Reading Data from an Excel Sheet

BaseTest.java

```
package in.Amazon.TestScripts;

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.edge.EdgeDriver;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeTest;

public class BaseTest {
	WebDriver driver;

	@BeforeTest
	public void LaunchApplication() {
		// 1. Open the browser
		driver = new EdgeDriver();

		// 2. Maximize it
		driver.manage().window().maximize();

		// 3. Navigate to https://amazon.in
		driver.get("https://amazon.in");
	}
	@AfterTest
	public void CloseBrowser() {
		driver.quit();

	}
}
```

BuyMobilePhoneTest.java

```
package in.Amazon.TestScripts;

import java.util.ArrayList;
import org.testng.Assert;
import org.testng.annotations.Test;
import in.Amazon.Pages.AllMobileBrands;
import in.Amazon.Pages.ApplePhones;
import in.Amazon.Pages.BuyPhone;
import in.Amazon.Pages.LandingPage;
import in.Amazon.Pages.SignIn;

public class BuyMobilePhoneTest extends BaseTest {

	@Test
	public void BuyMobile() {
		// 4. Click on 'Mobiles' in the navigation bar
		LandingPage landingPage = new LandingPage(driver);
		landingPage.clickMobiles();

		// 5. Hover the pointer over the 'Mobiles & Accessories'
		AllMobileBrands allMobileBrands = new
AllMobileBrands(driver);
		allMobileBrands.hoverOverMobilesAndAccessories();

		// 6. Click on 'Apple' in the sub-menu
		allMobileBrands.clickApple();

		// 7. Click first available phone
		ApplePhones applePhones = new ApplePhones(driver);
		applePhones.clickFirstMobile();

		// 8. Switch focus on new tab
```

```
            ArrayList<String> tabs = new
ArrayList<>(driver.getWindowHandles());
            driver.switchTo().window(tabs.get(1));

            // 9. Click on 'Buy Now' button
            BuyPhone buyPhone = new BuyPhone(driver);
            buyPhone.clickBuyNowBtn();

            // 10. Verify user sees the text 'Sign in' on the page
            SignIn signIn = new SignIn(driver);
            String expectedText = "Sign in";
            String actualText = signIn.getSignInText();
            Assert.assertEquals(actualText, expectedText);
      }

}
```

DDF.java

```
package in.Amazon.TestScripts;

import java.io.IOException;
import org.testng.Assert;
import org.testng.annotations.Test;
import in.Amazon.Pages.LandingPage;
import in.Amazon.Pages.SignIn;
import utils.ReadExcel;

public class DDF extends BaseTest {
      // Data Driven Framework
      @Test
      public void verifyErrorMsg() throws IOException {
            // 4. Hover the pointer over "Hello Sign-in" menu
            LandingPage landingPage = new LandingPage(driver);
```

```
            landingPage.hoverOverHelloSignInMenu();

            // 5. Click on "Sign-in" button in the sub-menu
            landingPage.clickSignInBtn();

            String[][] data =
ReadExcel.getData("resources/TestData.xlsx", "Sheet1");

            for (int i = 1; i < 6; i++) {
                  String username = data[i][1];
                  // 6. Enter invalid username in the email textbox
                  SignIn signIn = new SignIn(driver);
                  signIn.enterEMail(username);

                  // 7. Click on 'Continue' button
                  signIn.clickContinueBtn();

                  // 8. Verify the error message - 'We cannot find
an account with that email
                  // address' is displayed to the user
                  String expectedErrMsg = "We cannot find an account
with that email address";
                  String actualErrMsg = signIn.getErrMsg();
                  Assert.assertEquals(actualErrMsg, expectedErrMsg);
            }
      }

}
```

VerifyErrorMessageTest.java

```
package in.Amazon.TestScripts;

import org.testng.Assert;
import org.testng.annotations.Test;
```

```
import in.Amazon.Pages.LandingPage;
import in.Amazon.Pages.SignIn;

public class VerifyErrorMessageTest extends BaseTest {
	@Test
	public void verifyErrorMsg() {
		// 4. Hover the pointer over "Hello Sign-in" menu
		LandingPage landingPage = new LandingPage(driver);
		landingPage.hoverOverHelloSignInMenu();

		// 5. Click on "Sign-in" button in the sub-menu
		landingPage.clickSignInBtn();

		// 6. Enter invalid username in the email textbox
		SignIn signIn = new SignIn(driver);
		signIn.enterEMail("batman4455@gmail.com");

		// 7. Click on 'Continue' button
		signIn.clickContinueBtn();

		// 8. Verify the error message - 'We cannot find an
account with that email
		// address' is displayed to the user
		String expectedErrMsg = "We cannot find an account with
that email address";
		String actualErrMsg = signIn.getErrMsg();
		Assert.assertEquals(actualErrMsg, expectedErrMsg);
	}

}
```

ReadExcel.java

```
package utils;


import java.io.File;

import java.io.FileInputStream;

import java.io.IOException;

import org.apache.poi.ss.usermodel.Cell;

import org.apache.poi.ss.usermodel.DataFormatter;

import org.apache.poi.ss.usermodel.Row;

import org.apache.poi.ss.usermodel.Sheet;

import org.apache.poi.ss.usermodel.Workbook;

import org.apache.poi.xssf.usermodel.XSSFWorkbook;


public class ReadExcel {


      public static String[][] getData(String fileName, String
sheetName) throws IOException {

            File file = new File(fileName);

            FileInputStream ips = new FileInputStream(file); //
FileOutputStream for writing the data on excel sheet

            Workbook Wb = new XSSFWorkbook(ips);

            Sheet Sh = Wb.getSheet(sheetName);

            int rowNum = Sh.getLastRowNum() + 1;

            int colNum = Sh.getRow(0).getLastCellNum();

            String[][] data = new String[rowNum][colNum];


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

                  Row row = Sh.getRow(i);

                  for (int j = 0; j < colNum; j++) {

                        Cell cell = row.getCell(j);

                        String value = new
DataFormatter().formatCellValue(cell);

                        data[i][j] = value;

                  }
```

```
			}
			return data;
		}

	}
```

SignIn.java

```
	package in.Amazon.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 SignIn {
		@FindBy(xpath = "//h1[contains(@class, 'small')]")
		private WebElement signInText;

		@FindBy(id = "ap_email")
		private WebElement emailTextBox;

		@FindBy(id = "continue")
		private WebElement continueBtn;

		@FindBy(xpath = "//span[contains(@class, 'a-list-item')]")
		private WebElement errMsg;

		public SignIn(WebDriver driver) {
			PageFactory.initElements(driver, this);
		}

		public String getSignInText() {
```

```
            String text = signInText.getText();
            return text;
      }

      public void enterEMail(String email) {
            emailTextBox.clear();
            emailTextBox.sendKeys(email);
      }

      public void clickContinueBtn() {
            continueBtn.click();
      }

      public String getErrMsg() {
            String message = errMsg.getText();
            return message;
      }

}
```