Lesson 7

TestNG XML Config

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College of Information and Communication Technology

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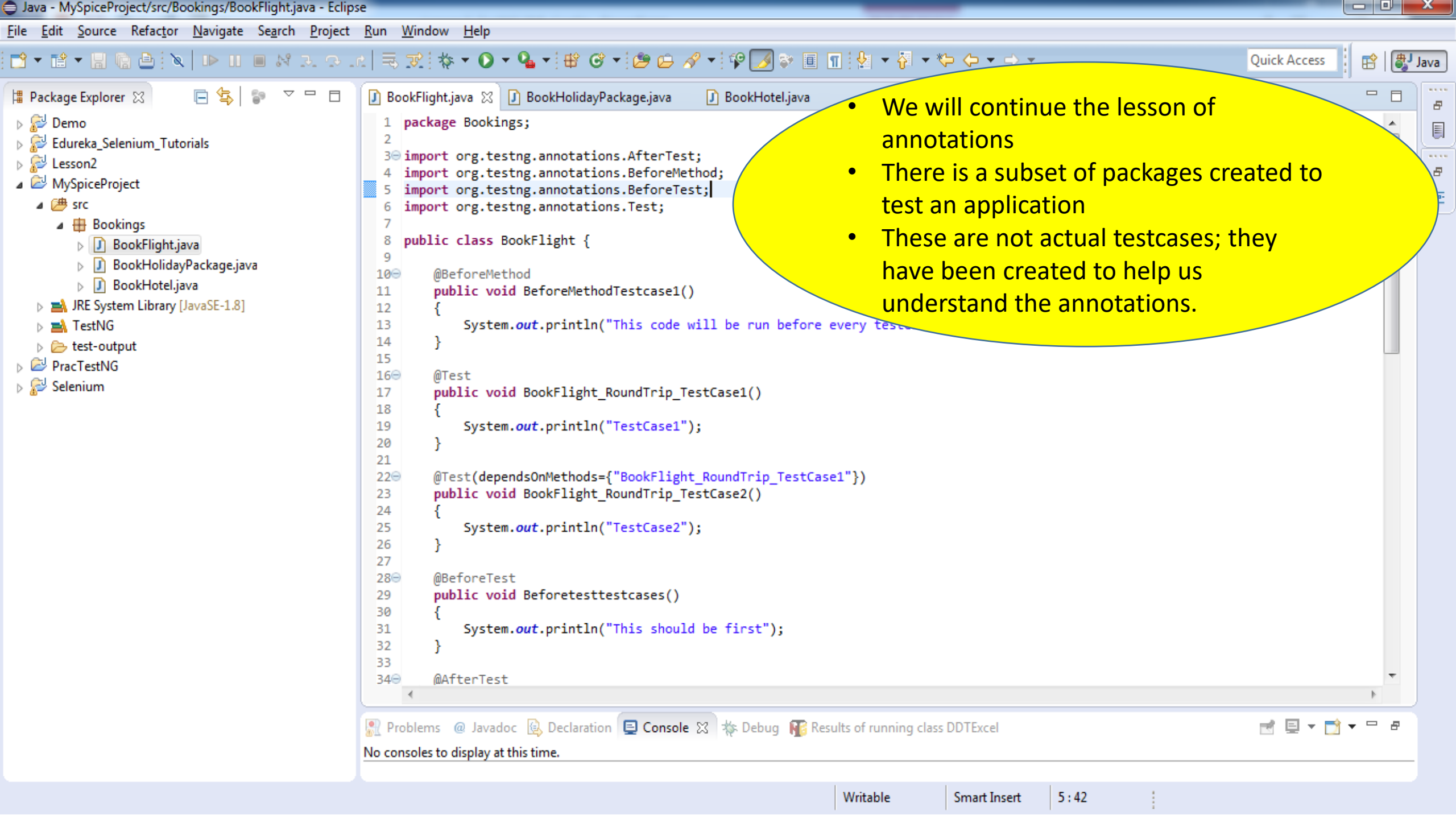
22/03/2023

TestNG

- Installation
- Advantages
- Annotations
- TestNG XML Configuration
  - Why do we need to create this XML Config file?
  - How do we generate this XML Config file?
  - How can we run multiple tests at once?



- We will continue the lesson of annotations
- There is a subset of packages created to test an application
- These are not actual testcases; they have been created to help us understand the annotations.

This is the website of the application under test

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Round Trip One Way

*FROM	*TO	*DEPART DATE	RETURN DATE	ADULT	CHILD	INFANT	CURRENCY
Departure City	Arrival City	25/01 Thu, Jan 25 2018	01/02 Thu, Feb 01 2018	1	0	0	Select

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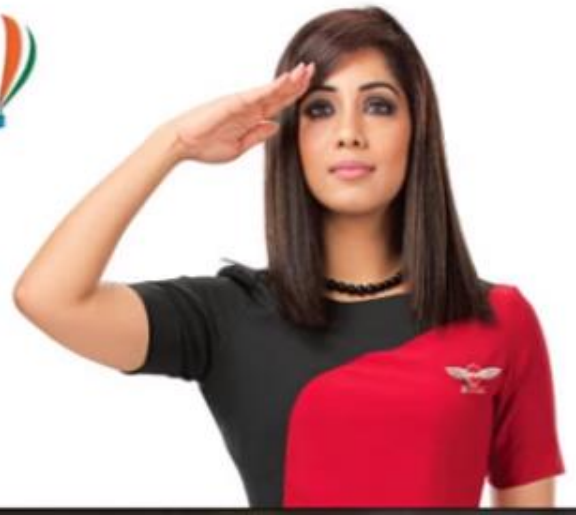

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javascript:void(0);

Java - MySpiceProject/src/Bookings/BookFlight.java - Eclipse

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      - BookHotel.java
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  - test-output
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java

```
1  package Bookings;
2
3  import org.testng.annotations.AfterTest;
4  import org.testng.annotations.BeforeMethod;
5  import org.testng.annotations.BeforeTest;
6  import org.testng.annotations.Test;
7
8  public class BookFlight {
9
10     @BeforeMethod
11     public void BeforeMethodTestcase1()
12     {
13         System.out.println("This code will be run before every testcase");
14     }
15
16     @Test
17     public void BookFlight_RoundTrip_TestCase1()
18     {
19         System.out.println("TestCase1");
20     }
21
22     @Test(dependsOnMethods={"BookFlight_RoundTrip_TestCase1"})
23     public void BookFlight_RoundTrip_TestCase2()
24     {
25         System.out.println("TestCase2");
26     }
27
28     @BeforeTest
29     public void Beforetesttestcases()
30     {
31         System.out.println("This should be first");
32     }
33
34     @AfterTest
```

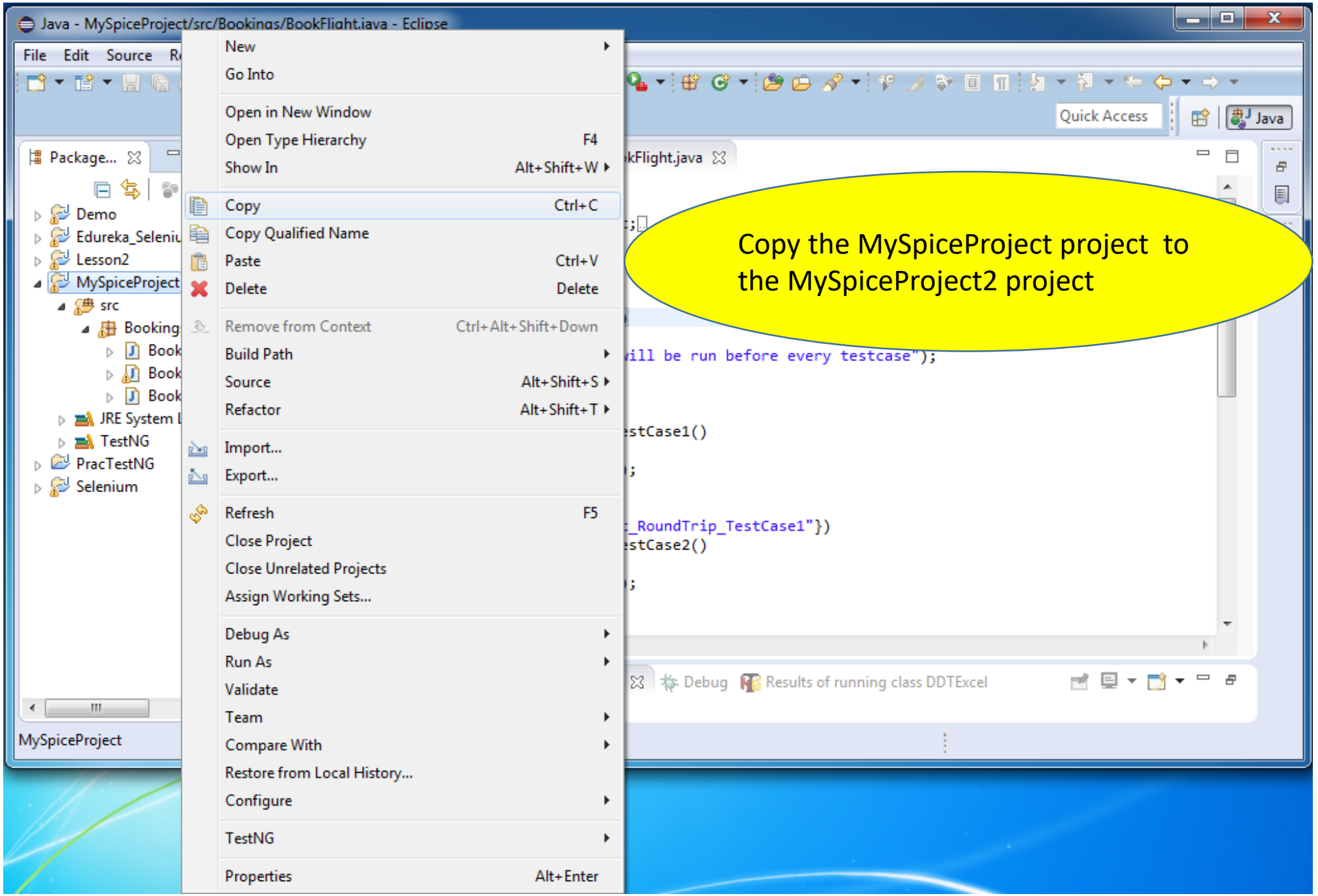
- In this lesson, we complete the packages and then learn how to configure a XML file.

Problems | Javadoc | Declaration | Console | Debug | Results of running class DDTExcel

No consoles to display at this time.

