

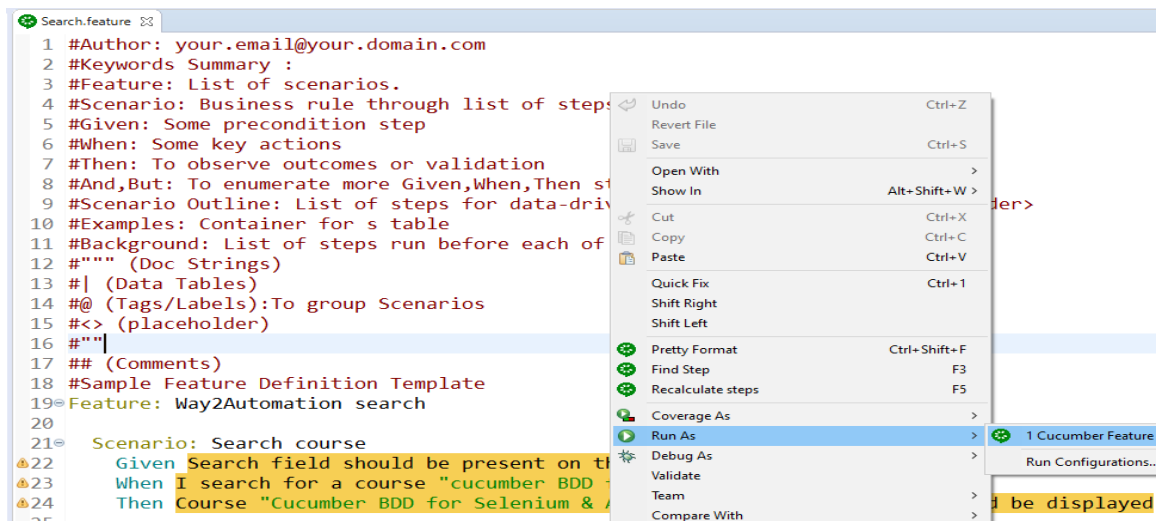
Way2Automation - Tutorial 4 – Create runner file

What you will Learn :

- o Create runner file
- o Execute runner file as junit test
- o Print the pretty output
- o Monochrome option
- o Execute runner file as maven test

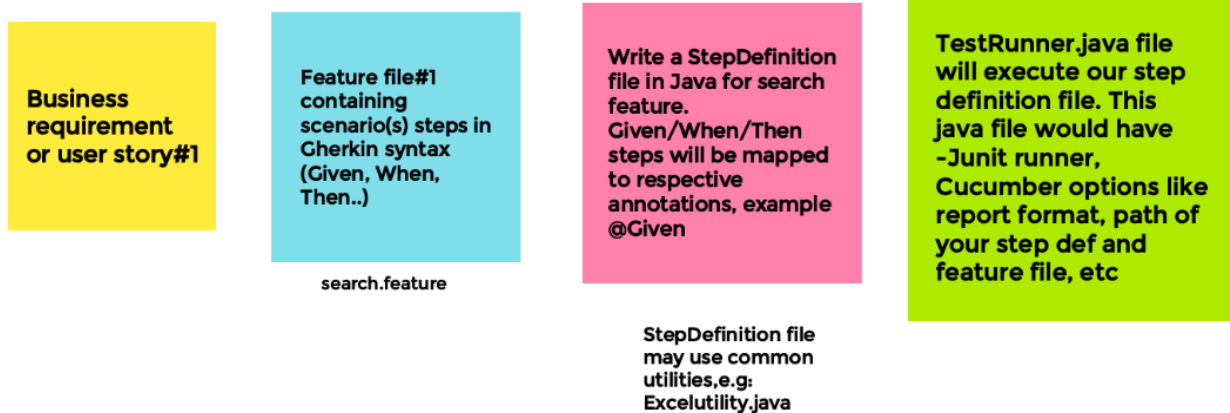
Create runner file

So far, we have been executing our feature file by right clicking the feature file >Run As >Cucumber Feature

