Way2Automation - Tutorial 6 – Background keyword in Cucumber

What you will Learn :

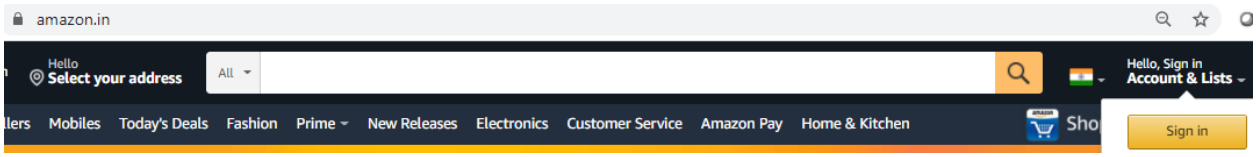
- About 'Background' keyword in cucumber
- User story
- Create feature file to capture scenarios
- Background keyword
- Reference

About 'Background' keyword in cucumber

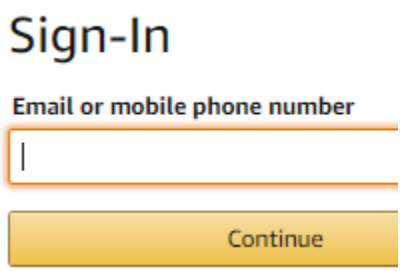
Background keyword is used to define some pre-conditions for all the scenarios. Many a times, we repeat the same 'Given' step in all the scenarios. Since 'Given' step is repeated in every scenario, we can move such repeated steps to the background, by grouping them under a 'Background' section.

User story

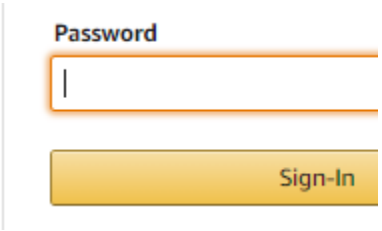
The user story or the requirement is that:
We have to launch www.amazon.in and click 'Sign in'



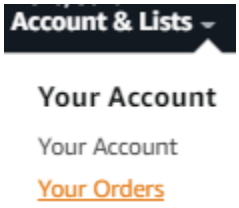
Next we will enter our user id and click 'Continue'



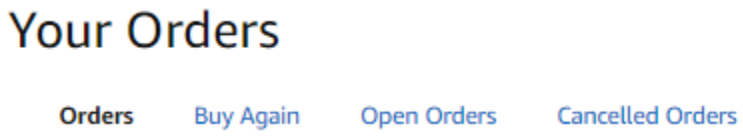
Next we enter our passwordand click 'Sign-in'



Once we login, we will click ‘Your Orders’



We will see our ‘Orders’, ‘Open Orders’, ‘Cancelled Orders’



So we will write 3 scenarios over here:

When I log in and go to order details page, I want to see my previous orders

When I log in and go to order details page, I want to see my open orders

When I log in and go to order details page, I want to see my cancelled orders

Create feature file to capture scenarios

Create a feature file and mention the 3 scenarios, see below

Background.feature

```
1  Feature: My Amazon Orders
2
3    Scenario: Check Previous order details
4    Given a registered user exists
5    Given user is on Amazon login page
6    When user enters username
7    And user enters password
8    And user clicks on sign-in button
9    Then user navigates to order page
10   When user clicks on Orders link
11   Then user checks the previous order details
12
13   Scenario: Check Open order details
14   Given a registered user exists
15   Given user is on Amazon login page
16   When user enters username
17   And user enters password
18   And user clicks on sign-in button
19   Then user navigates to order page
20   When user clicks on Open Orders link
21   Then user checks the open order details
22
23   Scenario: Check Cancelled order details
24   Given a registered user exists
25   Given user is on Amazon login page
26   When user enters username
27   And user enters password
28   And user clicks on sign-in button
29   Then user navigates to order page
30   When user clicks on Cancelled Orders link
31   Then user checks the cancelled order details
```

If you carefully notice the 3 scenarios, the below steps are repeated in each scenario

```
Given a registered user exists
Given user is on Amazon login page
When user enters username
And user enters password
And user clicks on sign-in button
Then user navigates to order page
```

It is not advisable to repeat the steps inside the scenarios.