Writable | Smart Insert | 5 : 42

- First, we clone the **MySpiceProject** project to the **MySpicePropject2** project
- Then, we will work on the MySpiceProject2 project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;
_RoundTrip_TestCase1"})
stCase2()
;
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Results of running class DDTExcel
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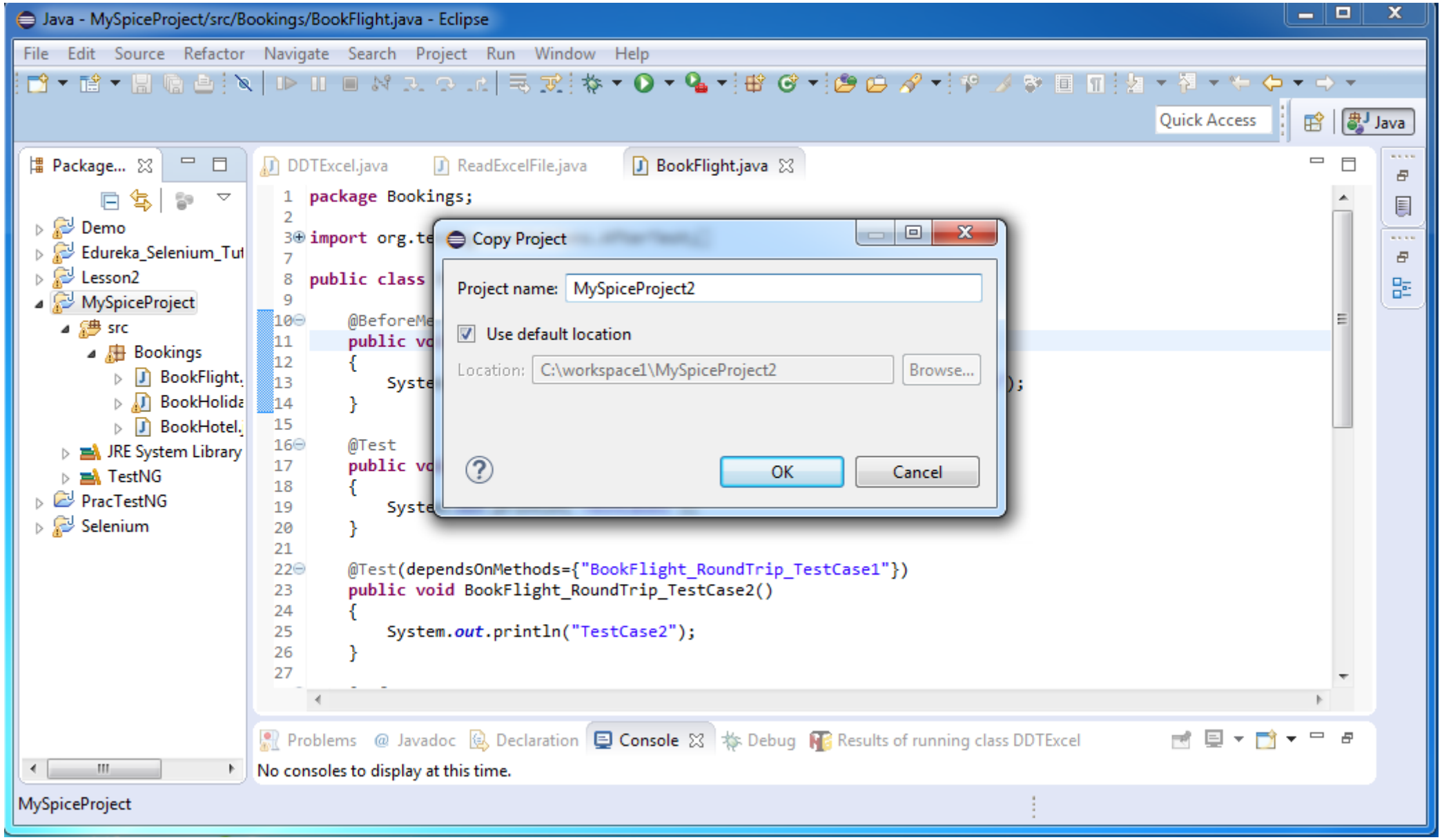
Go Into
Open in New Window
Open Type Hierarchy F4
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Source Alt+Shift+S
Refactor Alt+Shift+T
Import...
Export...
Refresh F5
Close Project
Close Unrelated Projects
Assign Working Sets...
Debug As
Run As
Validate
Team
Compare With
Restore from Local History...
Configure
TestNG
Properties Alt+Enter
Copy the MySpiceProject project to the MySpiceProject2 project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BookHotel.
JRE System Library
TestNG
PracTestNG
Selenium
DDTExcel.java
ReadExcelFile.java
BookFlight.java
1 package Bookings;
2
3 import org.te
7
8 public class
9
10 @BeforeMe
11 public vo
12 {
13 Syste
14 }
15
16 @Test
17 public vo
18 {
19 Syste
20 }
21
22 @Test(dependsOnMethods={"BookFlight_RoundTrip_TestCase1"})
23 public void BookFlight_RoundTrip_TestCase2()
24 {
25 System.out.println("TestCase2");
26 }
27
Copy Project
Project name: MySpiceProject2
Use default location
Location: C:\workspace1\MySpiceProject2
Browse...
OK
Cancel
Problems Javadoc Declaration Console Debug Results of running class DDTExcel
No consoles to display at this time.
MySpiceProject

Java - MySpiceProject2/src/Bookings/BookFlight.java - Eclipse

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- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java | BookHolidayPackage.java | BookFlight.java

```
1  package Bookings;
2
3  import org.testng.annotations.AfterTest;
7
8  public class BookFlight {
9
10     @BeforeMethod
11     public void BeforeMethodTestcase1()
12     {
13         System.out.println("This code will be run before every testcase");
14     }
15
16     @Test
17     public void BookFlight_RoundTrip_TestCase1()
18     {
19         System.out.println("TestCase1");
20     }
21
22     @Test(dependsOnMethods={"BookFlight_RoundTrip_TestCase1"})
23     public void BookFlight_RoundTrip_TestCase2()
24     {
25         System.out.println("TestCase2");
26     }
27
28     @BeforeTest
29     public void Beforetesttestcases()
30     {
31         System.out.println("This should be first");
32     }
33
34     @AfterTest
35     public void Aftertesttestcase1()
36     {
37         System.out.println("This should be last");
```

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No consoles to display at this time.

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- Now, we create contents for Java classes

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  - test-output
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java

```
1  package Bookings;
2
3  import org.testng.annotations.Test;
4
5  public class BookFlight {
6
7      @Test
8      public void BookFlight_RoundTrip_TestCase1()
9      {
10         System.out.println("BookFlight RoundTrip TestCase1");
11     }
12
13     @Test
14     public void BookFlight_RoundTrip_TestCase2()
15     {
16         System.out.println("BookFlight RoundTrip TestCase2");
17     }
18
19     @Test
20     public void BookFlight_OneWay_TestCase1()
21     {
22         System.out.println("BookFlight OneWay TestCase1");
23     }
24
25     @Test
26     public void BookFlight_OneWay_TestCase2()
27     {
28         System.out.println("BookFlight OneWay TestCase2");
29     }
30
31 }
32
```

- Write the code for the BookFlight class like this
- There are testcases for:
  - RoundTrip
  - OneWay

Problems | Javadoc | Declaration | Console | Debug | Results of running class BookFlight

<terminated> BookFlight [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 2, 2019, 6:28:28 AM)

[TestNG] Running:

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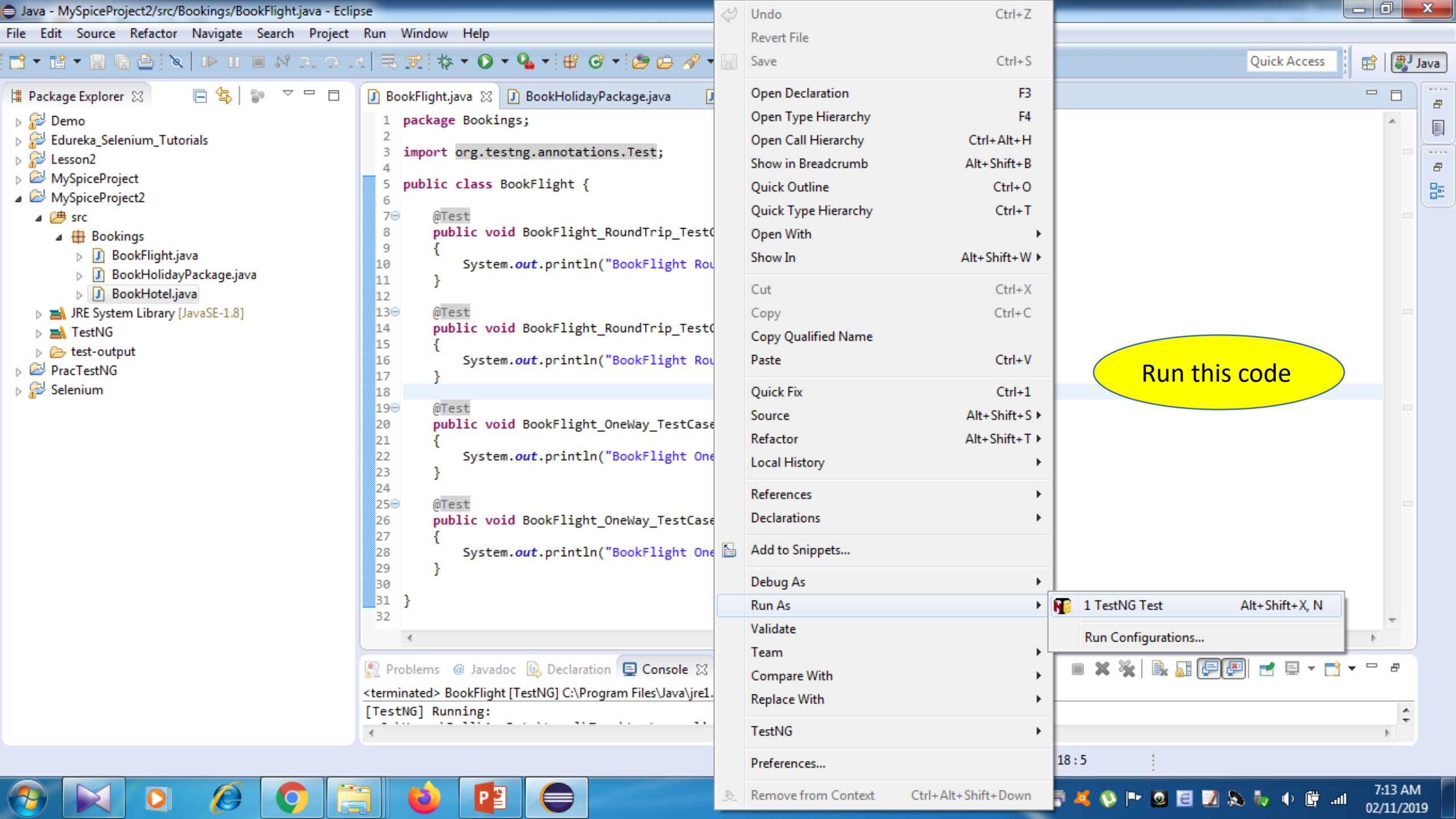
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test-output
PracTestNG
Selenium
BookFlight.java
BookHolidayPackage.java
1 package Bookings;
2
3 import org.testng.annotations.Test;
4
5 public class BookFlight {
6
7 @Test
8 public void BookFlight_RoundTrip_Test
9 {
10 System.out.println("BookFlight Rou
11 }
12
13 @Test
14 public void BookFlight_RoundTrip_Test
15 {
16 System.out.println("BookFlight Rou
17 }
18
19 @Test
20 public void BookFlight_OneWay_TestCase
21 {
22 System.out.println("BookFlight One
23 }
24
25 @Test
26 public void BookFlight_OneWay_TestCase
27 {
28 System.out.println("BookFlight One
29 }
30
31 }
32
Problems Javadoc Declaration Console
<terminated> BookFlight [TestNG] C:\Program Files\Java\jre1.
[TestNG] Running:
Undo Ctrl+Z
Revert File
Save Ctrl+S
Open Declaration F3
Open Type Hierarchy F4
Open Call Hierarchy Ctrl+Alt+H
Show in Breadcrumb Alt+Shift+B
Quick Outline Ctrl+O
Quick Type Hierarchy Ctrl+T
Open With
Show In Alt+Shift+W
Cut Ctrl+X
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Quick Fix Ctrl+1
Source Alt+Shift+S
Refactor Alt+Shift+T
Local History
References
Declarations
Add to Snippets...
Debug As
Run As
Validate
Team
Compare With
Replace With
TestNG
Preferences...
Remove from Context Ctrl+Alt+Shift+Down
1 TestNG Test Alt+Shift+X, N
Run Configurations...
Run this code
18 : 5
7:13 AM
02/11/2019

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  - TestNG
  - test-output
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java

```
1  package Bookings;
2
3  import org.testng.annotations.Test;
4
5  public class BookFlight {
6
7      @Test
8      public void BookFlight_RoundTrip_TestCase1()
9      {
10         System.out.println("BookFlight RoundTrip TestCase1");
11     }
12
13     @Test
14     public void BookFlight_RoundTrip_TestCase2()
15     {
16         System.out.println("BookFlight RoundTrip TestCase2");
17     }
18
19     @Test
20     public void BookFlight_OneWay_TestCase1()
```