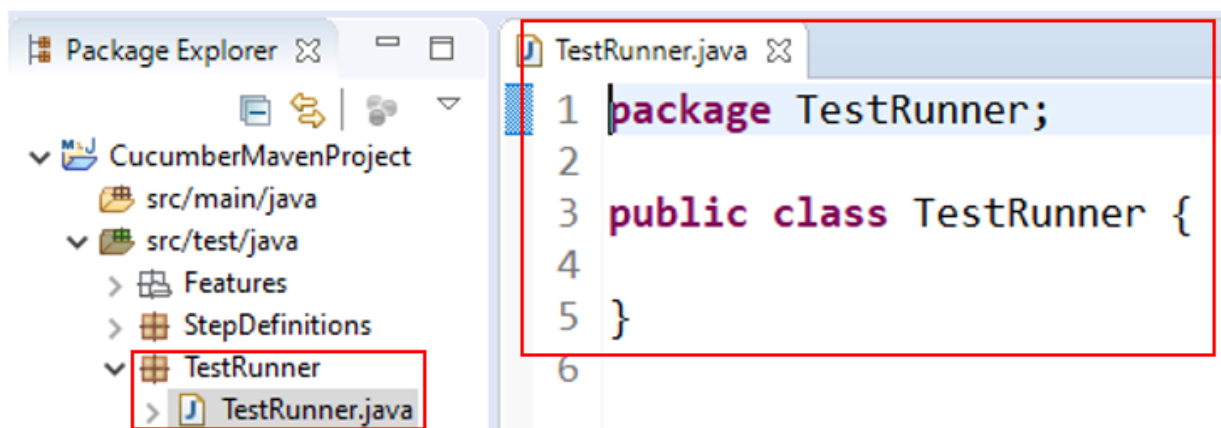


Now, if we have multiple feature files, we cannot execute our feature files using the above method. It will be quite tedious. A better approach would be to create a runner file.

Also, recall cucumber design flow steps. We create TestRunner.java file to execute our step def file

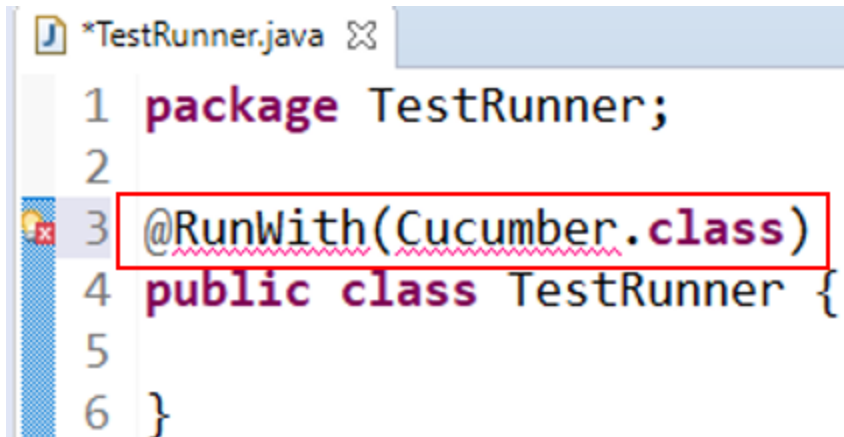


See below. Create a new package 'TestRunner' under `src/test/java`. Under this package, create a java class 'TestRunner'



Now we will add 2 annotations to this class: `@RunWith` and `@CucumberOptions`

Let us first add `@RunWith(Cucumber.class)`

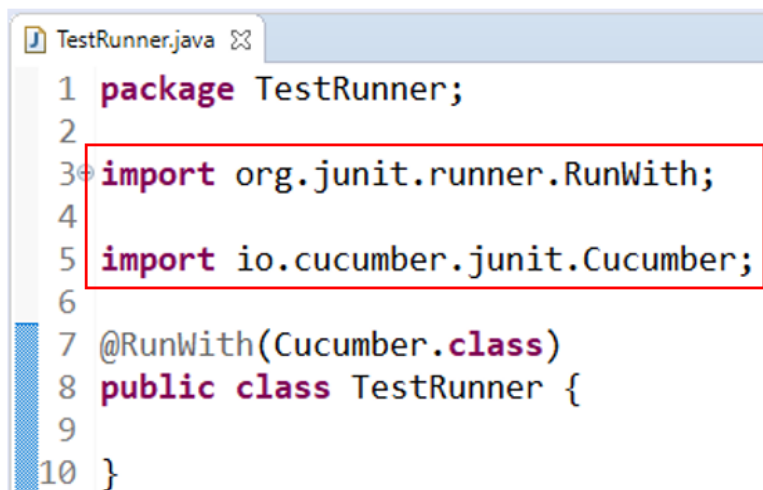


```

1 package TestRunner;
2
3 @RunWith(Cucumber.class)
4 public class TestRunner {
5
6 }

```

To resolve error, import the classes [Ctrl + Shift + O]

