(fis);
			sheet1 = wb.getSheetAt(0);
		} catch (Exception e) {
			System.out.println(e.getMessage());
		}
	}

	public String getData(int sheetNumber, int row, int column) {
		sheet1 = wb.getSheetAt(sheetNumber);
		String data = sheet1.getRow(row).getCell(column).getStringCellValue();
		return data;
	}

	public int getRowCount(int sheetIndex) {
		int row = wb.getSheetAt(sheetIndex).getLastRowNum();
		row = row + 1;
		return row;
	}
}
```

```java
package ReadExcelData;

import java.io.File;
import java.io.FileInputStream;
import org.apache.poi.xssf.usermodel.XSSFSheet;
import org.apache.poi.xssf.usermodel.XSSFWorkbook;

public class ReadData {

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

		File src = new File("D:\\LTI Selenium Samples\\Apache TestData\\TestData.xlsx");
		FileInputStream fis = new FileInputStream(src);
		XSSFWorkbook wb = new XSSFWorkbook(fis);
		XSSFSheet sheet1 = wb.getSheetAt(0);

		String data0 = sheet1.getRow(0).getCell(0).getStringCellValue();
		System.out.println("Data form Excel is ...." + data0);

		String data1 = sheet1.getRow(0).getCell(1).getStringCellValue();
		System.out.println("Data form Excel is ...." + data1);

		wb.close();
	}
}
```

```java
package ReadExcelData;

import java.io.File;
import java.io.FileInputStream;
import org.apache.poi.xssf.usermodel.XSSFSheet;
import org.apache.poi.xssf.usermodel.XSSFWorkbook;

public class ReadDataFromLoop {

	public static void main(String[] args) throws Exception {
File src = new File("D:\\LTI Selenium Samples\\Apache TestData\\TestData.xlsx");
		FileInputStream fis = new FileInputStream(src);
		XSSFWorkbook wb = new XSSFWorkbook(fis);
		XSSFSheet sheet1 = wb.getSheetAt(0);

		int rowcount = sheet1.getLastRowNum();
		 System.out.println("Total Rows in ExcelSheet ++++++....  " + rowcount);

		 for(int i = 0; i<=rowcount; i++)
		 {
			String data0 = sheet1.getRow(i).getCell(0).getStringCellValue();
			System.out.println("Data from Row ******.. " + i + "  is  " + data0);
		 }
		 wb.close();
	}	}
```

```java
package ReadExcelData;

import library.ExcelDataConfig;

public class ReadExcelData {

	public static void main(String[] args)
	{
		ExcelDataConfig excel = new ExcelDataConfig("D:\\LTI Selenium
Samples\\DDT Using Excel Sheet\\OrangeHRM TestData.xlsx");
		System.out.println(excel.getData(0, 0, 0));
	}
}
```