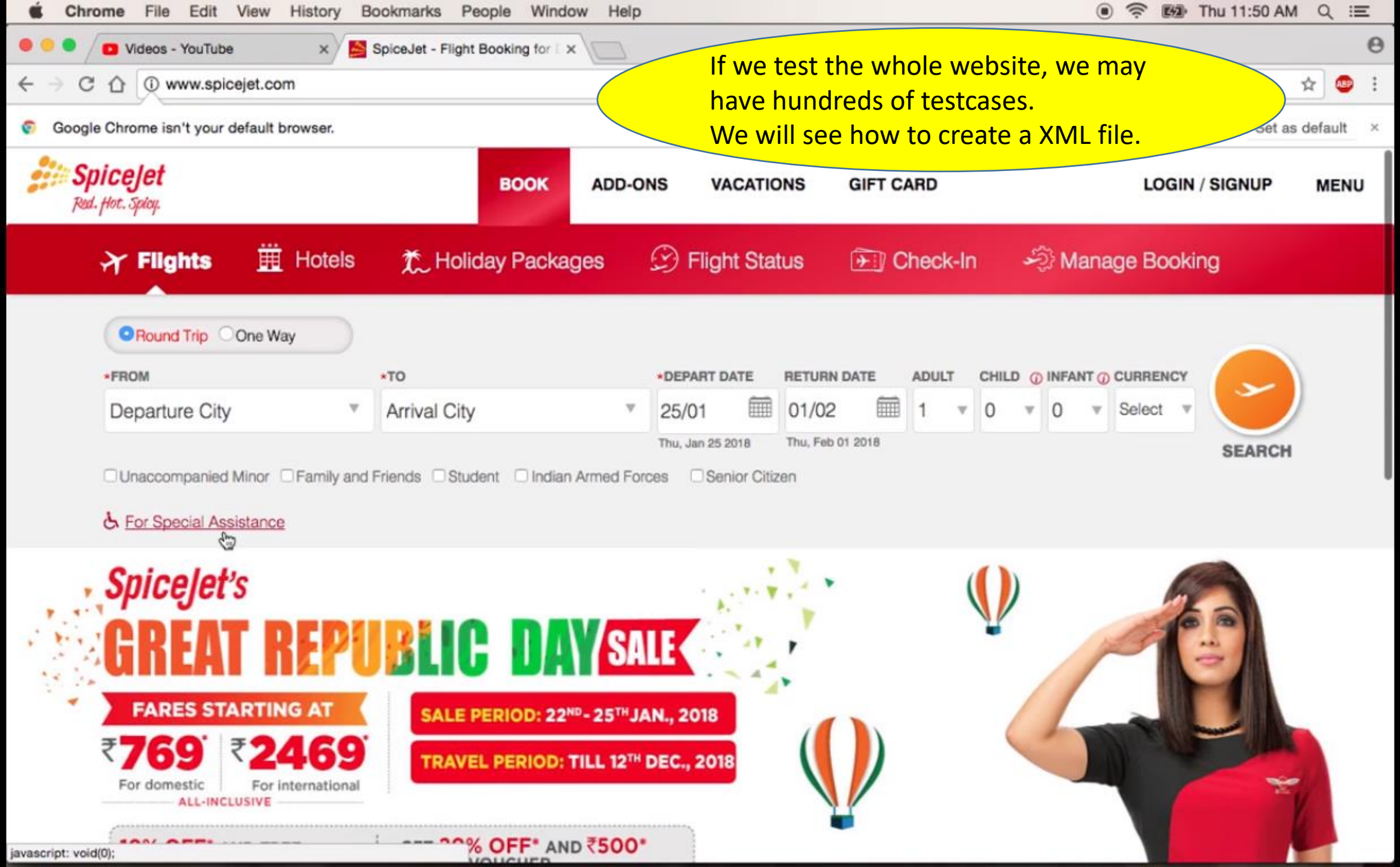
Problems | Javadoc | Declaration | Console | Debug | Results of running class BookFlight

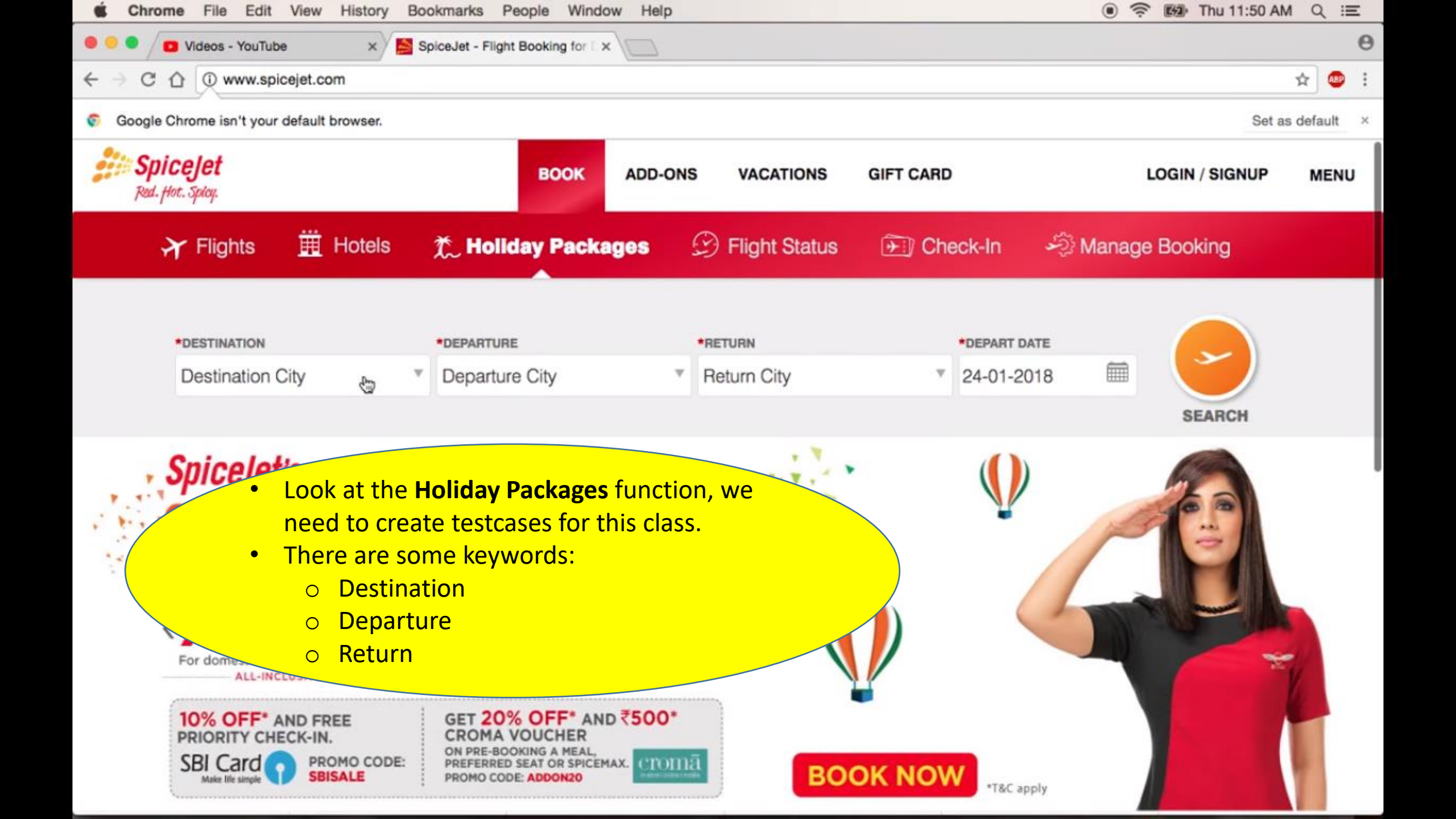
<terminated> BookFlight [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 2, 2019, 7:14:24 AM)

```
[TestNG] Running:
  C:\Users\Dell\AppData\Local\Temp\testng-eclipse--249071830\testng-customsuite.xml

BookFlight OneWay TestCase1
BookFlight OneWay TestCase2
BookFlight RoundTrip TestCase1
BookFlight RoundTrip TestCase2
PASSED: BookFlight_OneWay_TestCase1
PASSED: BookFlight_OneWay_TestCase2
PASSED: BookFlight_RoundTrip_TestCase1
PASSED: BookFlight_RoundTrip_TestCase2

===============================================
    Default test
```

These are the result reports

If we test the whole website, we may have hundreds of testcases.
We will see how to create a XML file.

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Set as default
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MENU
Flights
Hotels
Holiday Packages
Flight Status
Check-In
Manage Booking
*DESTINATION
Destination City
*DEPARTURE
Departure City
*RETURN
Return City
*DEPART DATE
24-01-2018
SEARCH
• Look at the Holiday Packages function, we need to create testcases for this class.
• There are some keywords:
o Destination
o Departure
o Return
10% OFF* AND FREE PRIORITY CHECK-IN.
SBI Card
Make life simple
PROMO CODE: SBISALE
GET 20% OFF* AND ₹500* CROMA VOUCHER
ON PRE-BOOKING A MEAL, PREFERRED SEAT OR SPICEMAX.
PROMO CODE: ADDON20
croma
BOOK NOW
*T&C apply

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      - BookHotel.java
  - JRE System Library [JavaSE-1.8]
  - TestNG
  - test-output
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java

```
1  package Bookings;
2
3  import org.testng.annotations.Test;
4
5  public class BookHolidayPackage {
6
7      @Test
8      public void BookHolidayPackage_destination(){
9          System.out.println("BookHolidayPackage testcase1");
10     }
11
12     @Test
13     public void BookHolidayPackage_departure(){
14         System.out.println("BookHolidayPackage testcase2");
15     }
16
17     @Test
18     public void BookHolidayPackage_return(){
19         System.out.println("BookHolidayPackage testcase3");
20     }
21 }
22
```

- Write the code for the BookHolidayPackage class like this.
- Run it.

Problems | Javadoc | Declaration | Console | Debug | Results of running class BookHolidayPackage

<terminated> BookHolidayPackage [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 2, 2019, 12:59:48 PM)

```
BookHolidayPackage testcase2
BookHolidayPackage testcase1
BookHolidayPackage testcase3
PASSED: BookHolidayPackage_departure
PASSED: BookHolidayPackage_destination
PASSED: BookHolidayPackage_return

===============================================
```