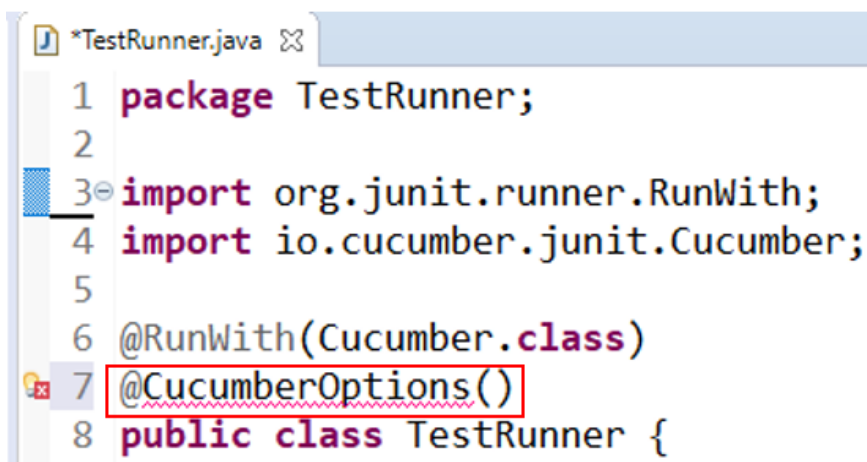


```

1 package TestRunner;
2
3 import org.junit.runner.RunWith;
4 import io.cucumber.junit.Cucumber;
5
6
7 @RunWith(Cucumber.class)
8 public class TestRunner {
9
10 }

```

Let us now add the second annotation



```

1 package TestRunner;
2
3 import org.junit.runner.RunWith;
4 import io.cucumber.junit.Cucumber;
5
6 @RunWith(Cucumber.class)
7 @CucumberOptions()
8 public class TestRunner {

```

To resolve error, import the classes [Ctrl + Shift + O]

```

*TestRunner.java
1 package TestRunner;
2
3 import org.junit.runner.RunWith;
4
5 import io.cucumber.junit.Cucumber;
6 import io.cucumber.junit.CucumberOptions;
7
8 @RunWith(Cucumber.class)
9 @CucumberOptions()
10 public class TestRunner {

```

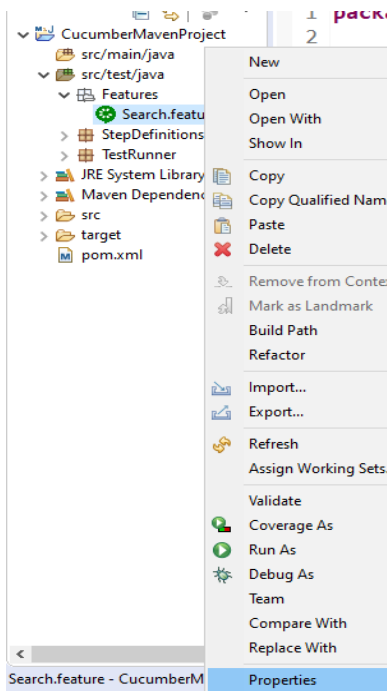
We will now add some options. Now, how will the TestRunner file know the location of feature file? The first option does that. We use the 'features' keyword

```

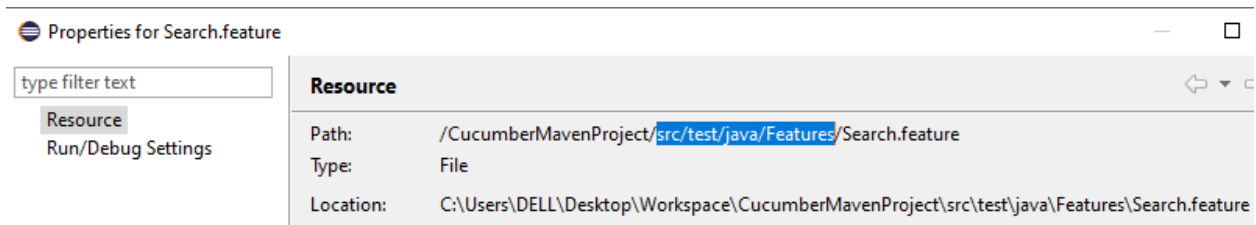
8 @RunWith(Cucumber.class)
9 @CucumberOptions(
10     features = {""},
11 )
12 public class TestRunner {
13

