

Background

I wrote UI automation tests for verifying Subscription prompt for an article on Financial Review web page.

Tools/ Library Used

- Selenium Java library
- Extent report plugin
- TestNG execution engine

Solution Components

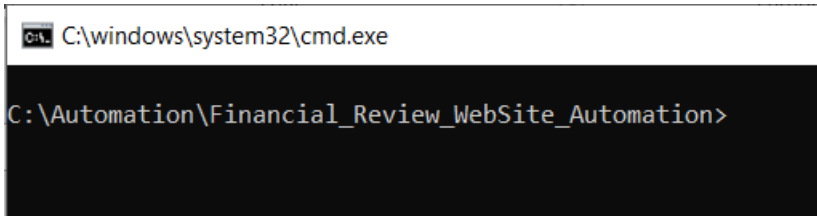
Financial_Review_Automation (in Financial_Review_WebSite_Automation)

- src/main/java
 - allocator
 - ReusableMethods.java → This Java class has all the reusable methods like Performing action on an element, Waiting for an element etc.
 - WebConnector.java → Connector class having code to launch given browser.
- src/test/java
 - ConstantVariables
 - Constant.java → Used to read project variables like Glue, Tags etc
 - listeners
 - ExtentReportListener.java → It has methods like how to capture screenshots, where to store them and so on.
 - runner
 - TestRunner.java → Run this Java class or TestNG.XML file to ren the test script
 - stepdefs
 - BaseClassSteps.java
 - FinancialReviewSteps.java → Step definition file for the statements written in Feature file.
- src/test/resources
 - features
 - FR_Subscription
 - 01_Verify_Subscription_Prompt.feature → Feature file having test in BDD style.
- JRE System Library [JavaSE-1.8]
- Maven Dependencies
- bin
- src
 - main
 - test
 - config
 - Application.properties → Contains Element Identification properties and application capabilities.
 - java
 - lib
 - reports
 - 01_Verify_Subscription_Prompt → Once the execution is completed, results will be available inside this folder.
 - screenshots
 - Extent_Report.html
 - resources
 - iesiuaia
- target
 - pom.xml → Maven POM file to manage all the dependencies.
 - testng.xml

How to Execute?

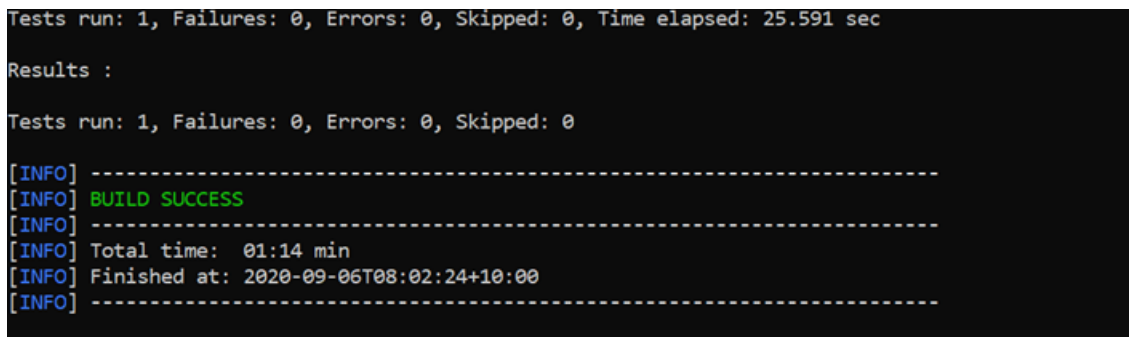
Please follow below steps:

1. Ensure that Java and Maven is available on the machine.
2. Extract all the files from ZIP.
3. Launch Command Prompt.
4. Navigate to the project directory in CMD.



```
C:\windows\system32\cmd.exe  
  
C:\Automation\Financial_Review_WebSite_Automation>
```