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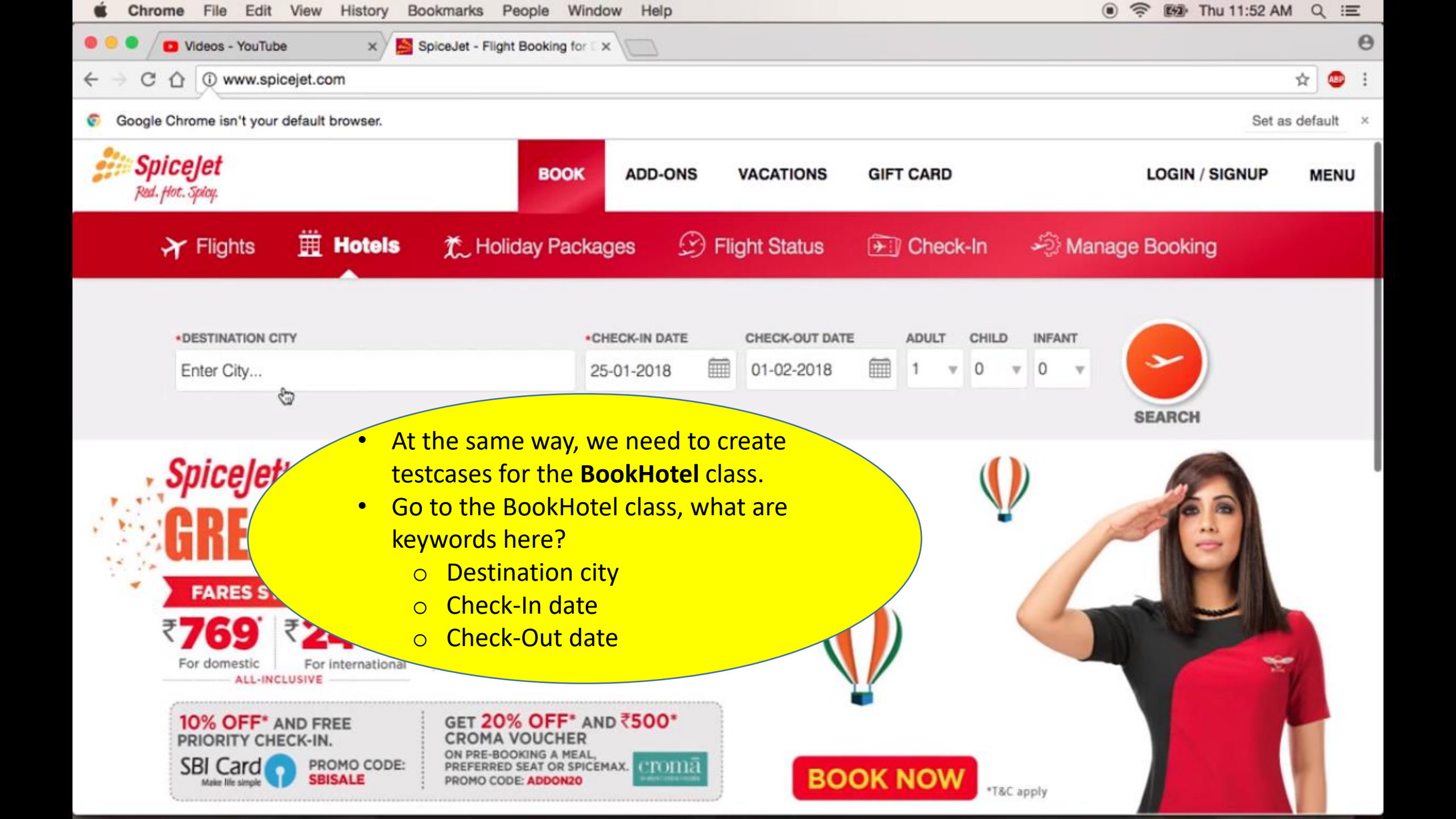
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Set as default
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Red. Hot. Spicy.
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GIFT CARD
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MENU
Flights
Hotels
Holiday Packages
Flight Status
Check-In
Manage Booking
*DESTINATION CITY
Enter City...
*CHECK-IN DATE
25-01-2018
CHECK-OUT DATE
01-02-2018
ADULT
1
CHILD
0
INFANT
0
SEARCH
At the same way, we need to create testcases for the BookHotel class.
Go to the BookHotel class, what are keywords here?
Destination city
Check-In date
Check-Out date
₹769
For domestic
For international
ALL-INCLUSIVE
10% OFF* AND FREE PRIORITY CHECK-IN.
SBI Card
PROMO CODE: SBISALE
GET 20% OFF* AND ₹500* CROMA VOUCHER
ON PRE-BOOKING A MEAL, PREFERRED SEAT OR SPICEMAX.
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croma
BOOK NOW
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      - BookHotel.java
  - JRE System Library [JavaSE-1.8]
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  - test-output
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | *BookHotel.java

```
1  package Bookings;
2
3  import org.testng.annotations.Test;
4
5  public class BookHotel {
6
7      @Test
8      public void BookHotel_DestinationCity(){
9          System.out.println("BookHotel testcase1");
10     }
11
12     @Test
13     public void BookHotel_Checkin(){
14         System.out.println("BookHotel testcase2");
15     }
16
17     @Test
18     public void BookHotel_CheckOut(){
19         System.out.println("BookHotel testcase3");
20     }
21 }
22
```

- Write the code for the BookHotel class like this.
- Run it.

Problems | Javadoc | Declaration | Console | Debug | Results of running class BookHotel

<terminated> BookHotel [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 8:08:18 AM)

```
C:\Users\Dell\AppData\Local\Temp\testng-eclipse-1807411507\testng-customsuite.xml

BookHotel testcase3
BookHotel testcase2
BookHotel testcase1
PASSED: BookHotel_CheckOut
PASSED: BookHotel_Checkin
PASSED: BookHotel_DestinationCity

===============================================
    Default test
```

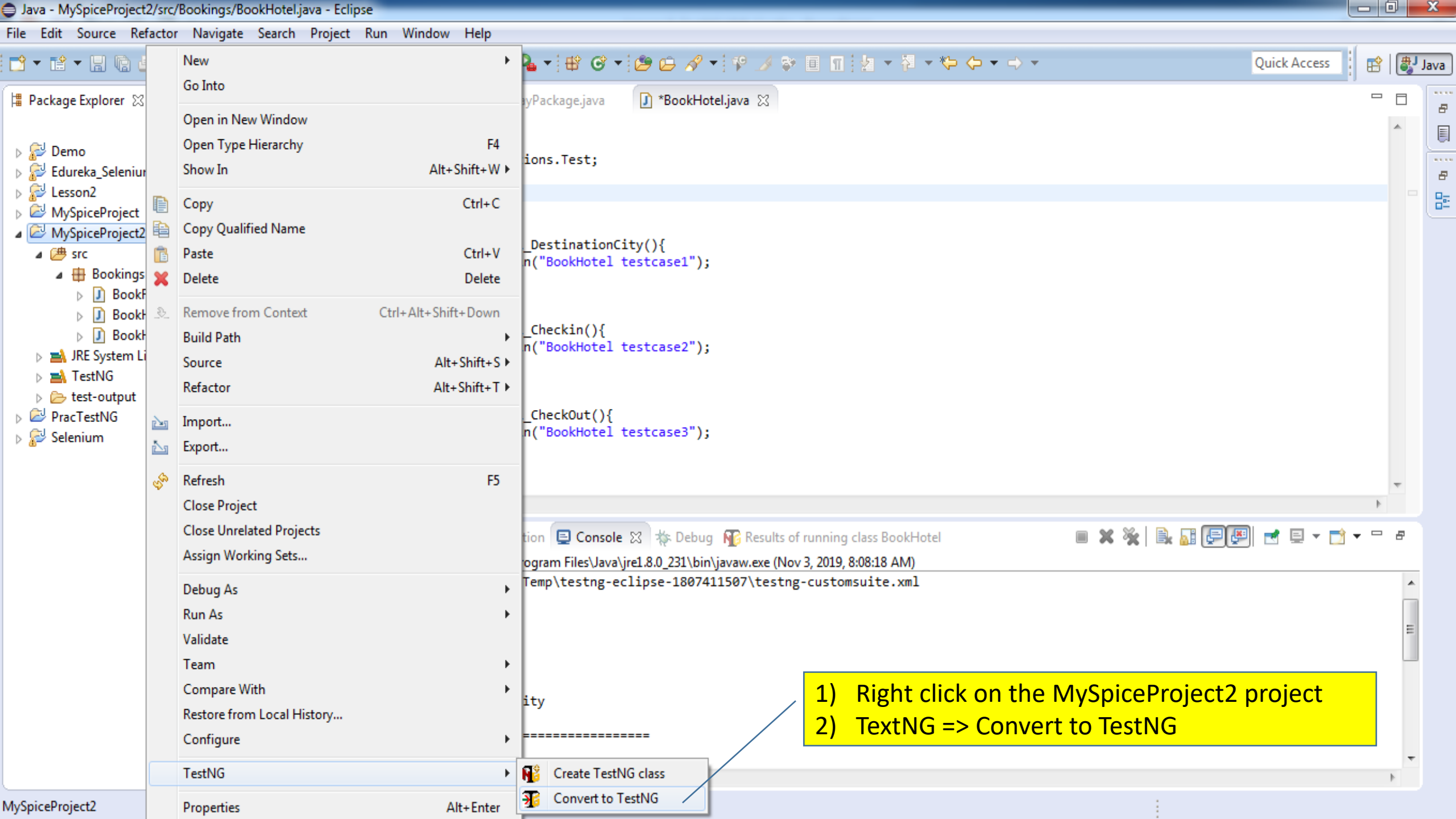
Problems

Scenarios of the Example	**Scenarios of Real time**
We have 3 classes: ○ **BookFlight**: 4 testcases ○ **BookHolidayPackage**: 3 testcases ○ **BookHotel**: 3 testcases	We may have many classes (e.g., 7 or 8) with a large number of testcases (e.g., hundreds of testcases).
Run each class individually with some testcases	Run many classes together with hundreds of testcases

Solution

- TestNG XML Configuration
  - To create a XML Config file
  - To run multiple tests at once

