Cucumber is a software that supports BDD (Behaviour driven development)

It allows us to write scenarios/tests that everyone can understand, if u write in junit only java guys will understand

Cucumber is available in many languages (java, ruby,c++)

Both karate, Cucumber uses gherkin to write test cases

Its better to capture the business requirements in gherkin language

Online gherkin editor

<https://app.specflow.org/gherkin-editor/>

u can write all gherkin code in the above

Gherkin

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Who | Customer | Given |
| Condition | On product page | Given |
| Action | Clicks buy button | When |
| result | Product added to cart | Then |

(its like evearina emanna chesaro, result ila untadi)

keywords

feature-some process - shopping basket  
feature will have list of scenarios  
Each scenario has 3 -summary, description,list if steps

GIVEN

=======  
pre condition/pre-requisites -something happened in d past- describe the initial context- put system into known state  
Ex:- given i am logged in, given product is already added to cart, given i have a balance of 70, given i am a registered user  
Ex:- given i am on the product page

WHEN

====  
Describes the event or action   
Triggered by an actor by a person or by a system   
1) when i clicked the login button  
2) when i click add to cart button  
3) when the credit amount is received  
4) with withdrawal is success

THEN

=====  
Describes the observable output (user should be able to see-not like record inserted in database which user cant see  
Describes the result or expected outcome   
1) then an alert will be sent  
2) then an email wil come  
3) then an product will be removed from cart

AND

=====  
1) instead of writing multiple given keywords ,

2) instead of writing multiple **Then** keywords u can use **AND** keyword

3) u can combine multiple When keywords with And

4) u can combine multiple Given keywords with And

5) u can combine multiple Then keywords with And

Lists

This is not a keyword, instead of writing multiple AND keywords we can use \* symbol

|  |  |
| --- | --- |
| Using AND | Replacing AND with \* |
| Feature: As a customer …  Scenario: As a customer i can add a item to the basket  Given i am on the product detail page  And product must be available in stock  And this product is not already added to basked  When i click add to cart button  Then product must be added to cart  And stock must be reduced by *1*  And a message is displayed to … | Feature: As a customer …  Scenario: As a customer i can add a item to the basket  Given i am on the product detail page  And product must be available in stock  And this product is not already added to basked  When i click add to cart button  Then product must be added to cart  And stock must be reduced by *1*  \* a message is displayed to …  \* user is happy |

BUT

=====  
states negative- like then record in inserted in database but it wont ger displayed

BUT keyword is used, when the statement is effectively negative  
• means list of things

FEATURE

This feature keyword is a high level description of the software feature , 1 feature will have many scenario’s

Feature description: we should write like ,

As a …developer/product owner…… I want……..so that………

RULE

===≠  
Groups one or more scenarios under same business rule

BACKGROUND

===========  
If some given when statements are common for all scenarios, then keep those statements in background, and those will be executed every time a scenario executed  
  
This will help in avoiding writing multiple  
when then statements  
  
Background:   
Given the product is wishlisted  
When the product is added to cart

SCENARIO

========

Only for scenario we will use colon, for remaining keywords we wont use colon  
Then user should be able to checkout  
1) As a customer in can view items in basket  
2) As a customer i can edit the items in shopping basket  
3) As a customer i can remove the items in shopping basket  
4) as a customer, i should add item to shopping basket

All the scenarios will be executed independently, like in junit all the tests will be executed parallelly

Here also same thing, so we should ensure no test should accept the output from previous test, because

All those tests will be executed parallelly

SCENARIO OUTLINE & EXAMPLES

=============  
This will execute the same scenario multiple times with different inputs  
  
Scenario outline  
Given product has a stock level of <begin>  
Examples  
|Begin|end  
|10|20

@TAG

@tag is used to categorize a scenario or feature

U can tag any scenario /feature  
U can tag same scenario with multiple tags  
  
Features:-   
I should be able to edit the contents of my shopping basket, change the quantities and order

1. U can tag a feature or scenario with multiple tags

@exampleTag1

@exampleTag2

Feature some feature

@anotherExampleTag

Scenario

Given

1. @ignore is reserved special tag

Comments

This is not a keyword

# is used to comment , to comment each and every line we have to use # on each line

Sample examples

Feature: Calculator

Simple calculator for adding two numbers

*@mytag*

### Basic example

Scenario: Add two numbers

Given I have entered *50* into the calculator

And I have entered *70* into the calculator

When I press add

Then the result should be *120* on the screen

Feature: Calculator

Scenario: adding the 2 number entered by the user

# given is nothing but pre-condition

Given i have *2* numbers handy

When i click add button

Then the result should be displayed as the sum of those *2* number

### Scenario outline example

*@mytag*

Scenario Outline: Add two numbers

Given I have entered <First> in the calculator

And I have entered <Second> into the calculator

When I press add

Then the result should be <Result> on the screen

Examples:

  | First | Second | Result |

  | 50    | 70     | 120    |

  | 30    | 40     | 70     |

  | 60    | 30     | 90     |

### And – keyword example

AND is a keyword used to combine multiple GIVEN , WHEN ,THEN statements individually

Feature: As a customer i should be able to add the items to basket and remove the items to basked

Scenario: As a customer i can add a item to the basket

Given i am on the product detail page

And product must be available in stock

And this product is not already added to basked

When i click add to cart button

Then product must be added to cart

And stock must be reduced by *1*

And a message is displayed to user saying product successfully added to cart

Here multiple when statements are combined using AND keyword

Scenario: As a user i should be able to login with my credentials

Given the user is on the login page

And user can see the login button

When user entered username

And user entered password

And he clicks login button

Then he should see a message of successfully logged in button

And he is on the account page

### BUT keyword example

In place of AND , we can use but

BUT keyword is used when the statement is effectively negative

Before using BUT keyword

Scenario: As a customer iam unable to add item to basket if a product is not in stock

Given I am on the product detail page

And product is not in the stock

And product is not already added to basket

Then product is not added to cart

And message is displayed to user

And product is not added to cart

And stock level is not changed

After using But keyword

Scenario: As a customer iam unable to add item to basket if a product is not in stock

Given I am on the product detail page

And product is not in the stock

And product is not already added to basket

Then product is not added to cart

And message is displayed to user

But product is not added to cart

And stock level is not changed