5. Once done, run the below Maven command to trigger execution:
 - ***mvn clean test***

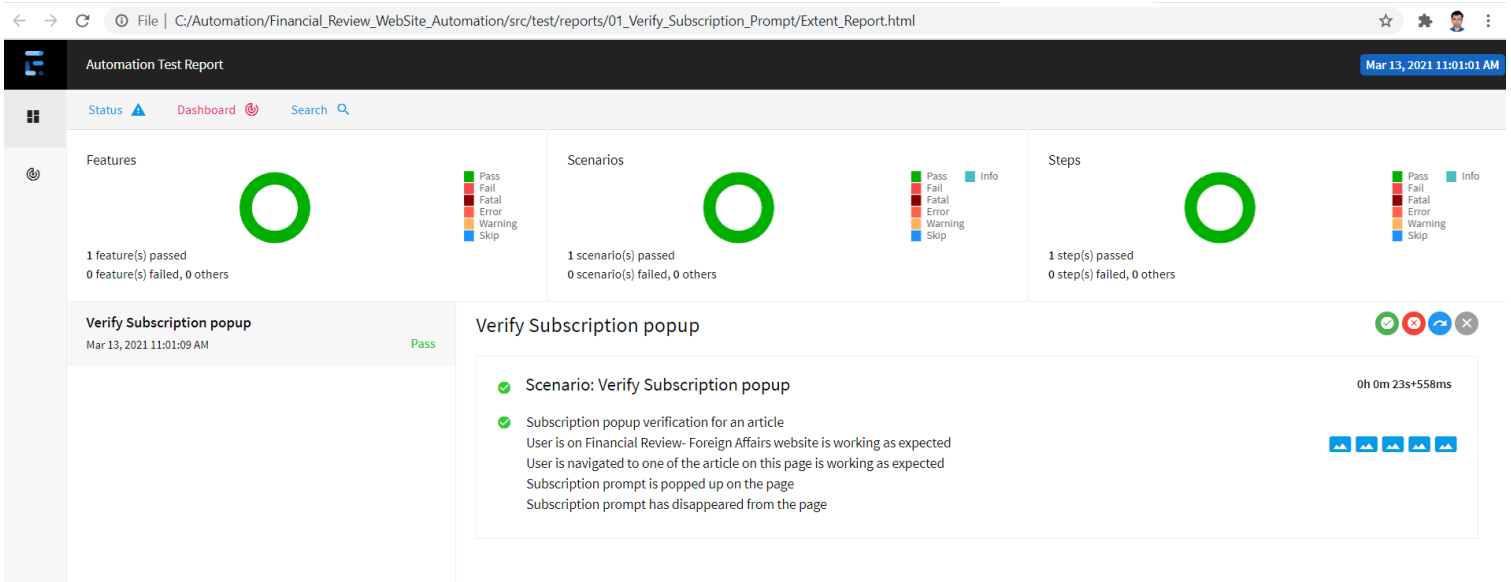


```
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 25.591 sec  
Results :  
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0  
[INFO] -----  
[INFO] BUILD SUCCESS  
[INFO] -----  
[INFO] Total time: 01:14 min  
[INFO] Finished at: 2020-09-06T08:02:24+10:00  
[INFO] -----
```

6. Once the execution is over, open the Extent_Report.html file from below path:
.\Financial_Review_WebSite_Automation\src\test\reports\01_Verify_Subscription_Prompt

Execution Results

Once execution is completed successfully, HTML report will be generated, and will look like below:



Suggested Enhancements

Some of the ideas which is coming in my mind,

1. Currently the solution is Single Threaded, in future we can enhance this to multithreading.
2. Integration with CI/ CD tool.
3. Integration with Jira, so that Jira ticket will be updated by automation test itself.
4. Containers Implementations.
5. Can be integrated with tools like JACOCO or Sonarqube for Code Analysis.
6. We can write Groovy to capture execution logs from Jenkins console and have a summarized HTML page.