- How to do create TestNG XML Configuration?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ions.Test;
_DestinationCity(){
n("BookHotel testcase1");
_Checkin(){
n("BookHotel testcase2");
_CheckOut(){
n("BookHotel testcase3");
Console
Debug
Results of running class BookHotel
ogram Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 8:08:18 AM)
Temp\testng-eclipse-1807411507\testng-customsuite.xml
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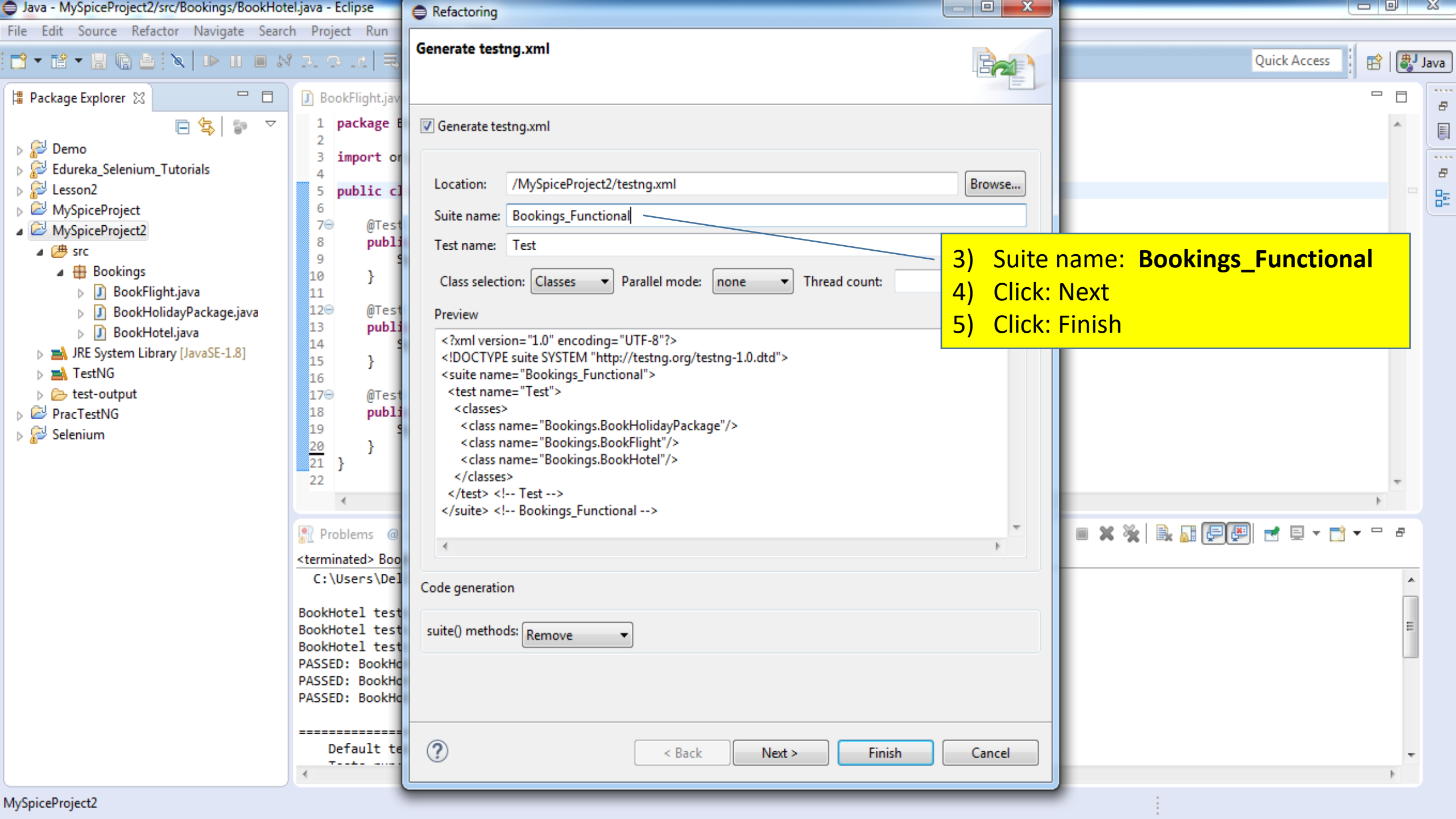
New
Go Into
Open in New Window
Open Type Hierarchy F4
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Source Alt+Shift+S
Refactor Alt+Shift+T
Import...
Export...
Refresh F5
Close Project
Close Unrelated Projects
Assign Working Sets...
Debug As
Run As
Validate
Team
Compare With
Restore from Local History...
Configure
TestNG
Properties Alt+Enter
Create TestNG class
Convert to TestNG
1) Right click on the MySpiceProject2 project
2) TextNG => Convert to TestNG
MySpiceProject2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test-output
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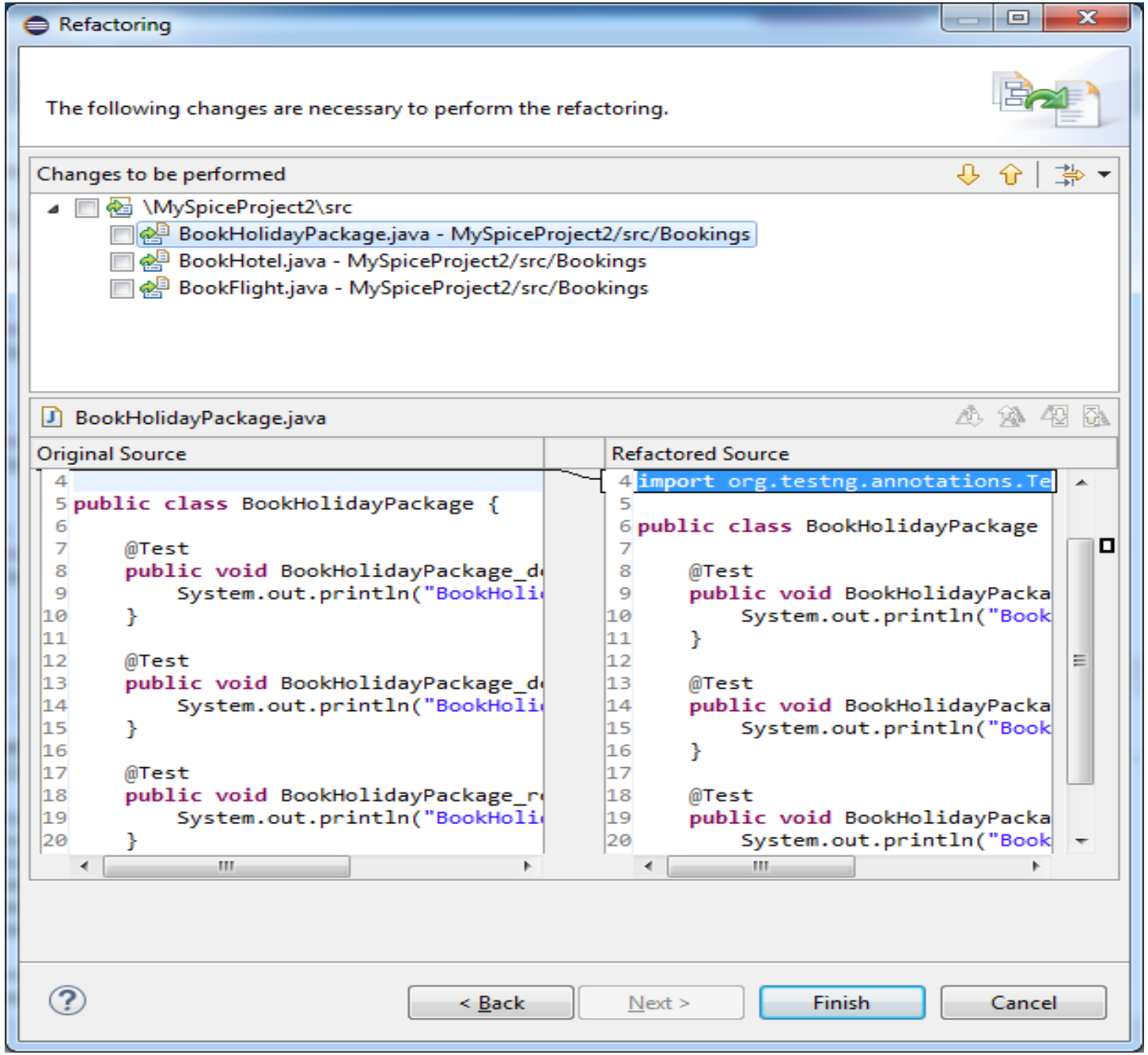
Problems
<terminated> Boo
C:\Users\Del
BookHotel test
BookHotel test
BookHotel test
PASSED: BookHo
PASSED: BookHo
PASSED: BookHo
Default te
MySpiceProject2
Refactoring
Generate testng.xml
Generate testng.xml
Location: /MySpiceProject2/testng.xml
Browse...
Suite name: Bookings_Functional
Test name: Test
Class selection: Classes
Parallel mode: none
Thread count:
Preview
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
<suite name="Bookings_Functional">
<test name="Test">
<classes>
<class name="Bookings.BookHolidayPackage"/>
<class name="Bookings.BookFlight"/>
<class name="Bookings.BookHotel"/>
</classes>
</test> <!-- Test -->
</suite> <!-- Bookings_Functional -->
Code generation
suite() methods: Remove
< Back
Next >
Finish
Cancel
3) Suite name: Bookings_Functional
4) Click: Next
5) Click: Finish


Refactoring
The following changes are necessary to perform the refactoring.
Changes to be performed
\MySpiceProject2\src
BookHolidayPackage.java - MySpiceProject2/src/Bookings
BookHotel.java - MySpiceProject2/src/Bookings
BookFlight.java - MySpiceProject2/src/Bookings
BookHolidayPackage.java
Original Source
Refactored Source
public class BookHolidayPackage {
import org.testng.annotations.Te
public class BookHolidayPackage
< Back
Next >
Finish
Cancel

Java - MySpiceProject2/src/Bookings/BookFlight.java - Eclipse

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      - BookFlight.java
      - BookHolidayPackage.java
      - BookHotel.java
  - JRE System Library [JavaSE-1.8]
  - TestNG
  - test-output
  - testng.xml
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | *BookHotel.java

```
1  package Bookings;
2
3  import org.testng.annotations.Test;
4
5  public class BookFlight {
6
7      @Test
8      public void BookFlight_RoundTrip_TestCase1()
9      {
10         System.out.println("BookFlight RoundTrip TestCase1");
11     }
12
13     @Test
14     public void BookFlight_RoundTrip_TestCase2()
15     {
16         System.out.println("BookFlight RoundTrip TestCase2");
17     }
18
19     @Test
20     public void BookFlight_OneWay_TestCase1()
21     {
22         System.out.println("BookFlight OneWay TestCase1");
```

6) testng.xml appears here

Problems | Javadoc | Declaration | Console | Debug | Results of running class BookHotel

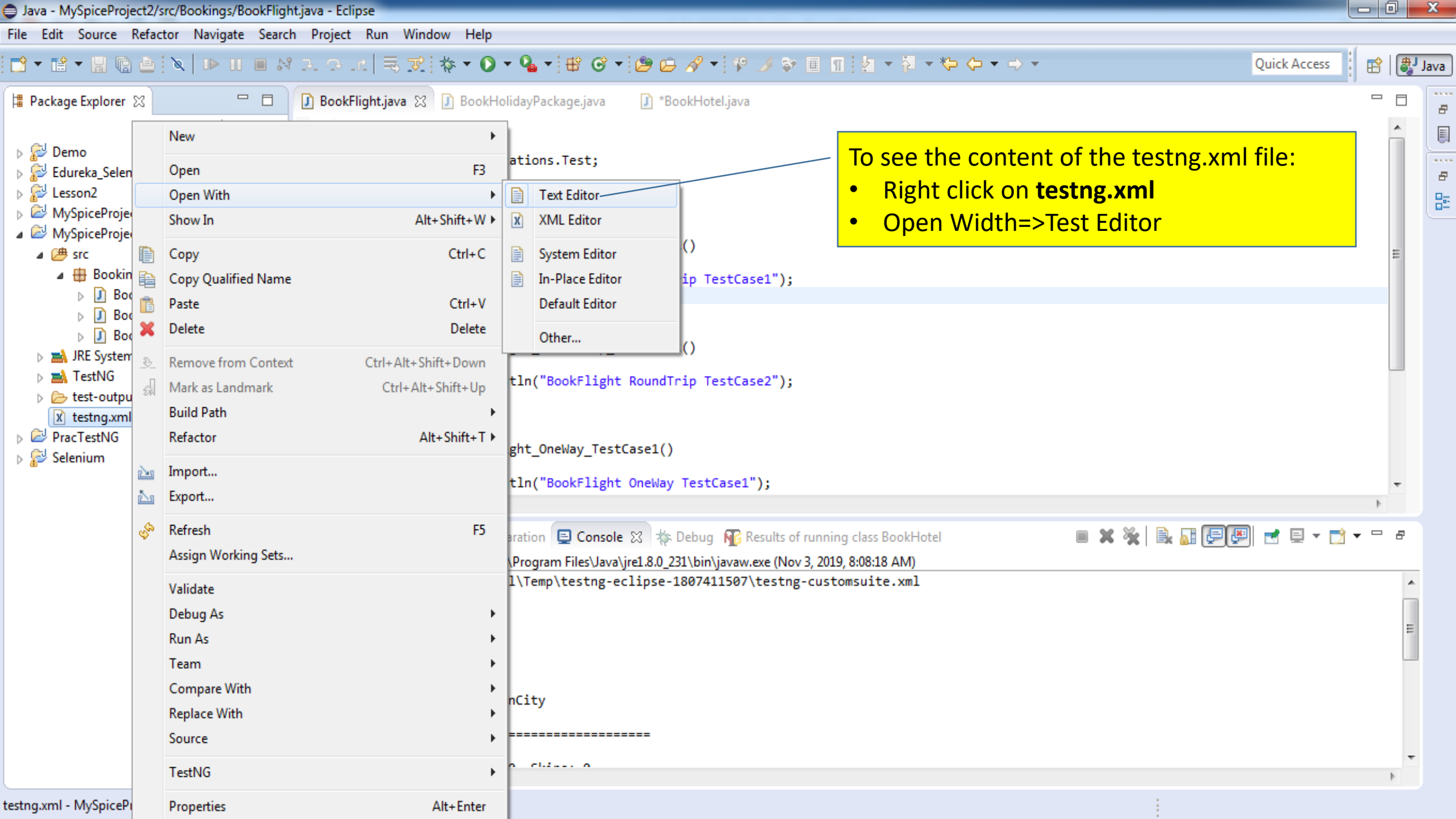
<terminated> BookHotel [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 8:08:18 AM)

```
C:\Users\Dell\AppData\Local\Temp\testng-eclipse-1807411507\testng-customsuite.xml

BookHotel testcase3
BookHotel testcase2
BookHotel testcase1
PASSED: BookHotel_CheckOut
PASSED: BookHotel_Checkin
PASSED: BookHotel_DestinationCity

===============================================
    Default test
```

testng.xml - MySpiceProject2


Java - MySpiceProject2/src/Bookings/BookFlight.java - Eclipse
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testng.xml
PracTestNG
Selenium
New
Open F3
Open With
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Mark as Landmark Ctrl+Alt+Shift+Up
Build Path
Refactor Alt+Shift+T
Import...
Export...
Refresh F5
Assign Working Sets...
Validate
Debug As
Run As
Team
Compare With
Replace With
Source
TestNG
Properties Alt+Enter
Text Editor
XML Editor
System Editor
In-Place Editor
Default Editor
Other...
ations.Test;
()
ip TestCase1");
()
tln("BookFlight RoundTrip TestCase2");
ght_OneWay_TestCase1()
tln("BookFlight OneWay TestCase1");
Console
Debug
Results of running class BookHotel
\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 8:08:18 AM)
l\Temp\testng-eclipse-1807411507\testng-customsuite.xml
nCity
==========
testng.xml - MySpiceP
To see the content of the testng.xml file:
• Right click on testng.xml
• Open Width=>Test Editor