```

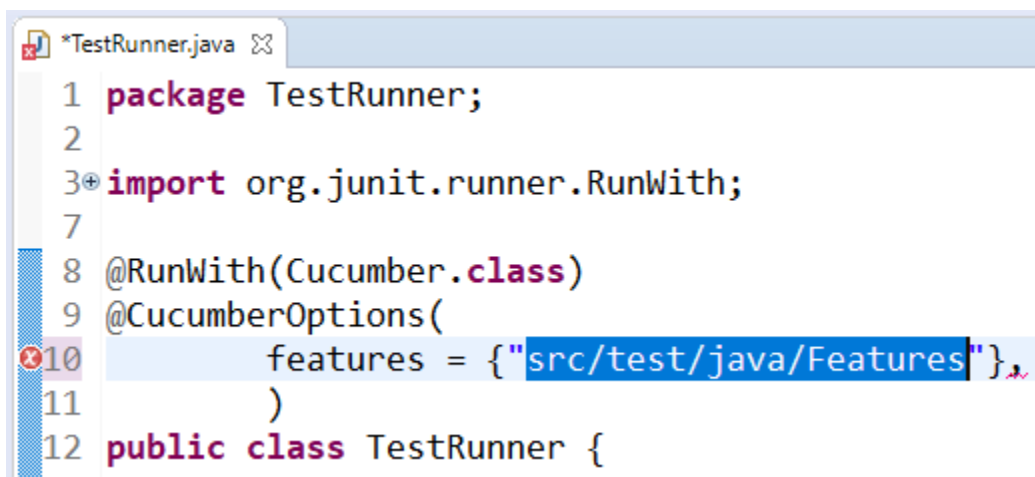
To find the location of feature file, right click the feature file > properties



The below window comes up. Just copy the path starting from `src/test/java/Features`



Paste it



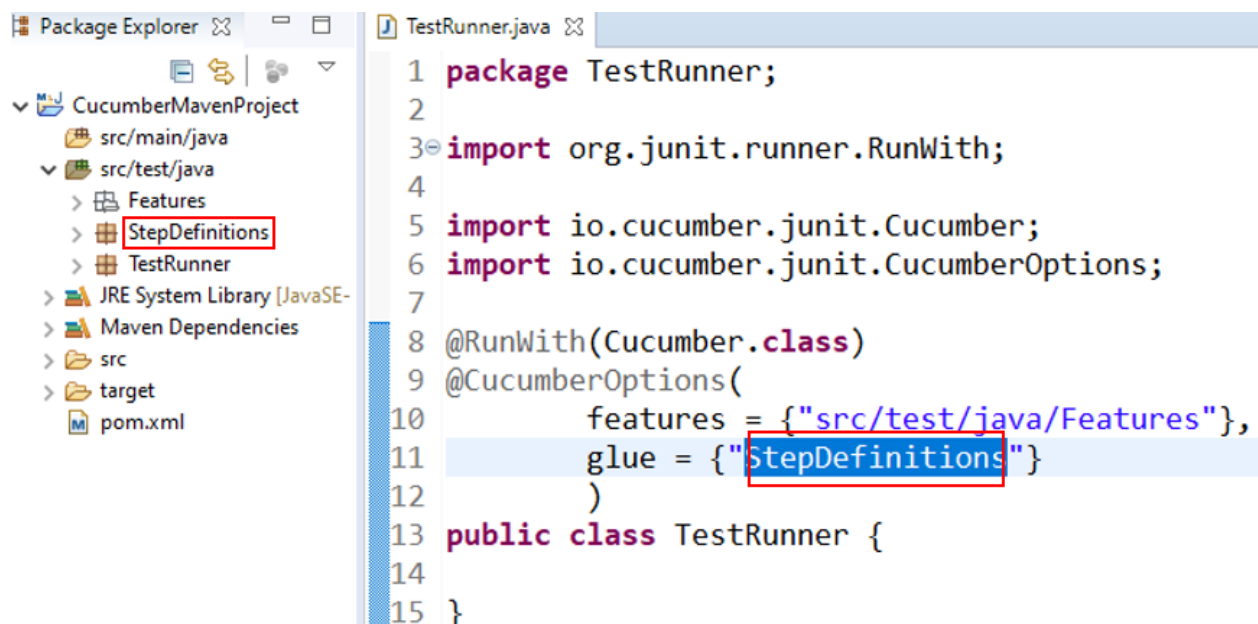
Note that, we copied the path only upto 'Features' package. We could have also copied the path upto the exact feature filename viz `src/test/java/Features/Search.feature`

However, tomorrow if there are multiple feature files inside 'Features' package and we want to execute all of them, than it would be better to mention the path only upto 'Features' package.

Next, using second option, we will tell the TestRunner where exactly the step definition file is available. This is done using 'glue' keyword

```
8 @RunWith(Cucumber.class)
9 @CucumberOptions(
10     features = {"src/test/java/Features"},
11     glue = {""}
12 )
13 public class TestRunner {
```

