

## Lesson 02 Demo 02

### Writing Step Definitions in Java

**Objective:** To write step definitions in Java for defining executable steps that correspond to the scenarios outlined in the feature files

**Tool required:** Eclipse IDE

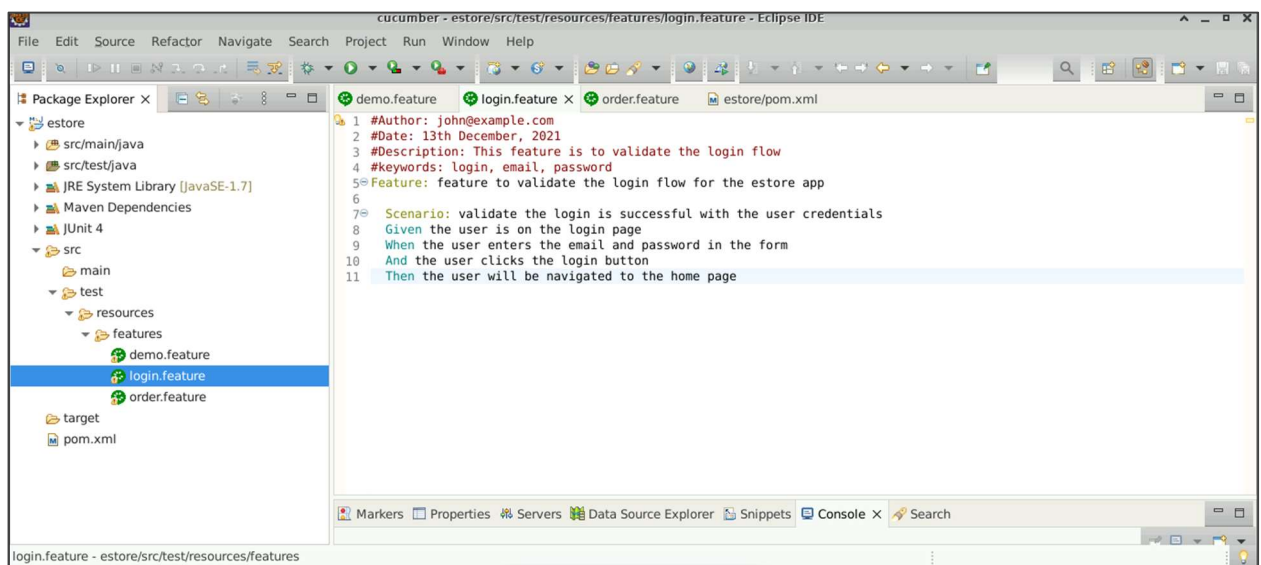
**Prerequisites:** None

Steps to be followed:

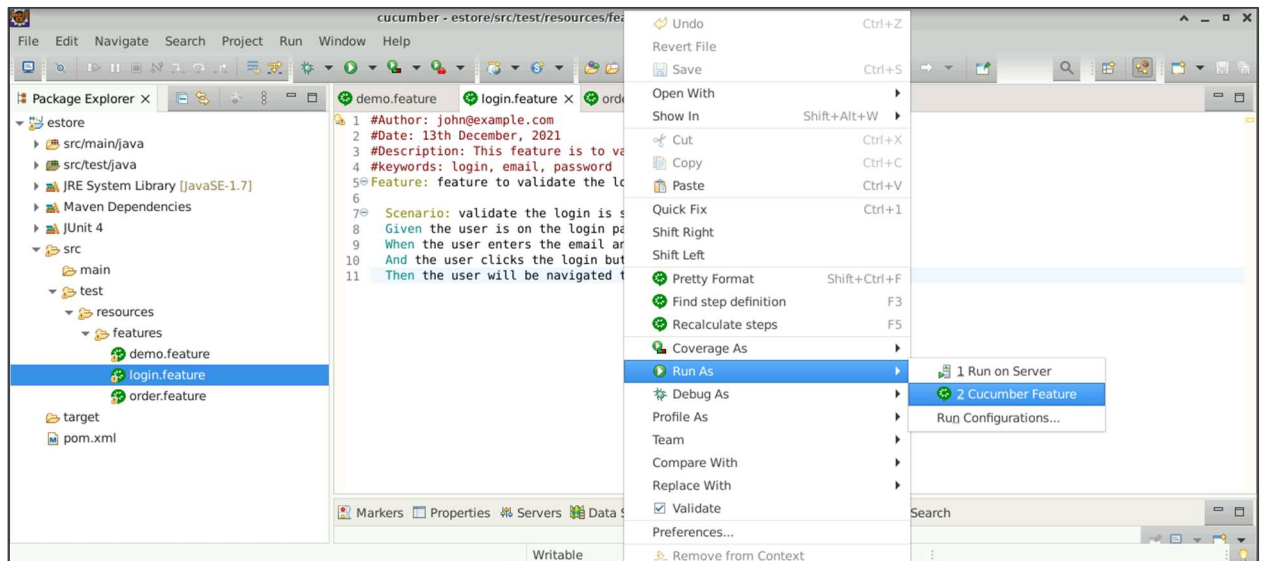
1. Write a step definition in Java

#### Step 1: Write a step definition in Java

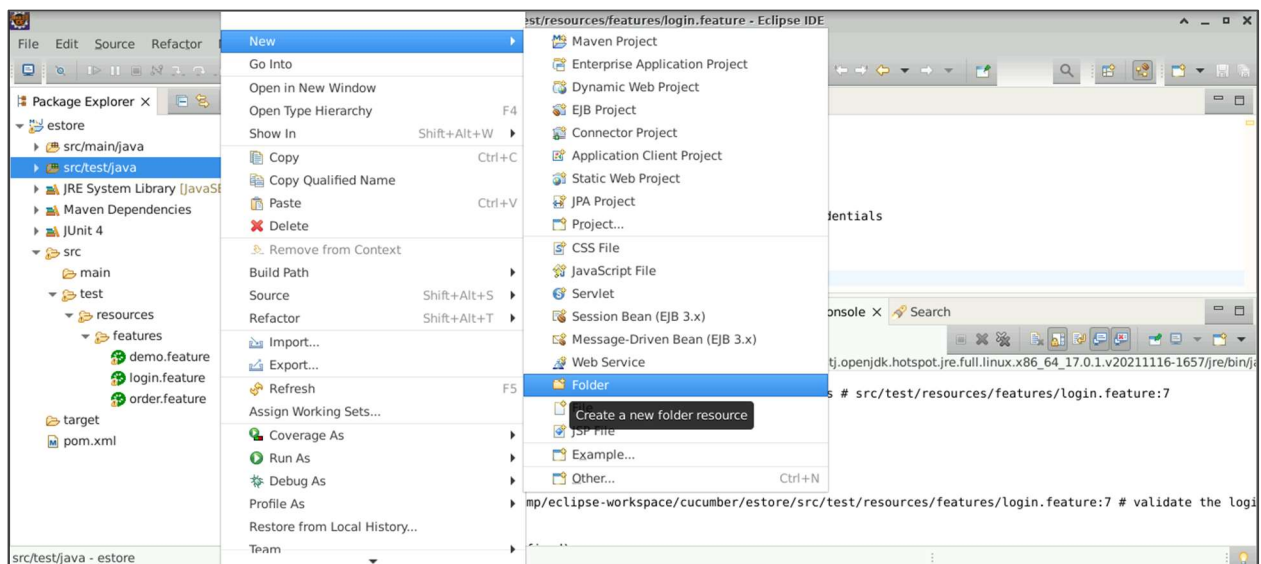
- 1.1 Follow the first demo where we executed the test cases with Cucumber. Open the **features** folder and navigate to **login.feature**.