Java - MySpiceProject2/testng.xml - Eclipse

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- Selenium

BookFlight.java | BookHolidayPackage.java | *BookHotel.java | testng.xml

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
3 <suite name="Bookings_Functional">
4   <test name="Test">
5     <classes>
6       <class name="Bookings.BookHolidayPackage"/>
7       <class name="Bookings.BookFlight"/>
8       <class name="Bookings.BookHotel"/>
9     </classes>
10  </test> <!-- Test -->
11 </suite> <!-- Bookings_Functional -->
12
```

- **Suite name**: **Bookings_Functional**
- **Suite level**: the most top of hierarchy (suite/test/method)
- Under the suite, we have **a number of tests**
- Under the test, we have classes
- **Bookings** is package
- **BookFlight, BookHolidayPackage, and BookHotel** are classes

Problems | Javadoc | Declaration | Console | Debug | Results of running class BookHotel

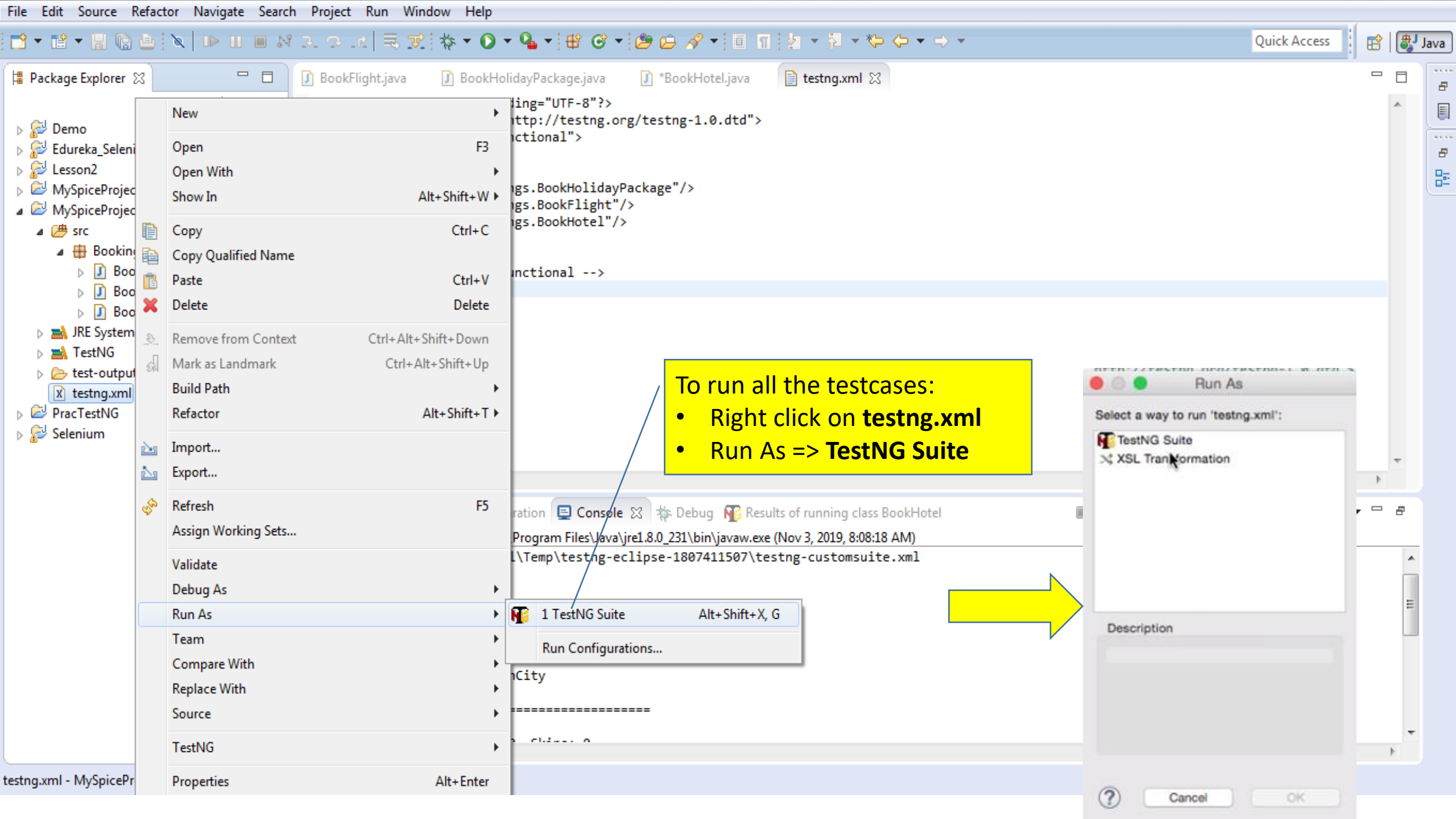
<terminated> BookHotel [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 8:08:18 AM)

```
C:\Users\Dell\AppData\Local\Temp\testng-eclipse-1807411507\testng-customsuite.xml

BookHotel testcase3
BookHotel testcase2
BookHotel testcase1
PASSED: BookHotel_CheckOut
PASSED: BookHotel_Checkin
PASSED: BookHotel_DestinationCity

===============================================
    Default test
```

Writable | Insert | 12 : 1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testng.xml
PracTestNG
Selenium
New
Open F3
Open With
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Mark as Landmark Ctrl+Alt+Shift+Up
Build Path
Refactor Alt+Shift+T
Import...
Export...
Refresh F5
Assign Working Sets...
Validate
Debug As
Run As
Team
Compare With
Replace With
Source
TestNG
Properties Alt+Enter
1 TestNG Suite Alt+Shift+X, G
Run Configurations...
To run all the testcases:
Right click on testng.xml
Run As => TestNG Suite
Console
Debug
Results of running class BookHotel
Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 8:08:18 AM)
\Temp\testng-eclipse-1807411507\testng-customsuite.xml
Run As
Select a way to run 'testng.xml':
TestNG Suite
XSL Transformation
Description
Cancel
OK
testng.xml - MySpicePr

Java - MySpiceProject2/testng.xml - Eclipse

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  - TestNG
  - test-output
  - testng.xml
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java | testng.xml

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
3 <suite name="Bookings_Functional">
4   <test name="Test">
5     <classes>
6       <class name="Bookings.BookHolidayPackage"/>
7       <class name="Bookings.BookFlight"/>
8       <class name="Bookings.BookHotel"/>
9     </classes>
10  </test> <!-- Test -->
11 </suite> <!-- Bookings_Functional -->
12
```

Problems | Javadoc | Declaration | Console | Debug | Results of running suite

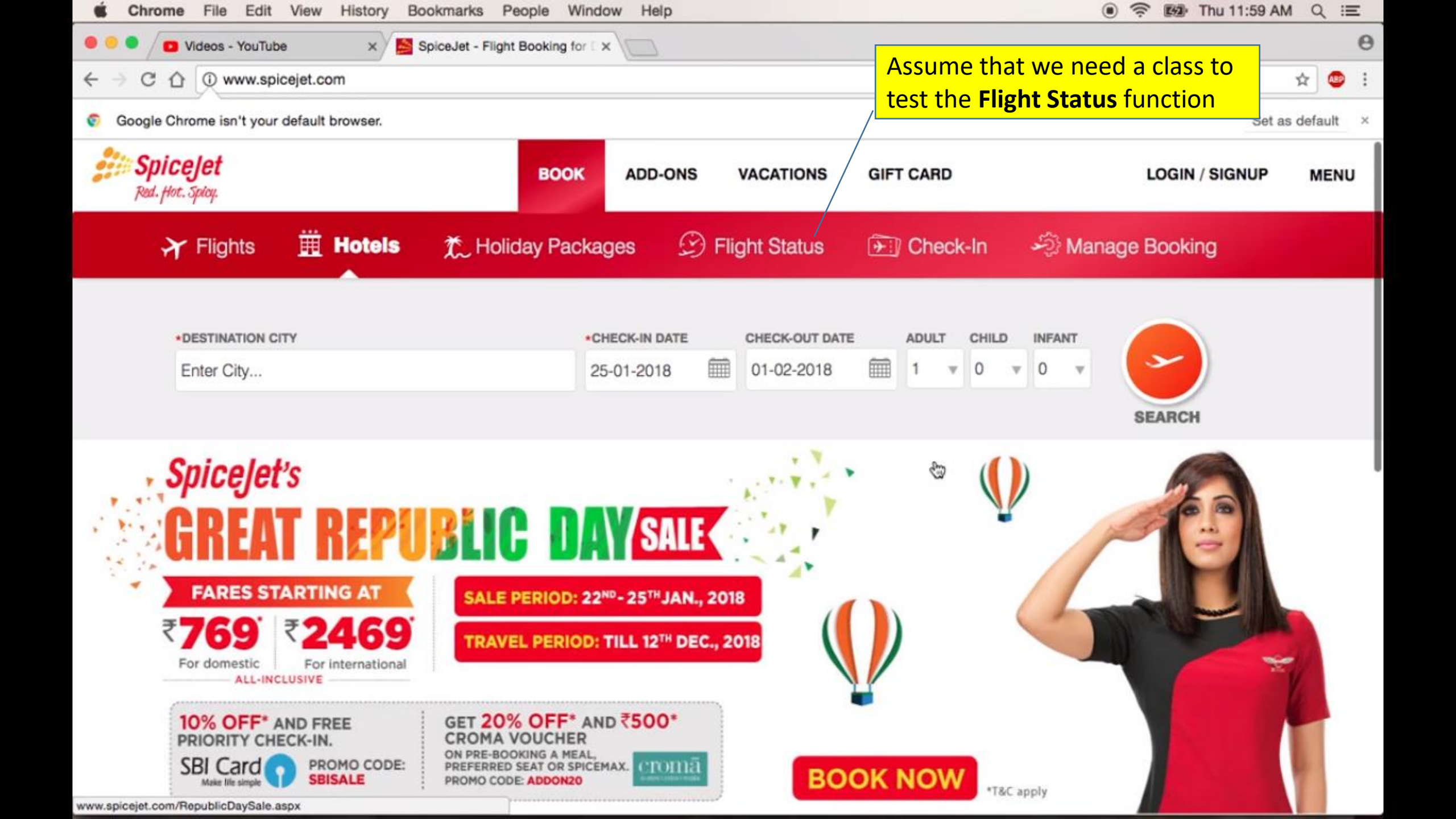
<terminated> MySpiceProject2_testng.xml [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 1:06:24 PM)

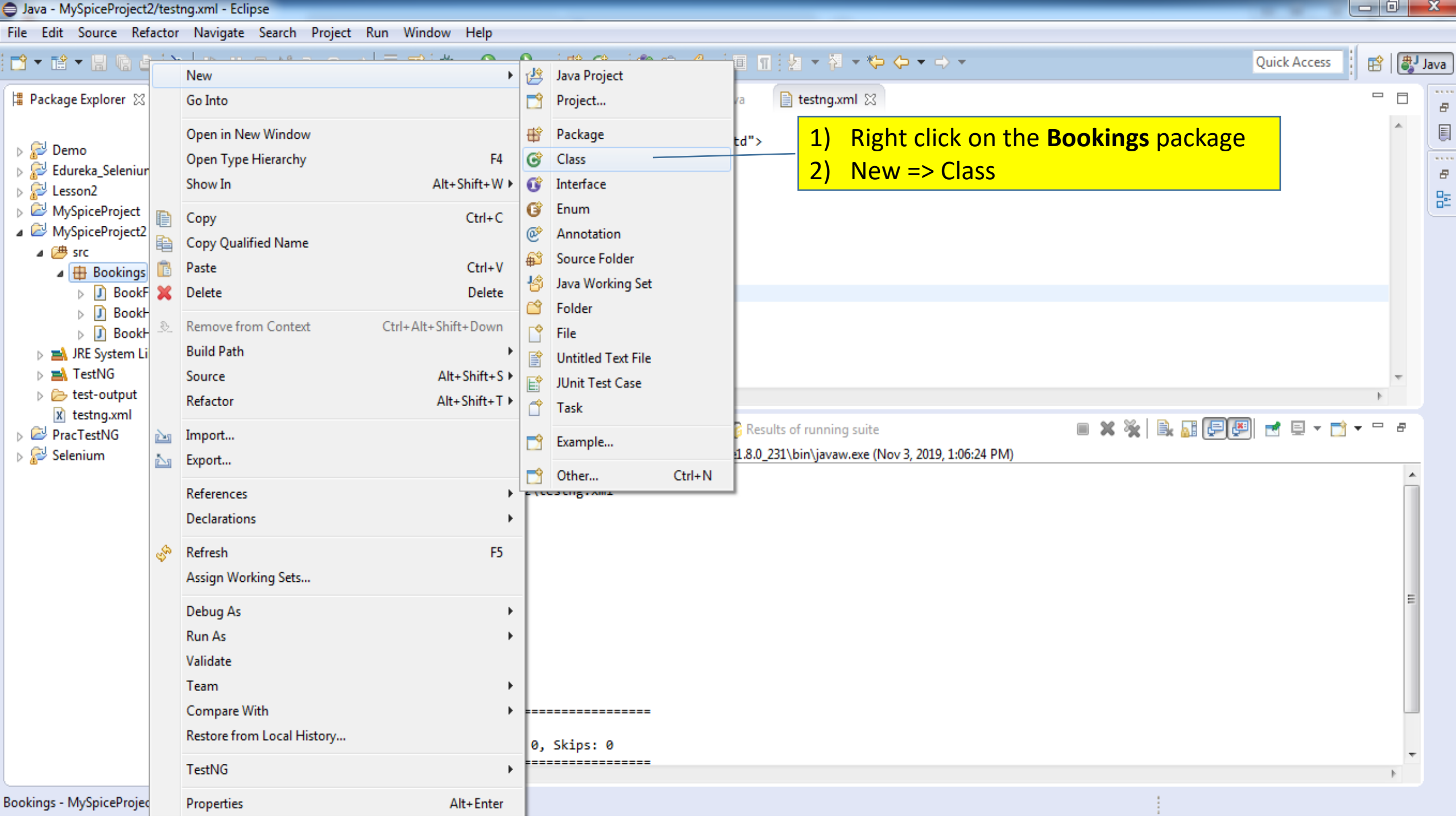
```
[TestNG] Running:
  C:\workspace1\MySpiceProject2\testng.xml

BookHolidayPackage testcase2
BookHolidayPackage testcase1
BookHolidayPackage testcase3
BookFlight OneWay TestCase1
BookFlight OneWay TestCase2
BookFlight RoundTrip TestCase1
BookFlight RoundTrip TestCase2
BookHotel testcase3
BookHotel testcase2
BookHotel testcase1

===============================================
Bookings_Functional
Total tests run: 10, Failures: 0, Skips: 0
===============================================
```