Background keyword

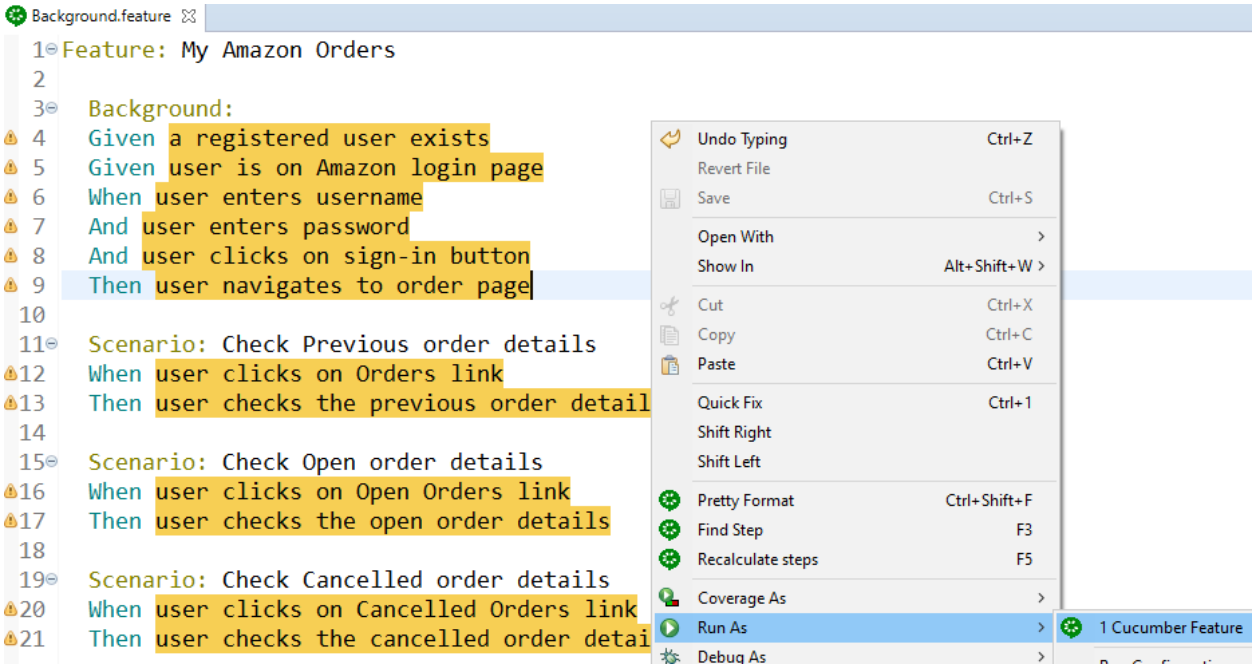
We will now write all the common steps as part of 'Background' keyword, see below. Delete all the common steps from the 3 scenarios. So we will be left with below. If you notice, the feature is more readable now. Each scenario is now focussing on what exactly we want to test as part of that scenario. All the common steps need not be written for every scenario