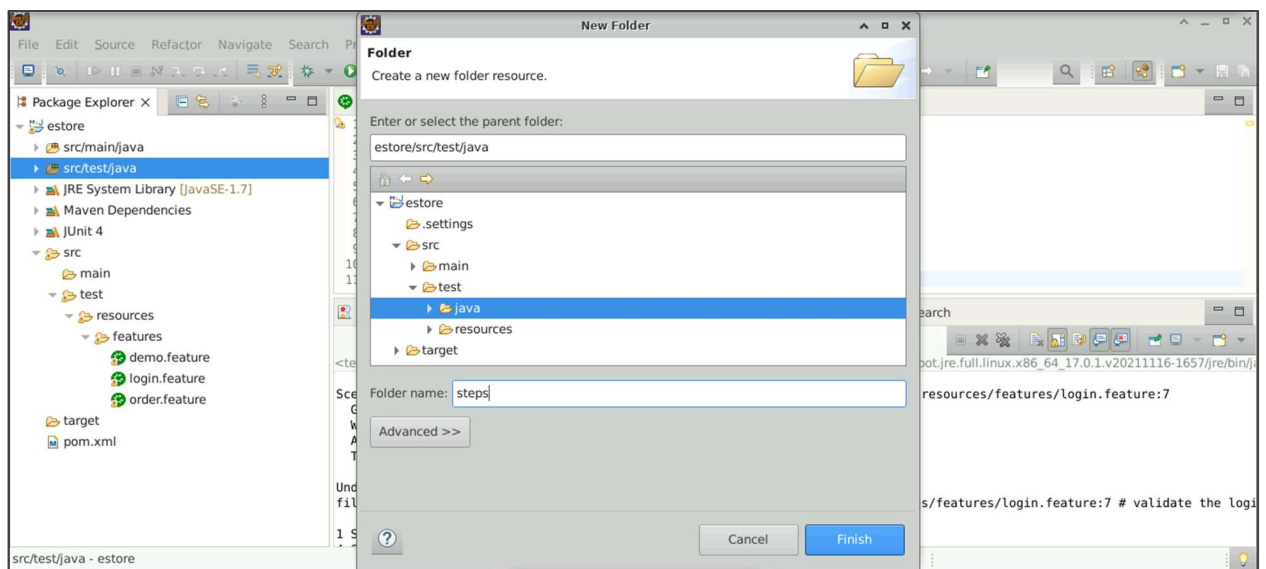


## 1.2 Right-click and select **Run As**, and then click on **Cucumber Feature**

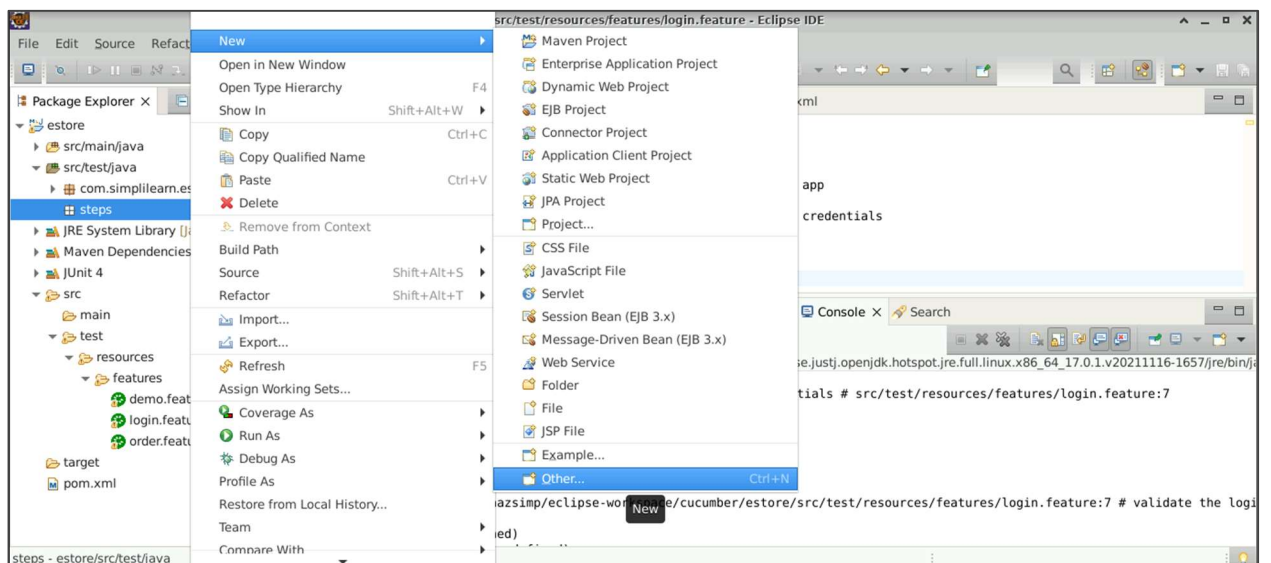