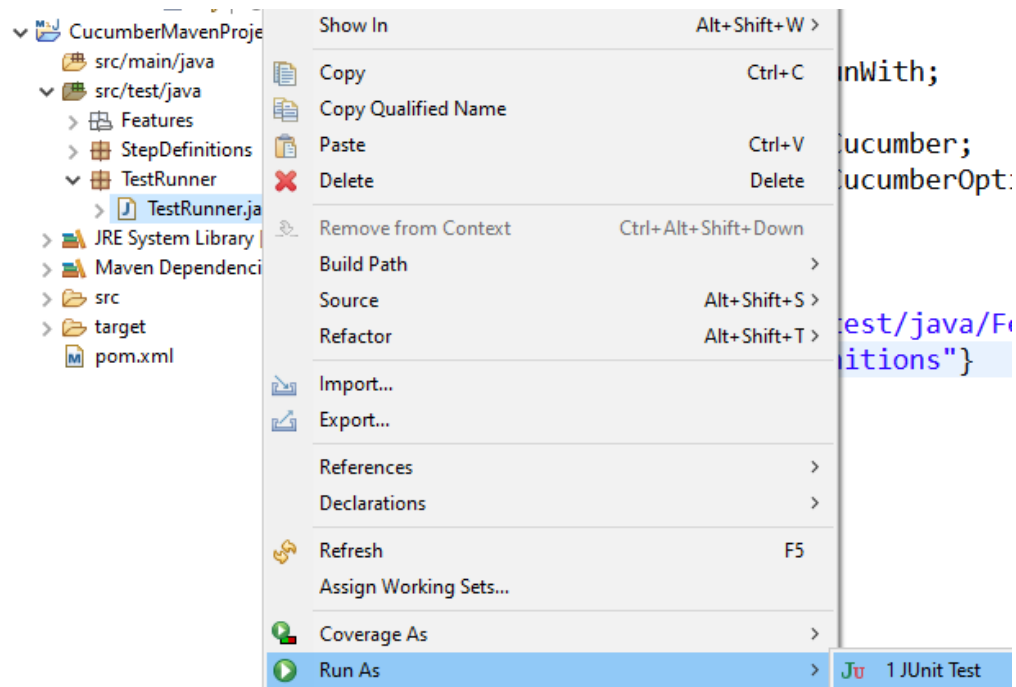
Just mention the name of the 'StepDefinitions' package folder. The TestRunner file will come to know that all the step definition files are present inside this package



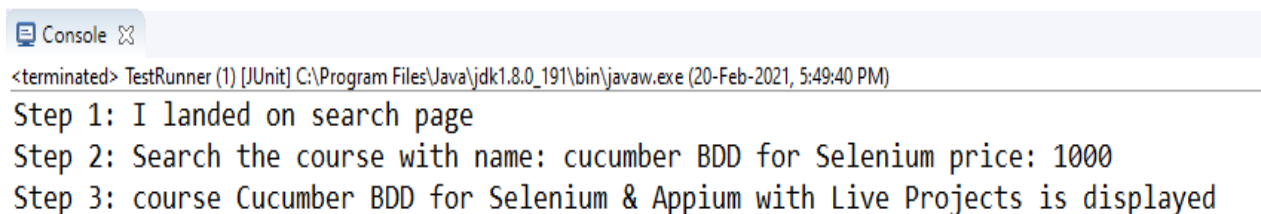
Save the TestRunner file.

Execute runner file as junit test

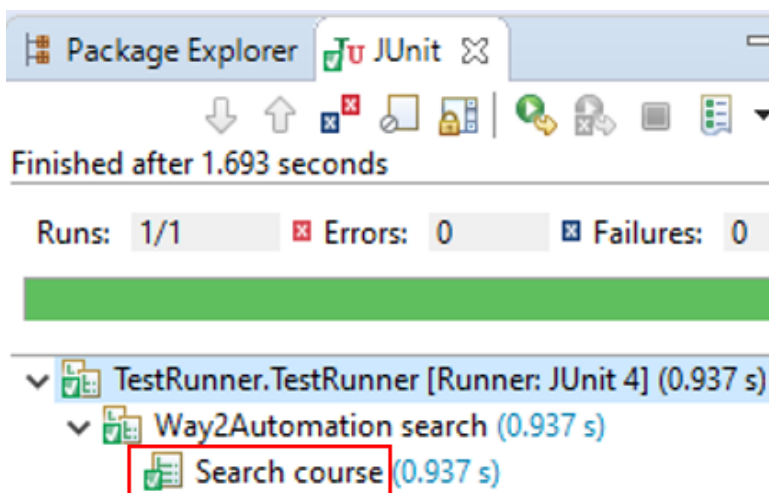
Right click TestRunner.java > Run As > Junit Test



See the console o/p below. All 3 steps are executed fine



You can also see the Junit plugin o/p. It tells us that the 'Search course' scenario got executed fine



Recall that the name of our scenario is 'Search course'

```
Feature: Way2Automation search  
Scenario: Search course  
Given Search field should be present on the Way2Automation website  
When I search for a course "cucumber BDD for Selenium" having price 1000  
Then Course "Cucumber BDD for Selenium & Appium with Live Projects" should be displayed
```

Print the pretty output

Notice that in the console output that we got above, we do not see the respective Give/When/Then steps.