Background.feature

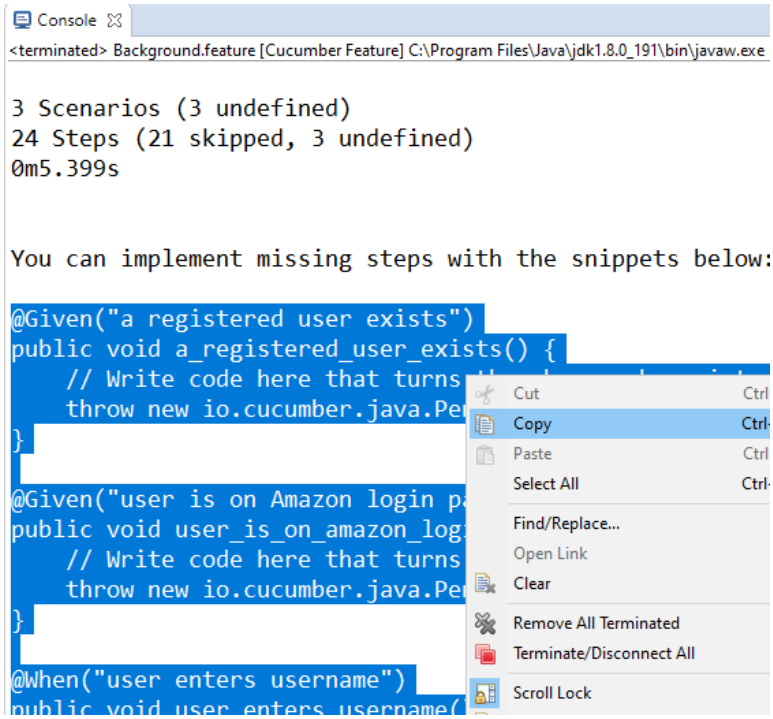
```
1  Feature: My Amazon Orders
2
3    Background:
4    Given a registered user exists
5    Given user is on Amazon login page
6    When user enters username
7    And user enters password
8    And user clicks on sign-in button
9    Then user navigates to order page
10
11   Scenario: Check Previous order details
12   When user clicks on Orders link
13   Then user checks the previous order details
14
15   Scenario: Check Open order details
16   When user clicks on Open Orders link
17   Then user checks the open order details
18
19   Scenario: Check Cancelled order details
20   When user clicks on Cancelled Orders link
21   Then user checks the cancelled order details
```

So the property of 'Background' keyword is that, when you run it, it will be executed before each and every scenario. So in this case, it would be executed 3 times since we have 3 scenarios.