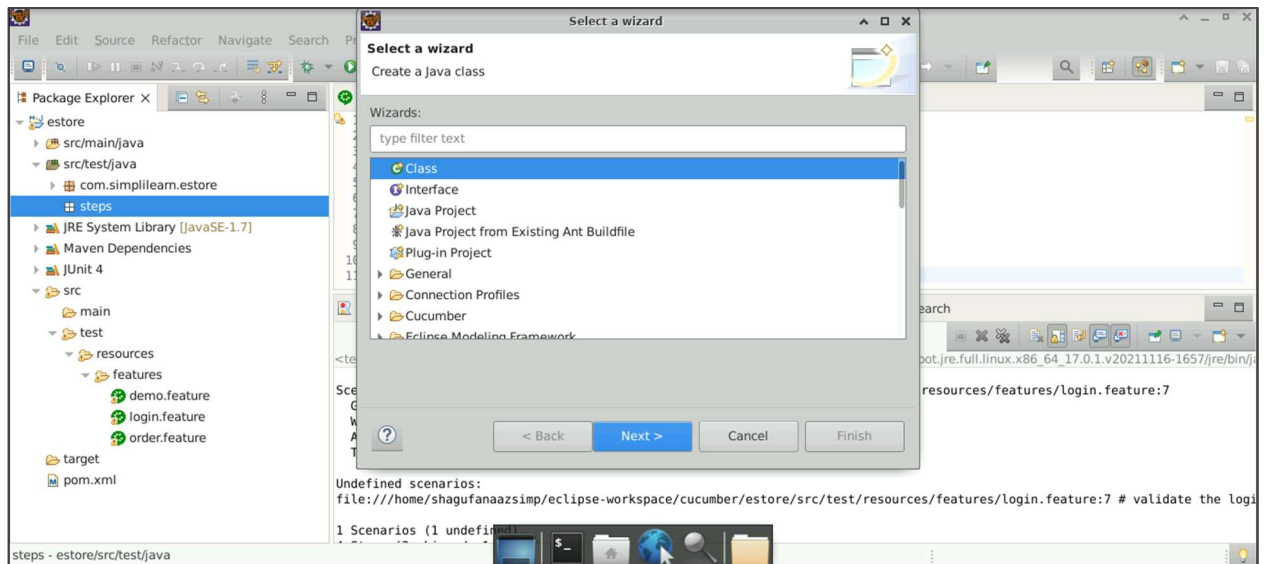
## 1.3 Now, create a new folder in the **src/test/java** directory and name it **steps**