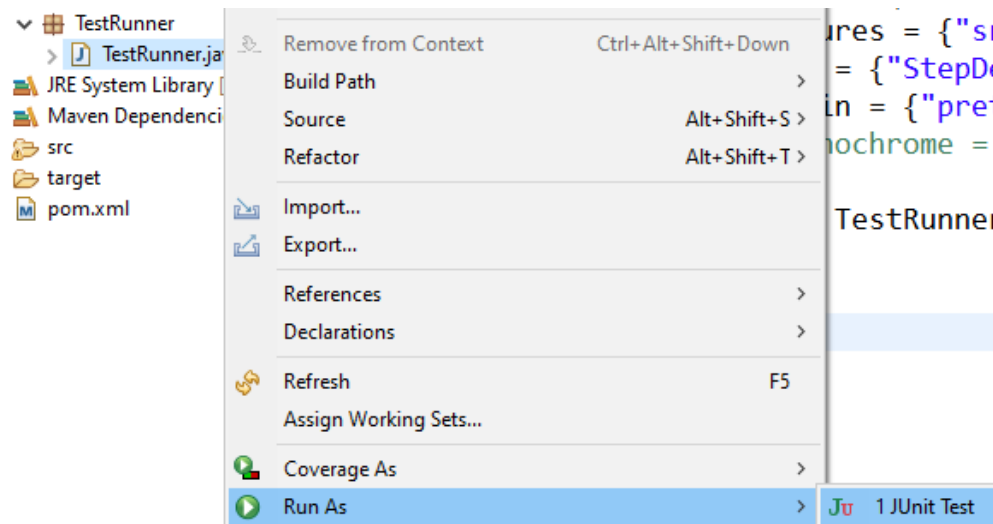
```
Console  
<terminated> TestRunner (1) [JUnit] C:\Program Files\Java\jdk1.8.0_191\bin\javaw.exe (20-Feb-2021, 5:49:40 PM)  
Step 1: I landed on search page  
Step 2: Search the course with name: cucumber BDD for Selenium price: 1000  
Step 3: course Cucumber BDD for Selenium & Appium with Live Projects is displayed
```

We can see the respective Give/When/Then steps in the console o/p by printing the pretty output. This is done by adding one more cucumber option. There is a 'plugin' keyword that we can use, see below

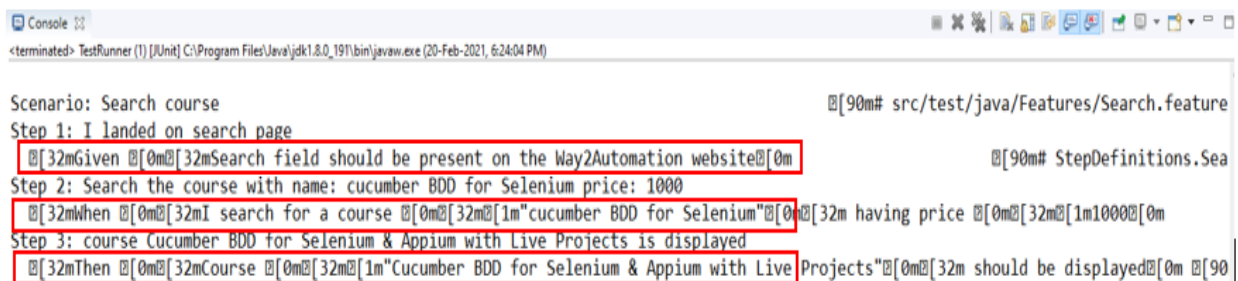
```
TestRunner.java  
1 package TestRunner;  
2  
3 import org.junit.runner.RunWith;  
4  
5 import io.cucumber.junit.Cucumber;  
6 import io.cucumber.junit.CucumberOptions;  
7  
8 @RunWith(Cucumber.class)  
9 @CucumberOptions(  
10     features = {"src/test/java/Features"},  
11     glue = {"StepDefinitions"},  
12     plugin = {"pretty"}  
13 )  
14 public class TestRunner {  
15  
16 }
```

Save the file.

