## Description

In this assignment you will create an automated testing framework for testing Zero online banking application. The framework will use Cucumber BDD and Selenium.

Project set up

1. Create a maven project. Use group-id *com.zerobank* and artifact-id *zerobank-automation*. Add all the required dependencies for Cucumber and Selenium to the pom file. Also add required plugins for HTML reporting with cucumber.

2. Under src/test/java create following packages:

   a. com.zerobank.pages

   b. com.zerobank.runners

   c. com.zerobank.stepdefnitions

   d. com.zerobank.utilities

3. Under src/test create following directory resources. Mark the new resources directory as a *test resource folder*.

4. Under the src/test/resources create new folder features.
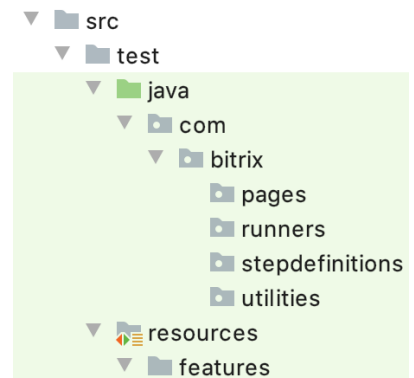
NOTE: This picture shows what packages you should have up completion of steps 1 to 4.

5. Under the project folder add file configuration.properties.

6. Under utilities package create ConfigurationReader which reads from the properties file.

7. Under utilities package create Driver utility which can create a new web driver object based on value from configuration.properties.

8. Under utilities package create BrowserUtils based on the example shown in the class. You can more methods to this utility as you see fit.

9. Under runner package create CukesRunner based on the example shown in the class. In this class you can use any CucumberOptions as you see fit.

Automate login functionality

Login.feature

Write scenarios based on the given functionality and automate them in new feature file Login.feature.

- Only authorized users should be able to login to the application. When user logs in with valid credentials, Account summary page should be displayed.

- Users with wrong username or wrong password should not be able to login. Users with blank username or password should also not be able to login. When user tries to login with invalid information, error message Login and/or password are wrong. should be displayed.

HTML Report

Add html reporting capability to your framework using the maven cucumber reporting. HTML report must contain screenshots for failed tests.

Parallel run

Add parallelization to your framework. Parallelization must be on the feature level (scenario level is optional for this assignment).

Feature files

Write feature files based on the following requirements. Create one feature file per requirement. Each feature file can have multiple requirements.

Account summary

Account summary page should have the title *Zero – Account summary*. Account summary page should have to following account types: *Cash Accounts, Investment Accounts, Credit Accounts, Loan Accounts*. Credit Accounts table must have columns *Account, Credit Card* and *Balance*.

Account Activity

Account Activity page should have the title *Zero – Account activity*.

In the Account drop down default option should be *Savings*. Account drop down should have the following options: *Savings, Checking, Loan, Credit Card, Brokerage*. Transactions table should have column names *Date, Description, Deposit, Withdrawal*.

Pay Bills

Account Activity page should have the title *Zero – Pay Bills*. When user completes a successful Pay operation, The payment was successfully submitted. should be displayed. When user tries to make a payment without entering the amount or date, Please fill out this field message! should be displayed.

Amount field should not accept alphabetical or special characters. Date field should not accept alphabetical characters.

NOTE: For the date input field, you can just use sendKeys. No need to click on the date navigator.

Automate following scenarios

NOTE: You can modify the feature files based on your needs

AccountActivityNavigation.feature

> Feature: Navigating to specific accounts in Accounts Activity
>
> Scenario: Savings account redirect
>> Given the user is logged in
>>
>> When the user clicks on Savings link on the Account Summary page
>>
>> Then the *Account Activity* page should be displayed
>>
>> And Account drop down should have *Savings* selected
>
> Scenario: Brokerage account redirect
>> Given the user is logged in
>>
>> When the user clicks on Brokerage link on the Account Summary page
>>
>> Then the *Account Activity* page should be displayed
>>
>> And Account drop down should have *Brokerage* selected

