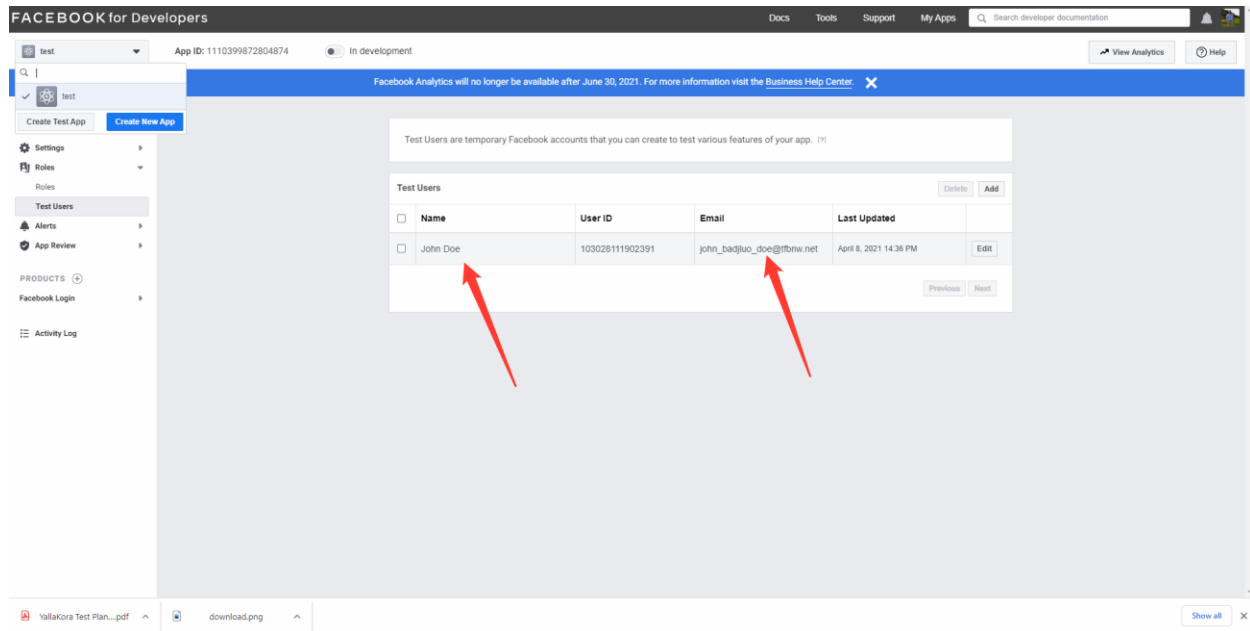


Automated Tests for Facebook Scenarios

- At First, I opened Facebook for developers and created a new test app, and then added one user that I will be using in the automation scripts.



- Created the data driven framework with selenium using Java.
- Used json file to import data to the login scenarios.

Please check the Following screenshots for more details:

POC - facebook_login/src/test/java/resources/application.properties - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Debug Project Explorer Servers JUnit

Constants.java LoginPage.java Constants.java BasePage.java application... BrowserFact... SystemProp...

1 selenium.server.url=https://facebook.com
2 selenium.browser=chrome

Application.properties file to choose which URL & Browser i want to test on.
Changing from Chrome to Firefox will trigger changing the browser.

src/main/java
facebook_login
src/main/java
facebook_facebook_login
src/test/java
LoginPage.java
pages
BasePage.java
LoginPage.java
SeleniumCommonPage.java
resources
BrowserFactory.java
Constants.java
SystemProperties.java
application.properties

IRE System Library [JDKSE-1.7]
Maven Dependencies
allure-results
resources
chromedriver.exe
geckodriver.exe
src
target
testdata.json
test-output
pom.xml
selenium-e2e-automation-framework [selenium-e2e-automation-4]
src/main/java
pages
BasePage.java
HomePage.java
LoginPage.java
src/test/java
base
BaseTest.java
listeners
TestListener.java
tests
LoginTest.java
utils
Screenshot.java

Console Problems Debug Shell Terminal Results of running class LoginTest

<terminated> LoginTest [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\java.exe (Apr 11, 2021, 12:02:17 AM)

PASSED: loginWithInvalidEmail
Login with invalid email
PASSED: loginWithEmptyEmail
Login with empty email
PASSED: loginWithValidCredentials
Login with valid credentials

Default test
Tests run: 6, Failures: 0, Skips: 0

Default suite
Total tests run: 6, Passes: 6, Failures: 0, Skips: 0

POC - facebook_login/src/test/java/resources/SystemProperties.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Debug Project Explorer Servers JUnit

LoginTest.java LoginPage.java Constants.java BasePage.java application... BrowserFact... SystemProp...