Execute the TestRunner



Notice that the o/p is still not pretty. We do see the Given/When/Then steps but not easily readable, see below



Monochrome option

To make the console o/p further readable, add another option, see below

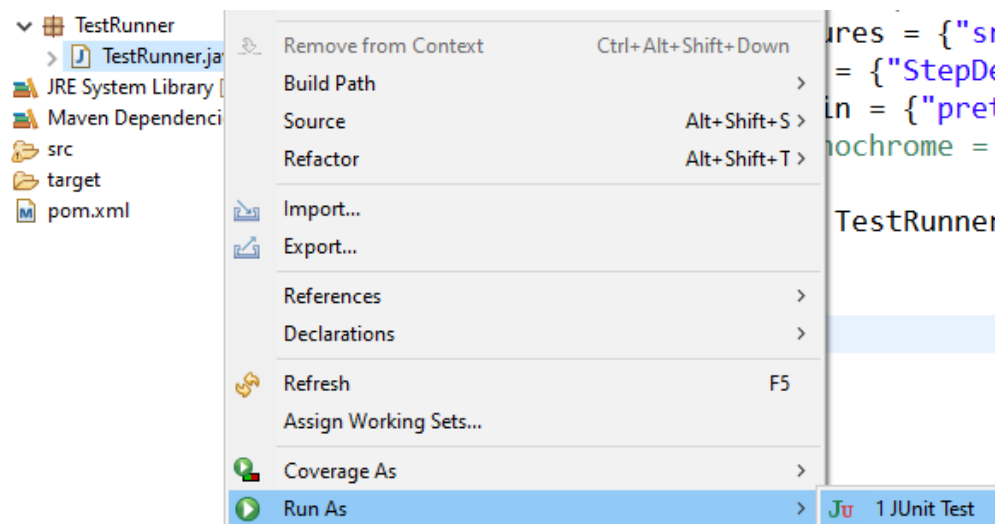
```

1 package TestRunner;
2
3 import org.junit.runner.RunWith;
4
5 import io.cucumber.junit.Cucumber;
6 import io.cucumber.junit.CucumberOptions;
7
8 @RunWith(Cucumber.class)
9 @CucumberOptions(
10     features = {"src/test/java/Features"},
11     glue = {"StepDefinitions"},
12     plugin = {"pretty"},
13     monochrome = true
14 )
15 public class TestRunner {

```

Save the file

Execute the TestRunner



Now, the console o/p shows the readable Give/When/Then steps

```

<terminated> TestRunner (1) [JUnit] C:\Program Files\Java\jdk1.8.0_191\bin\javaw.exe (20-Feb-2021, 6:28:56 PM)

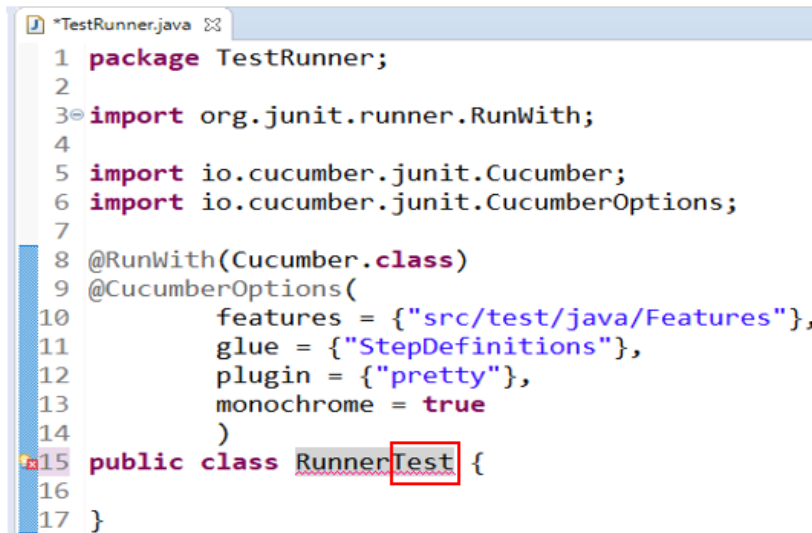
Scenario: Search course # src/te
Step 1: I landed on search page # StepDe
  Given Search field should be present on the Way2Automation website # StepDe
Step 2: Search the course with name: cucumber BDD for Selenium price: 1000 # StepDe
  When I search for a course "cucumber BDD for Selenium" having price 1000 # StepDe
Step 3: course Cucumber BDD for Selenium & Appium with Live Projects is displayed # StepDe
  Then Course "Cucumber BDD for Selenium & Appium with Live Projects" should be displayed

```

Execute runner file as maven test

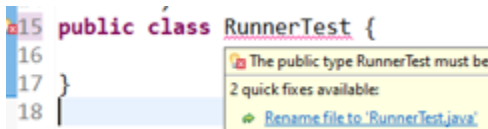
Let us now see how to run the same runner file as a maven test.