Scenario: Checking account redirect

    Given the user is logged in

    When the user clicks on Checking link on the Account Summary page

    Then the *Account Activity* page should be displayed

    And Account drop down should have *Checking* selected

Scenario: Credit Card account redirect

    Given the user is logged in

    When the user clicks on Credit card link on the Account Summary page

    Then the *Account Activity* page should be displayed

    And Account drop down should have *Credit Card* selected

Scenario: Loan account redirect

    Given the user is logged in

    When the user clicks on Loan link on the Account Summary page

    Then the *Account Activity* page should be displayed

    And Account drop down should have *Loan* selected

FindTransactions.feature

Feature: Find Transactions in Account Activity

Scenario: Search date range

    Given the user accesses the Find Transactions tab

    When the user enters date range from "2012-09-01" to "2012-09-06"

    And clicks search

    Then results table should only show transactions dates between "2012-09-01" to "2012-09-06"

    And the results should be sorted by most recent date

    When the user enters date range from "2012-09-02" to "2012-09-06"

    And clicks search

    Then results table should only show transactions dates between "2012-09-02" to "2012-09-06"

    And the results table should only not contain transactions dated "2012-09-01"

Scenario: Search description

        Given the user accesses the Find Transactions tab

        When the user enters description "ONLINE"

        And clicks search

        Then results table should only show descriptions containing "ONLINE"

        When the user enters description "OFFICE"

        And clicks search

        Then results table should only show descriptions containing "OFFICE"

        But results table should not show descriptions containing "OFFICE"

Scenario: Search description case insensitive

        Given the user accesses the Find Transactions tab

        When the user enters description "ONLINE"

        And clicks search

        Then results table should only show descriptions containing "ONLINE"

        When the user enters description "online"

        And clicks search

        Then results table should only show descriptions containing "ONLINE"

Scenario: Type

        Given the user accesses the Find Transactions tab

        And clicks search

        Then results table should show at least one result under Deposit

        Then results table should show at least one result under Withdrawal

        When user selects type "Deposit"

        Then results table should show at least one result under Deposit

        But results table should show no result under Withdrawal

        When user selects type "Withdrawal"

        Then results table should show at least one result under Withdrawal

        But results table should show no result under Deposit

Add New Payee.feature

Feature: Add new payee under pay bills

Scenario: Add a new payee
Given Add New Payee tab

And creates new payee using following information

Payee Name	The Law Offices of Hyde, Price & Scharks
Payee Address	100 Same st, Anytown, USA, 10001
Account	Checking

|Payee details | XYZ account |

Then message The new payee The Law Offices of Hyde, Price & Scharks was successfully created. should be displayed

PurchaseForeignCurrency.feature

Feature: Purchase Foreign Currency

Scenario: Available currencies
Given the user accesses the Purchase foreign currency cash tab

Then following currencies should be available

|Australia (dollar) |

|Canada (dollar) |
|Switzerland (franc) |
|China (yuan) |
|Denmark (krone) |
|Eurozone (euro) |
|Great Britain (pound)|
|Japan (yen) |

|Mexico (peso) |

|Norway (krone) |

|New Zealand (dollar) |

|Singapore (dollar) |

Scenario: Error message for not selecting currency
Given the user accesses the Purchase foreign currency cash tab

When user tries to calculate cost without selecting a currency

Then error message should be displayed

Scenario: Error message for not entering value

Given the user accesses the Purchase foreign currency cash tab

When user tries to calculate cost without entering a value

Then error message should be displayed

StatementsAndDocuments.feature

Feature: Statements and Documents details

Scenario Outline: Recent statements per year
Given the user accesses the Statements & Documents tab
When the user selects the Recent Statements Year <year>
Then <count> statements should be displayed for that year

Examples:

year	count
2009	2
2010	2
2011	2
2012	1

Scenario Outline: Download statements
Given the user accesses the Statements & Documents tab
And the user selects the Recent Statements Year <year>
When the user clicks on statement "<statement>"
Then the downloaded file name should contain "<name>"
And the file type should be pdf

Examples:

year	statement	name
2009	Statement 31/11/09(57K)	31-11-09
2010	Statement 01/12/10(57K)	01-12-10
2011	Statement 05/12/11(57K)	05-12-11
2012	Statement 01/10/12(57K)	01-10-12