Problem Statement 3: Listeners:

The Automated Testing Framework is designed to facilitate automated testing of web applications using TestNG and Selenium WebDriver. In this iteration, we are implementing ITestListeners to enhance the testing capabilities, specifically focusing on capturing screenshots on test failures.

Implementation Details:

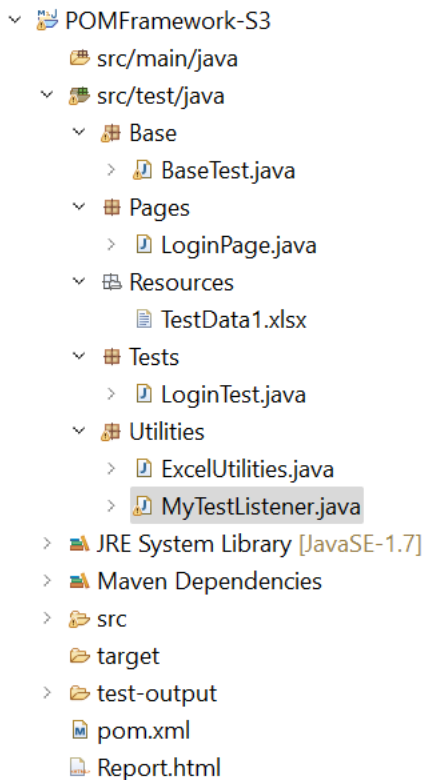
- The MyTestListener class implements the ITestListener interface.

- It includes the onTestFailure method, which captures a screenshot on test failure.

- The captureScreenshot method uses the WebDriver instance to take a screenshot and attaches it to the test report using Allure annotations.

Usage:

- Integrate MyTestListener into the TestNG test suite to enable the capturing of screenshots on test failures.



```java
package Utilities;

import java.io.File;

public class MyTestListener implements ITestListener {
    private WebDriver driver; // Assuming you have the driver initialized somewhere

    public void onTestStart(ITestResult result) {
        System.out.println("Test method has been started");
    }

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

    public void onTestFailure(ITestResult result) {
        System.out.println("Test method is failure");
        System.out.println("Screenshot code");
        try {
            captureScreenshot(result.getName());
        } catch (IOException e) {
            e.printStackTrace();
        }
    }

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

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

    public void onStart(ITestContext context) {
        System.out.println("Testing has started");
    }

    public void onFinish(ITestContext context) {
        System.out.println("Testing has ended");
    }

    private void captureScreenshot(String testName) throws IOException {
        File src = ((TakesScreenshot) driver).getScreenshotAs(OutputType.FILE);
        String screenshotPath = "screenshots/" + testName + ".png";
        FileUtils.copyFile(src, new File(screenshotPath));
        System.out.println("Screenshot captured: " + screenshotPath);
    }
}
```

GitHub repository : https://github.com/Karthick-Office/Project01.git

My “POMFramework-S3” Project is present under the “POMFramework-S3” folder in the GitHub