Before we run the maven test, we have to first rename our runner file with 'Test' is prefix (otherwise you will not see the Given/When/Then steps in output)



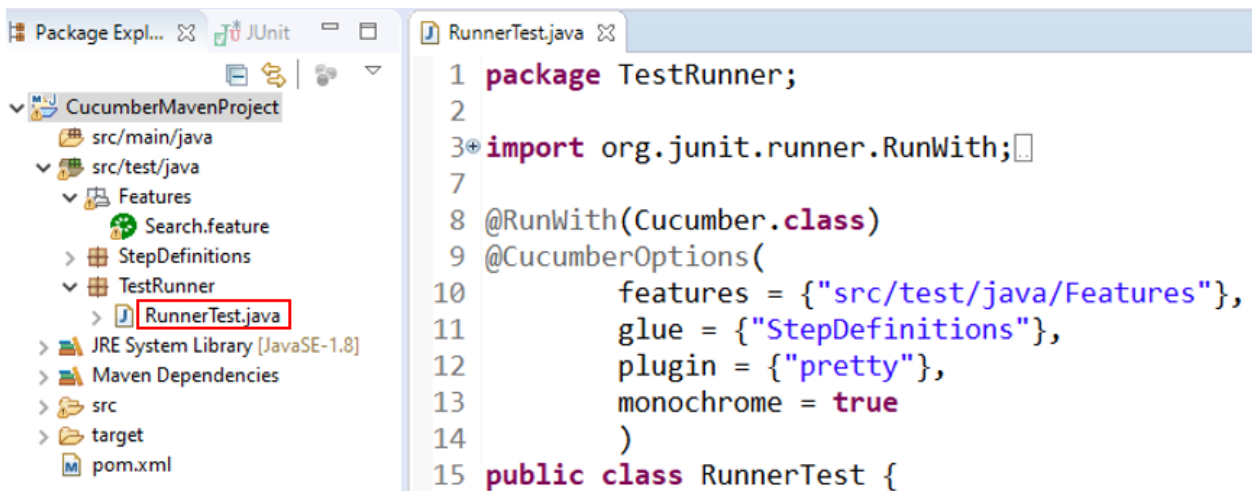
```
1 package TestRunner;
2
3 import org.junit.runner.RunWith;
4
5 import io.cucumber.junit.Cucumber;
6 import io.cucumber.junit.CucumberOptions;
7
8 @RunWith(Cucumber.class)
9 @CucumberOptions(
10     features = {"src/test/java/Features"},
11     glue = {"StepDefinitions"},
12     plugin = {"pretty"},
13     monochrome = true
14 )
15 public class RunnerTest {
16
17 }
```

Let us fix the error by renaming the class file



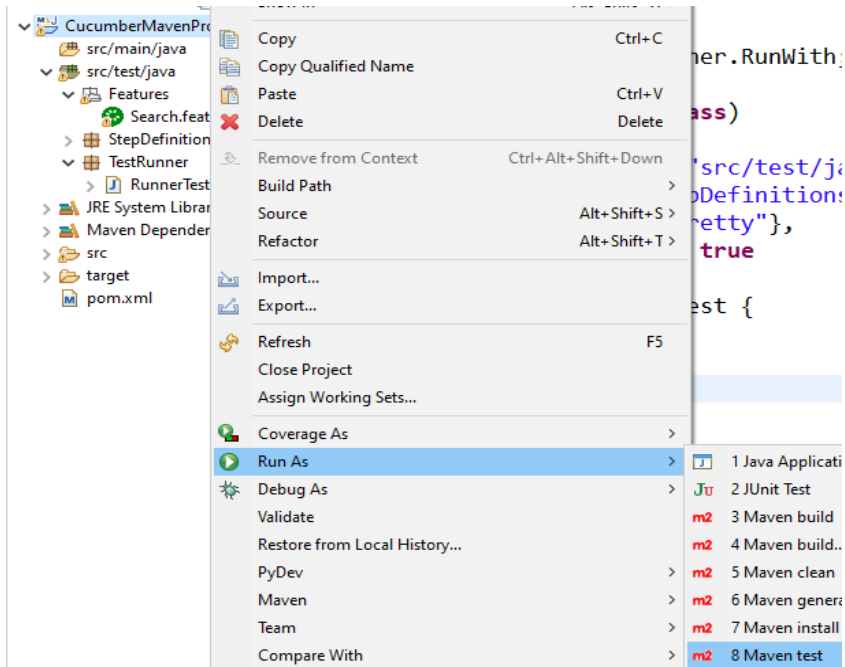
```
15 public class RunnerTest {
16
17 }
18
```

So we have



```
1 package TestRunner;
2
3 import org.junit.runner.RunWith;
4
5 @RunWith(Cucumber.class)
6 @CucumberOptions(
7     features = {"src/test/java/Features"},
8     glue = {"StepDefinitions"},
9     plugin = {"pretty"},
10     monochrome = true
11 )
12 public class RunnerTest {
```

Right click project > Run As > Maven test



Below is console o/p. Notice that it the 'Build' got successfull and it mentions the Given/When/Then steps