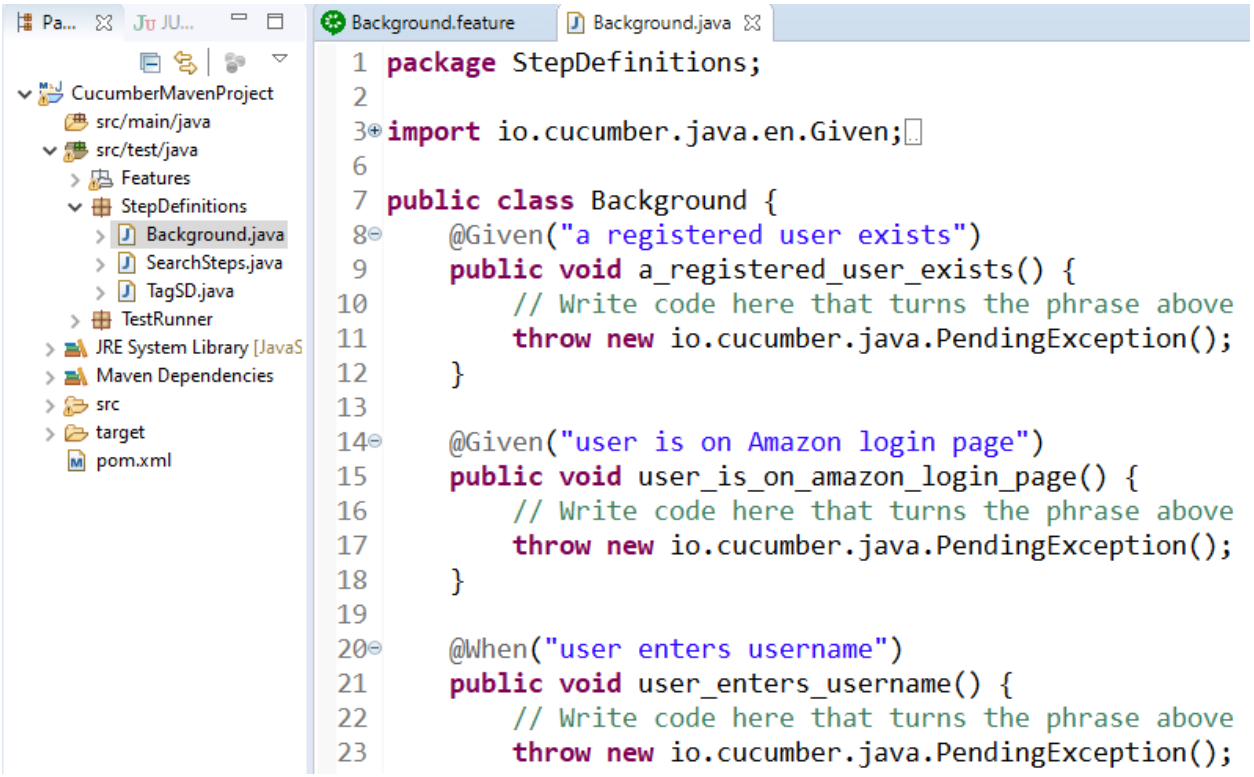
So save the feature file and run it



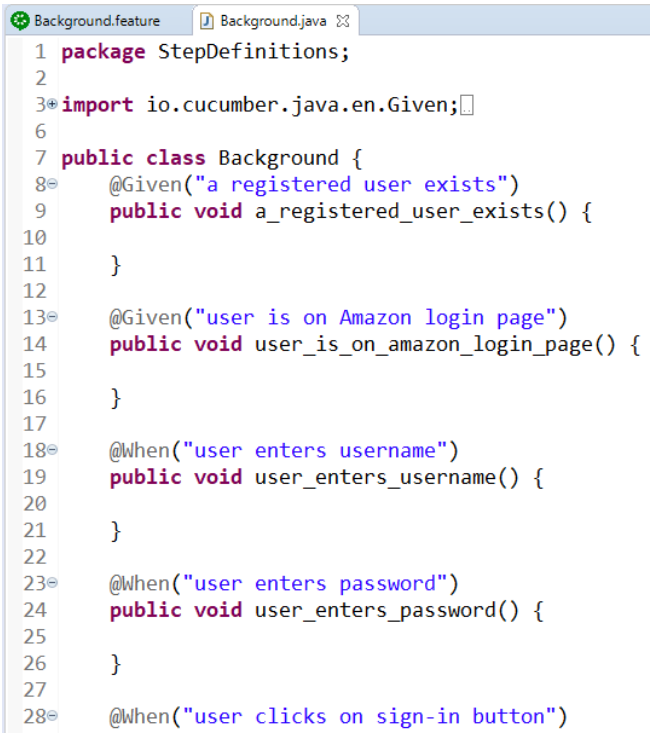
Copy the code snippets from the console window, see below