Results of running **testng.xml**:

- All the testcases are run at once

- Now, we try to add a new class and then run it from the XML file


Assume that we need a class to test the **Flight Status** function
Chrome File Edit View History Bookmarks People Window Help
Thu 11:59 AM
Videos - YouTube
SpiceJet - Flight Booking for
www.spicejet.com
Google Chrome isn't your default browser.
Set as default
SpiceJet
Red. Hot. Spicy.
BOOK
ADD-ONS
VACATIONS
GIFT CARD
LOGIN / SIGNUP
MENU
Flights
Hotels
Holiday Packages
Flight Status
Check-In
Manage Booking
*DESTINATION CITY
Enter City...
*CHECK-IN DATE
25-01-2018
CHECK-OUT DATE
01-02-2018
ADULT
1
CHILD
0
INFANT
0
SEARCH
SpiceJet's
GREAT REPUBLIC DAY SALE
FARES STARTING AT
₹769 For domestic
₹2469 For international
ALL-INCLUSIVE
SALE PERIOD: 22ND - 25TH JAN., 2018
TRAVEL PERIOD: TILL 12TH DEC., 2018
10% OFF* AND FREE PRIORITY CHECK-IN.
SBI Card
PROMO CODE: SBISALE
GET 20% OFF* AND ₹500* CROMA VOUCHER
ON PRE-BOOKING A MEAL, PREFERRED SEAT OR SPICEMAX.
PROMO CODE: ADDON20
croma
BOOK NOW
*T&C apply
www.spicejet.com/RepublicDaySale.aspx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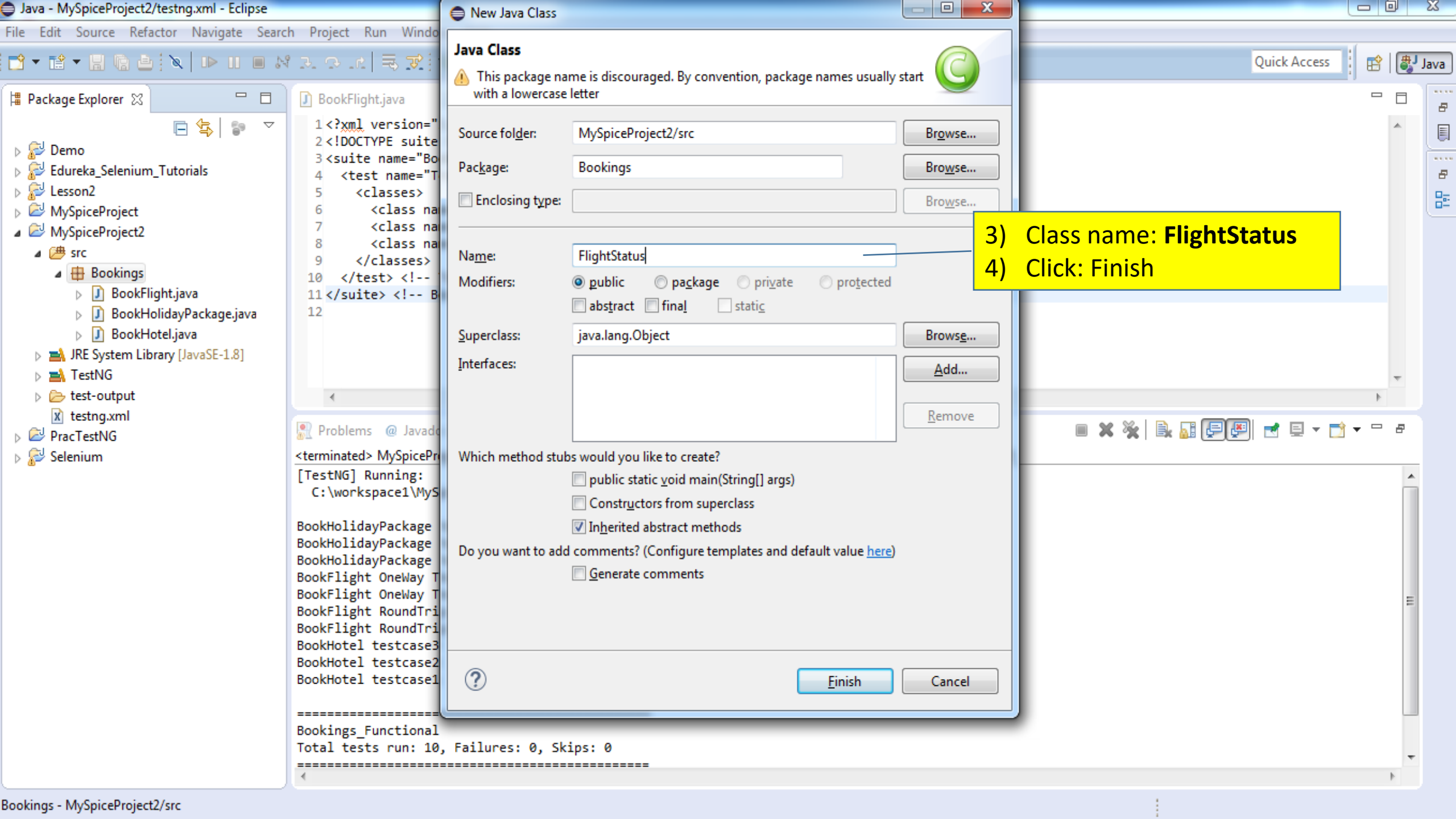
PracTestNG
Selenium
Bookings - MySpiceProjec
testng.xml
td">
1) Right click on the Bookings package
2) New => Class
New
Go Into
Open in New Window
Open Type Hierarchy F4
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Source Alt+Shift+S
Refactor Alt+Shift+T
Import...
Export...
References
Declarations
Refresh F5
Assign Working Sets...
Debug As
Run As
Validate
Team
Compare With
Restore from Local History...
TestNG
Properties Alt+Enter
Java Project
Project...
Package
Class
Interface
Enum
Annotation
Source Folder
Java Working Set
Folder
File
Untitled Text File
JUnit Test Case
Task
Example...
Other... Ctrl+N
Results of running suite
1.8.0_231\bin\javaw.exe (Nov 3, 2019, 1:06:24 PM)
==========
0, Skips: 0
==========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Selenium
BookFlight.java
1 <?xml version="
2 <!DOCTYPE suite
3 <suite name="Bo
4 <test name="T
5 <classes>
6 <class na
7 <class na
8 <class na
9 </classes>
10 </test> <!--
11 </suite> <!-- B
12
Problems @ Javado
<terminated> MySpicePr
[TestNG] Running:
C:\workspace1\MyS
BookHolidayPackage
BookHolidayPackage
BookHolidayPackage
BookFlight OneWay T
BookFlight OneWay T
BookFlight RoundTri
BookFlight RoundTri
BookHotel testcase3
BookHotel testcase2
BookHotel testcase1
Bookings_Functional
Total tests run: 10, Failures: 0, Skips: 0
Bookings - MySpiceProject2/src
New Java Class
Java Class
This package name is discouraged. By convention, package names usually start with a lowercase letter
Source folder: MySpiceProject2/src
Browse...
Package: Bookings
Browse...
Enclosing type:
Browse...
Name: FlightStatus
Modifiers: public package private protected
abstract final static
Superclass: java.lang.Object
Browse...
Interfaces:
Add...
Remove
Which method stubs would you like to create?
public static void main(String[] args)
Constructors from superclass
Inherited abstract methods
Do you want to add comments? (Configure templates and default value here)
Generate comments
Finish
Cancel
3) Class name: FlightStatus
4) Click: Finish

Java - MySpiceProject2/src/Bookings/FlightStatus.java - Eclipse

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- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java | testng.xml | FlightStatus.java

```
1  package Bookings;
2
3  public class FlightStatus {
4
5  }
6
```

Problems | Javadoc | Declaration | Console | Debug | Results of running suite

<terminated> MySpiceProject2_testng.xml [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 1:06:24 PM)

```
[TestNG] Running:
  C:\workspace1\MySpiceProject2\testng.xml

BookHolidayPackage testcase2
BookHolidayPackage testcase1
BookHolidayPackage testcase3
BookFlight OneWay TestCase1
BookFlight OneWay TestCase2
BookFlight RoundTrip TestCase1
BookFlight RoundTrip TestCase2
BookHotel testcase3
BookHotel testcase2
BookHotel testcase1

===============================================
Bookings_Functional
Total tests run: 10, Failures: 0, Skips: 0
===============================================
```

Writable | Smart Insert | 1 : 1

Java - MySpiceProject2/src/Bookings/FlightStatus.java - Eclipse

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  - testng.xml
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java | testng.xml | FlightStatus.java

```
1  package Bookings;
2
3  import org.testng.annotations.Test;
4
5  public class FlightStatus {
6
7      @Test
8      public void FlightStatus_Testcase1(){
9          System.out.println("FlightStatus Testcases1");
10     }
11
12 }
13
```

5) Write code for the **FlightStatus** class like this

Problems | Javadoc | Declaration | Console | Debug | Results of running suite

<terminated> MySpiceProject2_testng.xml [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 1:06:24 PM)

```
[TestNG] Running:
  C:\workspace1\MySpiceProject2\testng.xml

BookHolidayPackage testcase2
BookHolidayPackage testcase1
BookHolidayPackage testcase3
BookFlight OneWay TestCase1
BookFlight OneWay TestCase2
BookFlight RoundTrip TestCase1
BookFlight RoundTrip TestCase2
BookHotel testcase3
BookHotel testcase2
BookHotel testcase1

===============================================
Bookings_Functional
Total tests run: 10, Failures: 0, Skips: 0
===============================================
```

Writable | Smart Insert | 5 : 28

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  - test-output
    - testng.xml
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java | *testng.xml | FlightStatus.java

