**Selenium Cucumber Framework**

**Help Document**

**Step 1: Creating a Feature File:**

**#1) Feature Files:**

Feature files are the essential part of cucumber which is used to write test automation steps or acceptance tests. This can be used as the live document. The steps are the application specification. All the feature files end with .feature extension.

**Sample feature file:**

Feature: Order T-Shirt

Scenario: Login Functionalaity

Given User have the valid credential and application is up

When User login to the application with Valid Credentials

Then login should be successful "My account - My Store"

**#2) Feature:**

**T**his gives information about the high-level business functionality (Refer to the previous example) and the purpose of Application under test. Everybody should be able to understand the intent of feature file by reading the first Feature step. This part is basically kept brief.

**#3) Scenario:**

Basically, a scenario represents a particular functionality which is under test. By seeing the scenario user should be able to understand the intent behind the scenario and what the test is all about. Each scenario should follow given, when and then format. This language is called as “gherkin”.

1. **Given:**As mentioned above, given specifies the pre-conditions. It is basically a known state.
2. **When**: This is used when some action is to be performed. As in above example, we have seen when the user tries to log in using username and password, it becomes an action**.**
3. **Then:**The expected outcome or result should be placed here. For Instance: verify the login is successful, successful page navigation.
4. **Background:**Whenever any step is required to perform in each scenario then those steps need to be placed in Background. For Instance: If a user needs to clear database before each scenario then those steps can be put in a background.
5. **And**: And is used to combine two or more same type of action.

**Example:**

Feature: Order T-Shirt

Scenario: Login Functionalaity

Given User have the valid credential and application is up

When User login to the application with Valid Credentials

Then login should be successful "My account - My Store"

**#4) Scenario Outline:**

Scenario outlines are used when the same test has to be performed with different data set. Let’s take the same example. We have to test login functionality with multiple different sets of username and password.

Feature: Order T-Shirt

Scenario Outline: Order Tshirt - Adding a TShirt to the cart

Given User is on a TShirt shopping Page

When User sort the TShirt "<SortBy>"

And User open the required TShirt "<ProductName>"

And User select the Quanity/Size/Colour "<Colour>","<Size>","<Quantity>"

And User click on add to card button

Then User should see the selected TShirt in the add to cart confirmation page with "<ProductName>","<Colour>","<Size>","<Quantity>"

And User shoud see the message "Product successfully added to your shopping cart"

Examples:

| SortBy | ProductName | Quantity | Size | Colour |

| In stock | Faded Short Sleeve T-shirts | 2 | S | Blue |

**#5) Tags:**

Cucumber by default runs all scenarios in all the feature files. In real time projects, there could be hundreds of feature file which are not required to run at all times.

**For instance**: Feature files related to smoke test need not run all the time. So if you mention a tag as smokeless in each feature file which is related to smoke test and runs cucumber test with @SmokeTest tag. Cucumber will run only those feature files specific to given tags. Please follow the below example. You can specify multiple tags in one feature file.

**Example of use of single tags:**

**@Sanity**

Scenario Outline: Order Tshirt - Adding a TShirt to the cart

Given User is on a TShirt shopping Page

When User sort the TShirt "<SortBy>"

And User open the required TShirt "<ProductName>"

And User select the Quanity/Size/Colour "<Colour>","<Size>","<Quantity>"

And User click on add to card button

Then User should see the selected TShirt in the add to cart confirmation page with "<ProductName>","<Colour>","<Size>","<Quantity>"

And User shoud see the message "Product successfully added to your shopping cart"

Examples:

| SortBy | ProductName | Quantity | Size | Colour |

| In stock | Faded Short Sleeve T-shirts | 2 | S | Blue |

**Note**: Any number of tags can be mentioned for a feature file as well as for scenario.

**Step 2: TestNG Runner**

To run the specific feature file cucumber uses standard TestNG Runner and specify tags in @Cucumber. Options. Multiple tags can be given by using comma separate. Here you can specify the path of the report and type of report you want to generate.

**Example of TestNG Runner:**

@CucumberOptions(plugin = { "com.cucumber.listener.ExtentCucumberFormatter:",

"junit:target/cucumber-reports/UI.xml" },

features = { "Features" },

glue = { "com/rbs/onlineshopping/ui/stepdefinition" },

tags = { "@Sanity" })

**Note:** Similarly, you can give instruction to cucumber to run multiple tags.