Create a step definition file and paste it. Import the missing classes

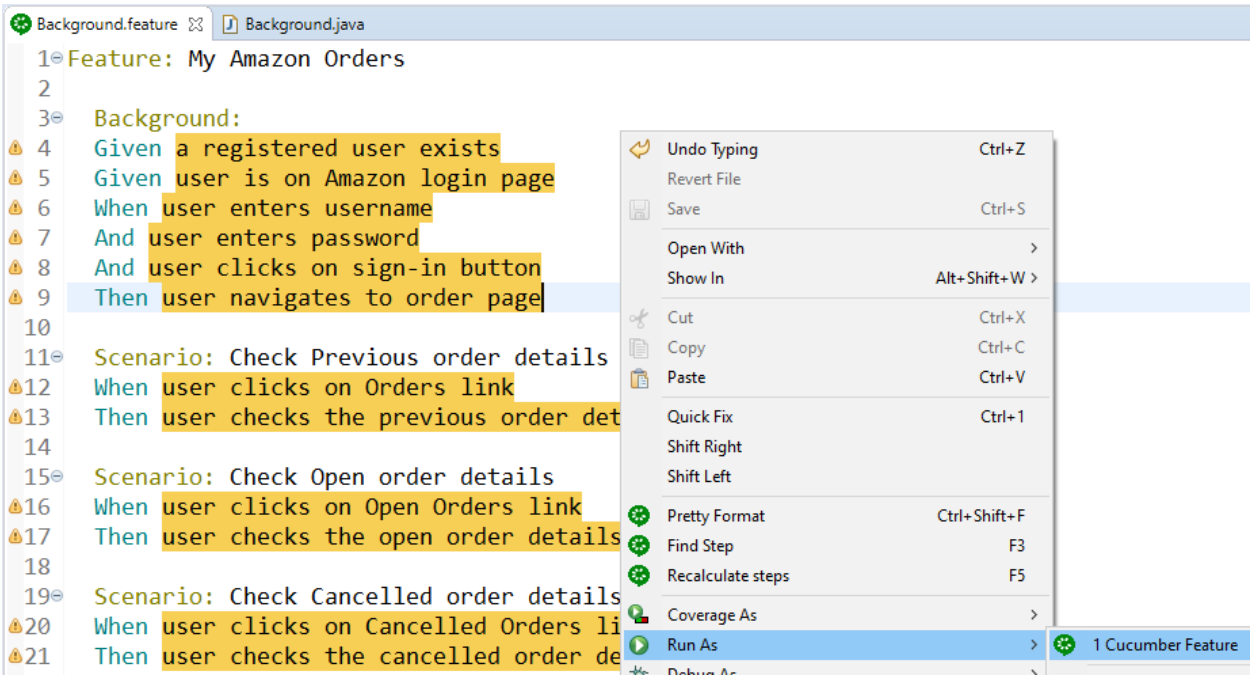


Delete all the throw exceptions

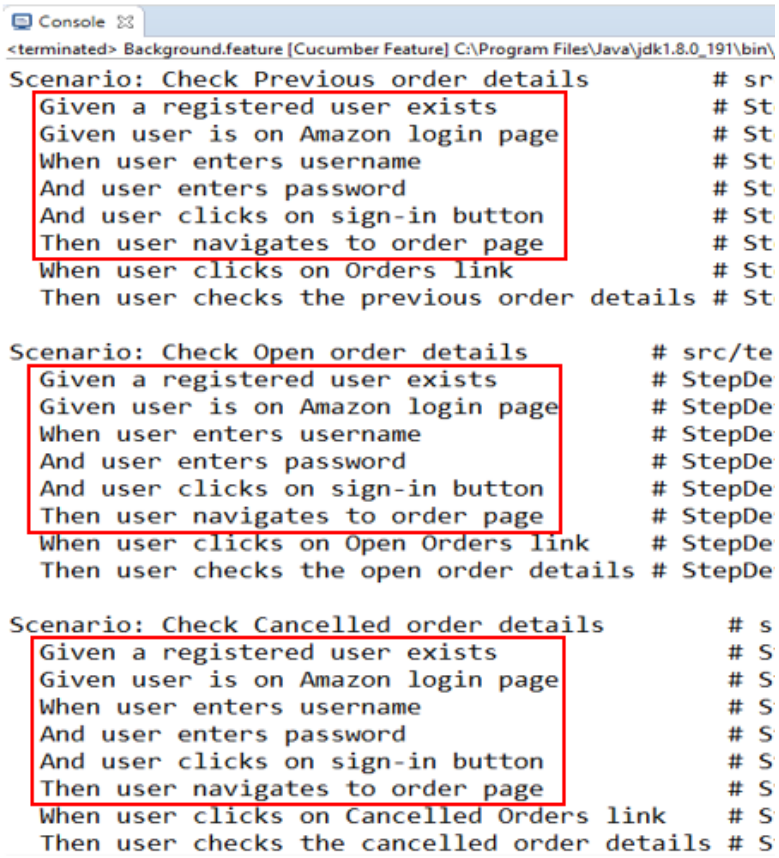


Save the step def file.