public class SystemProperties {
18
19 /**Load System Properties only one time instead of calling the function several time*/
20 private static final Properties SYSTEM_PROPS = loadSystemProperties();
21
22 private static Properties loadSystemProperties() {
23 Properties systemProps = new Properties();
24 try {
25 InputStream appConfigin = SystemProperties.class.getClassLoader().
26 getResourceAsStream("resources/application.properties");
27 if (appConfigin == null) {
28 throw new IllegalArgumentException("system.properties not found");
29 }
30 systemProps.load(appConfigin);
31 } catch (IOException e) {
32 throw new IllegalArgumentException(e);
33 }
34 return systemProps;
35 }
36
37 public static WebDriver getSeleniumBrowser() throws Throwable {
38 BrowserFactory browserFactory = new BrowserFactory();
39 String seleniumBrowser = SYSTEM_PROPS.getProperty("selenium.browser");
40 if (seleniumBrowser == null) {
41 throw new IllegalArgumentException("selenium.browser configuration not found in application.properties");
42 } else {
43 switch (seleniumBrowser) {
44 case "Chrome":
45 return browserFactory.getChromeDriver();
46 case "Firefox":
47 return browserFactory.getFirefoxDriver();
48 default:
49 throw new Exception(seleniumBrowser + " is not supported browser");
50 }
51 }
52 }
53
54 public static String getSystemURL() throws Throwable {
55 String systemURL = SYSTEM_PROPS.getProperty("selenium.server.url");
56 if (systemURL == null) {
57 throw new IllegalArgumentException("selenium.server.url configuration not found in application.properties");
58 }
59 return systemURL;
60 }
61 }
62 }

Function that load all data from the property file

Function to be called to know which Driver should be initiated.

Get the system URL

Console Problems Debug Shell Terminal Results of running class LoginTest

<terminated> LoginTest [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\java.exe (Apr 11, 2021, 12:02:17 AM)

PASSED: loginWithInvalidEmail
Login with invalid email

POC - facebook_login/src/test/java/resources/BrowseFactory.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Debug Project Explorer Servers JUnit

Constants.java
JRE System Library [JSE-1.5]
Maven Dependencies
allure-results
src
target
test-output
pom.xml
facebook_login
src/main/java
src/test/java
facebook.facebook_login
LoginTest.java
pages
BasePage.java
LoginPage.java
SeleniumCommonPage.java
resources
BrowseFactory.java
Constants.java
SystemProperties.java
application.properties
JRE System Library [JSE-1.7]
Maven Dependencies
allure-results
resources
chromedriver.exe
geckodriver.exe
src
target
testdata.json
test-output
pom.xml
selenium-e2e-automation-framework [selenium-e2e-automation-fr

src/test/java
base
BaseTest.java
listeners
TestListener.java
tests
LoginTest.java
utils
Screenshot.java

```
1 package resources;
2
3 import org.openqa.selenium.WebDriver;
4 import org.openqa.selenium.chrome.ChromeDriver;
5 import org.openqa.selenium.firefox.FirefoxDriver;
6
7 public class BrowseFactory {
8
9     public WebDriver getChromeDriver() {
10         System.setProperty("webdriver.chrome.driver", "resources/chromedriver.exe");
11         return new ChromeDriver();
12     }
13
14     public WebDriver getFirefoxDriver() {
15         System.setProperty("webdriver.gecko.driver", "resources/geckodriver.exe");
16         return new FirefoxDriver();
17     }
18 }
19
```

The driver initialization of each browser

Console Problems Debug Shell Terminal Results of running class LoginTest

<terminated> LoginTest [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\java.exe (Apr 11, 2021, 12:02:17 AM)

PASSED: loginWithInvalidEmail ..

POC - facebook_login/src/test/java/pages/SeleniumCommonPage.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Debug Project Explorer Servers JUnit

GetProductAP... Constants.java application... BrowseFact... SystemProp... SeleniumComm... CommonTestU...

```
1 package pages;
2
3 import org.openqa.selenium.By;
4 import org.openqa.selenium.TimeoutException;
5 import org.openqa.selenium.WebDriver;
6 import org.openqa.selenium.support.ui.ExpectedConditions;
7 import org.openqa.selenium.support.ui.WebDriverWait;
8
9 public class SeleniumCommonPage extends BasePage {
10
11     public SeleniumCommonPage(WebDriver webDriver) {
12         super(webDriver);
13     }
14
15     public boolean waitTillConditionalVisibilityOf(By by, int seconds) {
16         WebDriverWait wait = new WebDriverWait(webDriver, seconds);
17         try {
18             wait.until(ExpectedConditions.visibilityOfElementLocated(by));
19             return webDriver.findElement(by).isDisplayed();
20         } catch (TimeoutException ex) {
21             return false;
22         }
23     }
24
25     public void waitTillInvisibilityOf(By by, int seconds) {
26         WebDriverWait wait = new WebDriverWait(webDriver, seconds);
27         wait.until(ExpectedConditions.invisibilityOfElementLocated(by));
28     }
29
30     public void waitTillVisibilityOf(By by, int seconds) {
31         WebDriverWait wait = new WebDriverWait(webDriver, seconds);
32         wait.until(ExpectedConditions.visibilityOfElementLocated(by));
33     }
34
35     public void waitTillElementToBeClickable(By by, int seconds) {
36         WebDriverWait wait = new WebDriverWait(webDriver, seconds);
37         wait.until(ExpectedConditions.elementToBeClickable(by));
38     }
39
40 }
41
42
```

Selenium common page that includes some functions that would be reused all over the projects instead of duplicating steps.

Console Problems Debug Shell Terminal Results of running class LoginTest

Search

Passed: 6 Failed: 0 Skipped: 0

Tests: 1/1 Methods: 6 (7965 ms)

Writeable Smart Insert 40:11:1288