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
3 <suite name="Bookings_Functional">
4   <test name="Test">
5     <classes>
6       <class name="Bookings.BookHolidayPackage"/>
7       <class name="Bookings.BookFlight"/>
8       <class name="Bookings.BookHotel"/>
9       <class name="Bookings.FlightStatus"/>
10    </classes>
11  </test> <!-- Test -->
12 </suite> <!-- Bookings_Functional -->
13
```

6) Go to the **testng.xml** file and add the **FlightStatus** class

Problems | Javadoc | Declaration | Console | Debug | Results of running suite

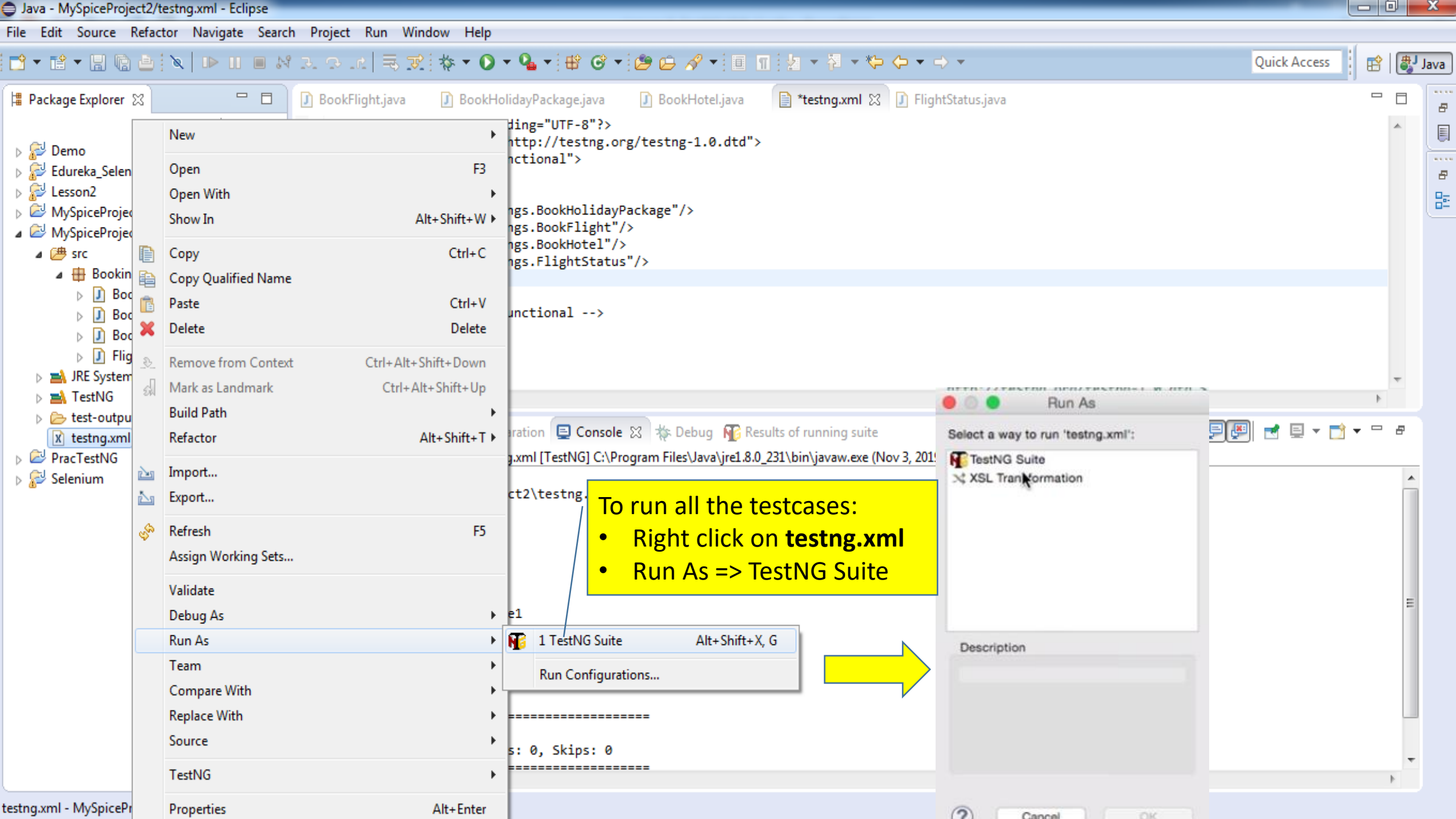
<terminated> MySpiceProject2_testng.xml [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 1:06:24 PM)

```
[TestNG] Running:
  C:\workspace1\MySpiceProject2\testng.xml

BookHolidayPackage testcase2
BookHolidayPackage testcase1
BookHolidayPackage testcase3
BookFlight OneWay TestCase1
BookFlight OneWay TestCase2
BookFlight RoundTrip TestCase1
BookFlight RoundTrip TestCase2
BookHotel testcase3
BookHotel testcase2
BookHotel testcase1

===============================================
Bookings_Functional
Total tests run: 10, Failures: 0, Skips: 0
===============================================
```

Writable | Insert | 9 : 7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BookHolidayPackage.java
BookHotel.java
*testng.xml
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test-outpu
testng.xml
PracTestNG
Selenium
New
Open F3
Open With
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Mark as Landmark Ctrl+Alt+Shift+Up
Build Path
Refactor Alt+Shift+T
Import...
Export...
Refresh F5
Assign Working Sets...
Validate
Debug As
Run As
Team
Compare With
Replace With
Source
TestNG
Properties Alt+Enter
1 TestNG Suite Alt+Shift+X, G
Run Configurations...
ding="UTF-8"?>
http://testng.org/testng-1.0.dtd">
nctional">
ngs.BookHolidayPackage"/>
ngs.BookFlight"/>
ngs.BookHotel"/>
ngs.FlightStatus"/>
unctional -->
Console
Debug
Results of running suite
Run As
Select a way to run 'testng.xml':
TestNG Suite
XSL Transformation
Description
Cancel
To run all the testcases:
Right click on testng.xml
Run As => TestNG Suite

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      - FlightStatus.java
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  - TestNG
  - test-output
  - testng.xml
- PracTestNG
- Selenium

BookFlight.java | BookHolidayPackage.java | BookHotel.java | testng.xml | FlightStatus.java

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
3 <suite name="Bookings_Functional">
4   <test name="Test">
5     <classes>
6       <class name="Bookings.BookHolidayPackage"/>
7       <class name="Bookings.BookFlight"/>
8       <class name="Bookings.BookHotel"/>
9       <class name="Bookings.FlightStatus"/>
10    </classes>
11  </test> <!-- Test -->
12 </suite> <!-- Bookings_Functional -->
13
```

Problems | Javadoc | Declaration | Console | Debug | Results of running suite

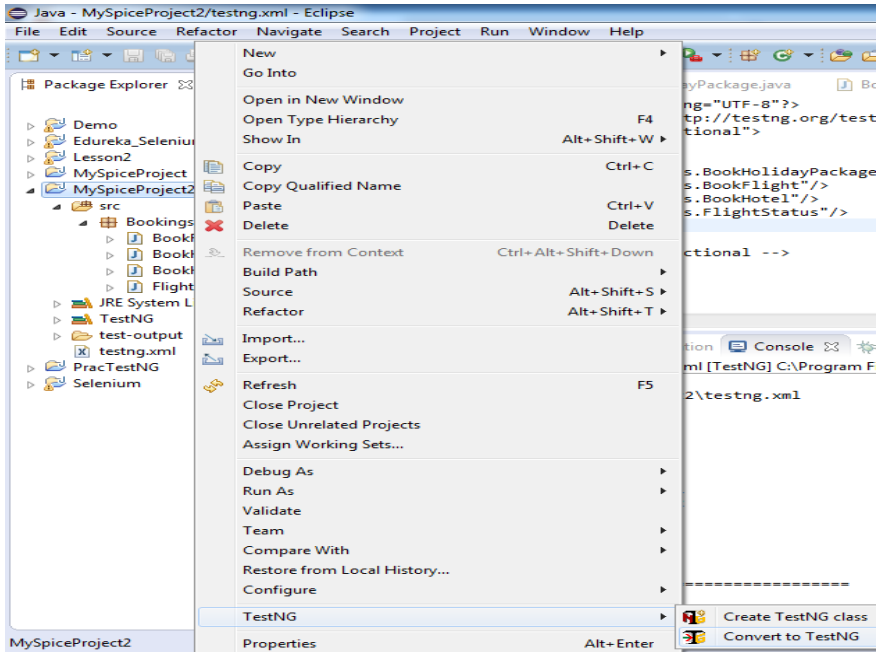
<terminated> MySpiceProject2_testng.xml [TestNG] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (Nov 3, 2019, 1:54:49 PM)

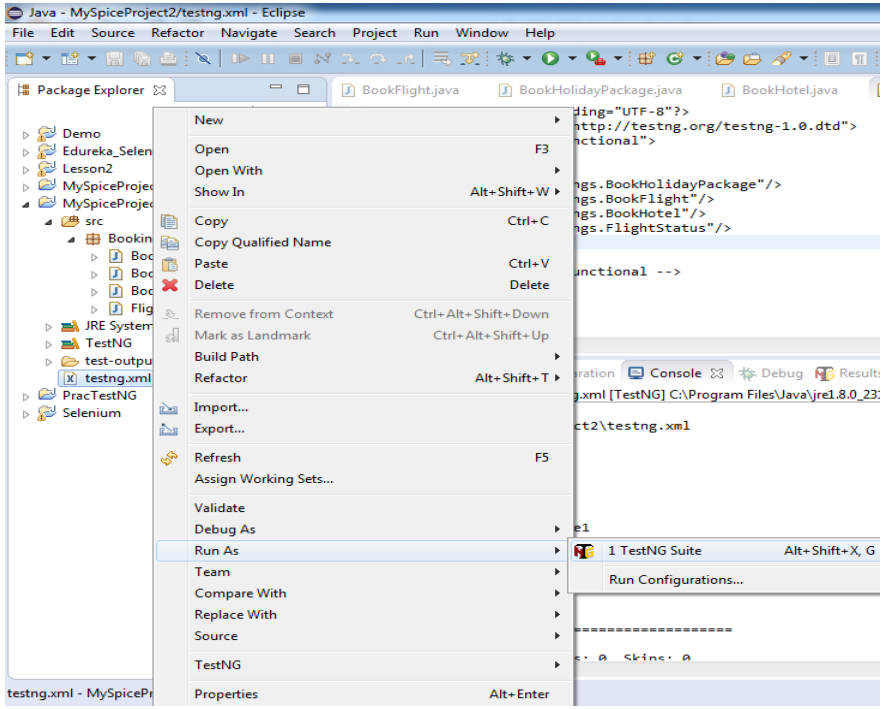
```
[TestNG] Running:
  C:\workspace1\MySpiceProject2\testng.xml

BookHolidayPackage testcase2
BookHolidayPackage testcase1
BookHolidayPackage testcase3
BookFlight OneWay TestCase1
BookFlight OneWay TestCase2
BookFlight RoundTrip TestCase1
BookFlight RoundTrip TestCase2
BookHotel testcase3
BookHotel testcase2
BookHotel testcase1
FlightStatus Testcases1

===============================================
Bookings_Functional
Total tests run: 11, Failures: 0, Skips: 0
```

Test results include **FlightStatus Testcase1**

Summary

- Why do we need to create this XML Config file?
  - Because it allows to run all the testcases at once instead of running each class of test cases individually.
- How do we generate this XML Config file?
  - After we complete writing classes, at project level, right click and TestNG => Convert to TestNG.
  - Automatically create XML file.
- How can we run multiple tests at once?
  - Right click on **testng.xml** => Run as => TestNG Suite.
  - Hundreds of testcases will run at once.





Reference

- TestNG XML Config, https://www.youtube.com/watch?v=m_OeyPYNLc8&list=PLW2TrvplfStfQqgWJmXRTwtspS6RKmtoR&index=3

Read more

1. TestNG Introduction, https://www.youtube.com/watch?v=ok_sG11axFA&list=PLW2TrvplfStfQqgWJmXRTwtspS6RKmtoR&index=1
2. TestNG Annotations, https://www.youtube.com/watch?v=JL4LbEi0JfU&list=PLW2TrvplfStfQqgWJmXRTwtspS6RKmtoR&index=2
3. TestNG Include and Exclude methods, https://www.youtube.com/watch?v=xRLt6CG0mlI&list=PLW2TrvplfStfQqgWJmXRTwtspS6RKmtoR&index=4
4. TestNG Groups, https://www.youtube.com/watch?v=tN7-BYqr_es&list=PLW2TrvplfStfQqgWJmXRTwtspS6RKmtoR&index=5
5. Parameterization using xml config file, https://www.youtube.com/watch?v=GXO5vB4HqB4&list=PLW2TrvplfStfQqgWJmXRTwtspS6RKmtoR&index=6
6. @Dataprovider in TestNG, https://www.youtube.com/watch?v=XHLc203LmUk&list=PLW2TrvplfStfQqgWJmXRTwtspS6RKmtoR&index=7
7. TestNG Listeners, https://www.youtube.com/watch?v=JchmqeNWg-w&list=PLW2TrvplfStfQqgWJmXRTwtspS6RKmtoR&index=8