Let us run the feature file once again



Notice the console o/p

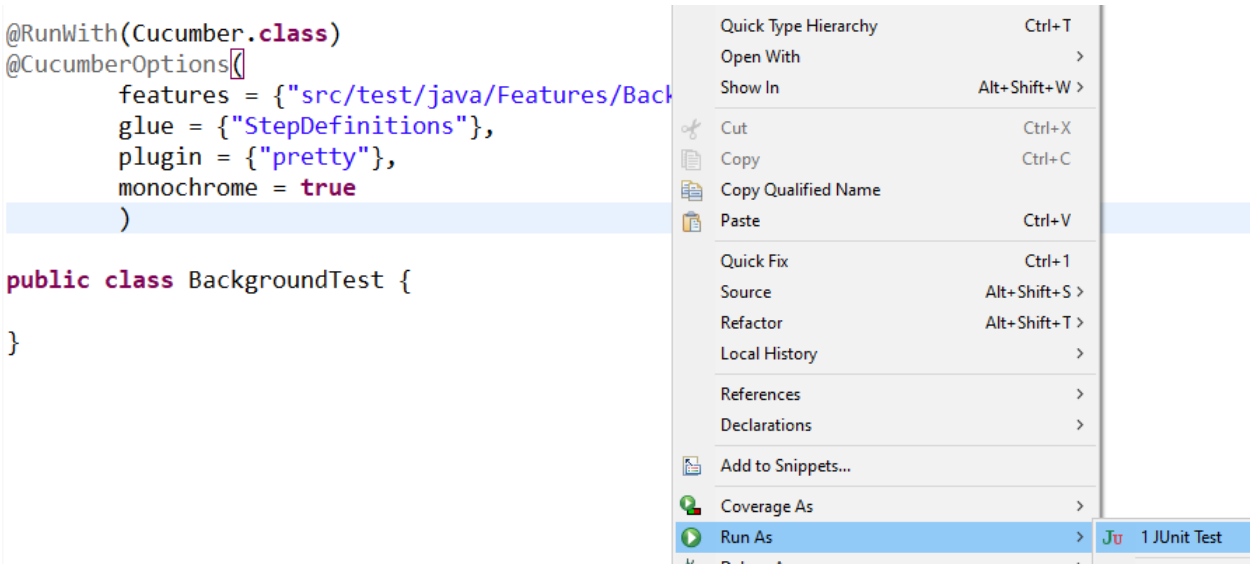


The o/p is exactly same as we were expecting. All the common steps that we wrote as part of ‘Background’ section get automatically attached to each and every scenario.

Let us create a runner file

Save the file

Let us run it



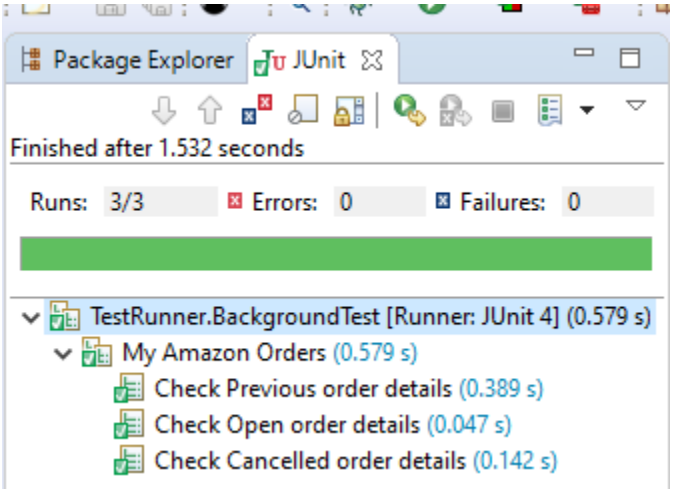
We get the same output

```
Console
<terminated> BackgroundTest [JUnit] C:\Program Files\Java\jdk1.8.0_191\bin\javaw.exe (24-Feb
Scenario: Check Previous order details         # sr
  Given a registered user exists               # St
  Given user is on Amazon login page           # St
  When user enters username                    # St
  And user enters password                     # St
  And user clicks on sign-in button            # St
  Then user navigates to order page            # St
  When user clicks on Orders link              # St
  Then user checks the previous order details # St

Scenario: Check Open order details          # src/te
  Given a registered user exists            # StepDe
  Given user is on Amazon login page        # StepDe
  When user enters username                 # StepDe
  And user enters password                  # StepDe
  And user clicks on sign-in button         # StepDe
  Then user navigates to order page         # StepDe
  When user clicks on Open Orders link      # StepDe
  Then user checks the open order details # StepDe

Scenario: Check Cancelled order details         # s
  Given a registered user exists                # S
  Given user is on Amazon login page            # S
  When user enters username                     # S
  And user enters password                      # S
  And user clicks on sign-in button             # S
  Then user navigates to order page             # S
  When user clicks on Cancelled Orders link     # S
  Then user checks the cancelled order details # S
```