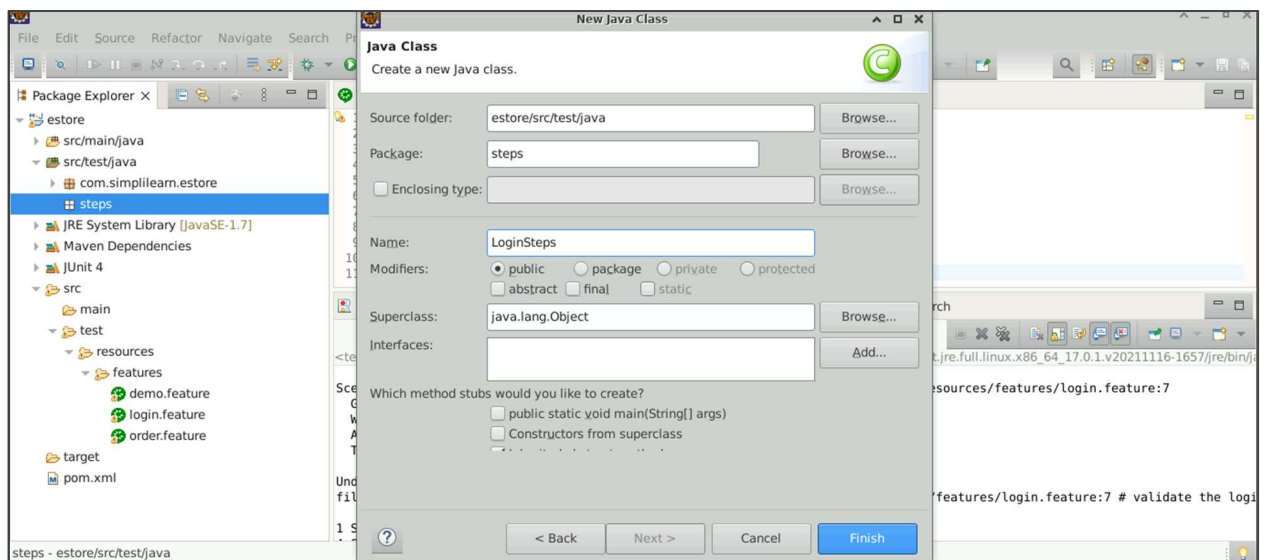


#### 1.4 Right-click on the **steps**, select New, and then click on **Other** and choose **Class**





## 1.5 Create a new Java class in the **steps** folder and name it **LoginSteps**



## 1.6 Copy all the annotations from **login.feature** and paste them into the **Java class** that you created

```

1 package steps;
2
3 public class LoginSteps {
4
5 }
6

```

Console output:

```

<terminated> login.feature [Cucumber Feature] /usr/eclipse/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.linux.x86_64_17.0.1.v20211116-1657/jre/bin/j
Given("the user is on the login page", () -> {
// Write code here that turns the phrase above into concrete actions
throw new io.cucumber.java8.PendingException();
});
When("the user enters the email and password in the form", () -> {
// Write code here that turns the phrase above into concrete actions
throw new io.cucumber.java8.PendingException();
});

```

```

1 package steps;
2
3 public class LoginSteps {
4
5     public LoginSteps() {
6         Given("the user is on the login page", () -> {
7             // Write code here that turns the phrase above into concrete actions
8             throw new io.cucumber.java8.PendingException();
9         });
10
11         When("the user enters the email and password in the form", () -> {
12             // Write code here that turns the phrase above into concrete actions
13             throw new io.cucumber.java8.PendingException();
14         });
15
16         When("the user clicks the login button", () -> {
17             // Write code here that turns the phrase above into concrete actions
18             throw new io.cucumber.java8.PendingException();
19         });
20
21         Then("the user will be navigated to the home page", () -> {
22             // Write code here that turns the phrase above into concrete actions
23             throw new io.cucumber.java8.PendingException();
24         });
25
26     }
27 }
28

```

1.7 Remove the dummy code and replace it with **print statements** for all four methods as shown below:

```

1  import io.cucumber.java8.En;
2
3  public class LoginSteps implements En {
4      public LoginSteps() {
5          Given("the user is on the login page", () -> {
6              System.out.println("STEP1: Given");
7          });
8
9          When("the user enters the email and password in the form", () -> {
10              System.out.println("STEP2: Given");
11          });
12
13          When("the user clicks the login button", () -> {
14              System.out.println("STEP3: Given");
15          });
16
17          Then("the user will be navigated to the home page", () -> {
18              System.out.println("STEP4: Given");
19          });
20      }
21  }

```

1.8 Navigate back to **login.feature**, right-click and select **Run As**, and then click on **Cucumber feature**. The output is shown in the screenshot below:

```

1  #Author: john@example.com
2  #Date: 13th December, 2021
3  #Description: This feature is to validate the login flow
4  #Keywords: login, email, password
5  #Feature: feature to validate the login flow for the estore app
6
7  Scenario: validate the login is successful with the user credentials
8  Given the user is on the login page

```

```

<terminated> login.feature [Cucumber Feature] /usr/eclipse/plugins/org.eclipse.justi.openjdk.hotspot.jre.full.linux.x86_64_17.0.1.v20211116-1657/jre/bin/j
Scenario: validate the login is successful with the user credentials # src/test/resources/features/login.feature:7
STEP1: Given # steps.LoginSteps.<init>(LoginSteps.java:7)
  Given the user is on the login page
STEP2: Given # steps.LoginSteps.<init>(LoginSteps.java:11)
  When the user enters the email and password in the form
STEP3: Given # steps.LoginSteps.<init>(LoginSteps.java:15)
  And the user clicks the login button
STEP4: Given # steps.LoginSteps.<init>(LoginSteps.java:19)
  Then the user will be navigated to the home page

1 Scenarios (1 passed)
4 Steps (4 passed)
0m0.409s

```

With this, you have successfully implemented the step definitions in Java.