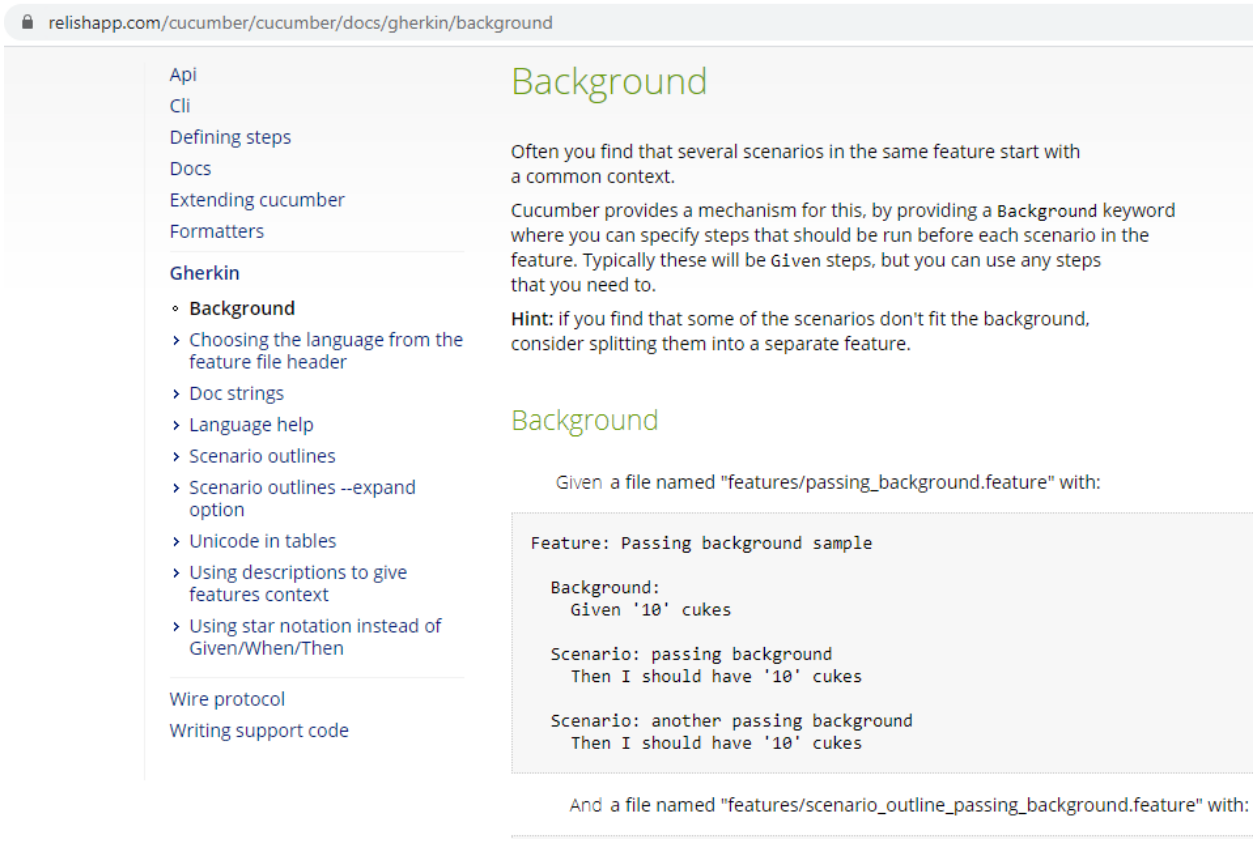
Even the junit runner shows 3 scenarios getting passed



So this is how we use the ‘Background’ keyword.

Reference

You can refer https://relishapp.com/cucumber/cucumber/docs/gherkin/background for further documentation



Thank you for reading!