

### Testing: Understanding Testing.xml, Adding Classes, Packages:-

TestNG.xml file is a setup/configuration file that helps us in organizing our test cases in the right pattern. It also helps us in making Test Suites and Test methods. By using the XML file approach, it makes it easy to understand the code.

The testng.xml file has the numerous uses as listed below –

- Test cases are executed in groups.
- Test methods can be included or excluded in the execution.
- The execution of multiple test cases from multiple java class files can be triggered.
- Comprises names of the folder, class, method.
- Capable of triggering parallel execution.
- Test methods belonging to groups can be included or excluded in the execution.

#### Example

TestNG.xml file

```
<?xml version = "1.0" encoding = "UTF-8"?>
<!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd" >
<suite name = "Cycle1">
  <test name = "Tutorialspoint">
    <classes>
      <class name = "Test1" />
      <methods>
        <exclude name= "Login.*"/>
      </methods>
    </classes>
  </test>
</suite>
```

Here as per the xml file, all the test methods with starting name Login will be excluded from test execution.

#### **Below are The Steps for Adding Classes to testng.xml file:**

- 1.Create a java project with multiple classes in each package.
- 2.In the above project; created 3 packages called (com.test.firstpackage, com.test.secondpackage and com.test.thirdpackage) and each package had 2 classes.
- 3.Now create a testng.xml file (here the xml file name is “testng-packages.xml”) with below code/configuration content.

```

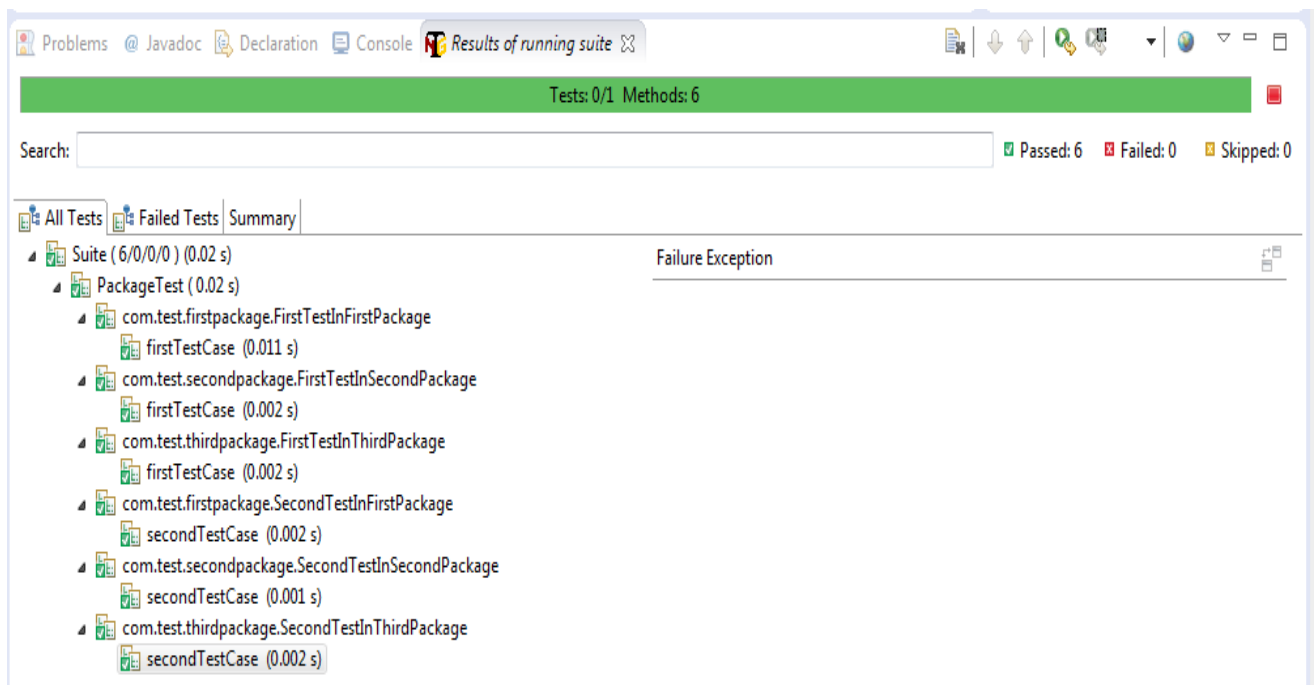
1
2 <?xml version="1.0" encoding="UTF-8"?>
3 <!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
4 <suite name="Suite">
5   <test name="PackageTest">
6     <packages>
7       <package name="com.test.firstpackage"/>
8       <package name="com.test.secondpackage"/>
9       <package name="com.test.thirdpackage"/>
10    </packages>
11  </test> <!-- Test -->
12 </suite> <!-- Suite -- >

```

In the above code, packages will be reside in the “packages” tag and the each individual package will be in the “package” tag with “name” attribute.

4.Now execute the “testng-packages.xml” file from eclipse as TestNG suite.

Then you can see the following output.



This way we can configure the packages in the testng xml configuration file to execute the scripts as packages and can analyse the test results.

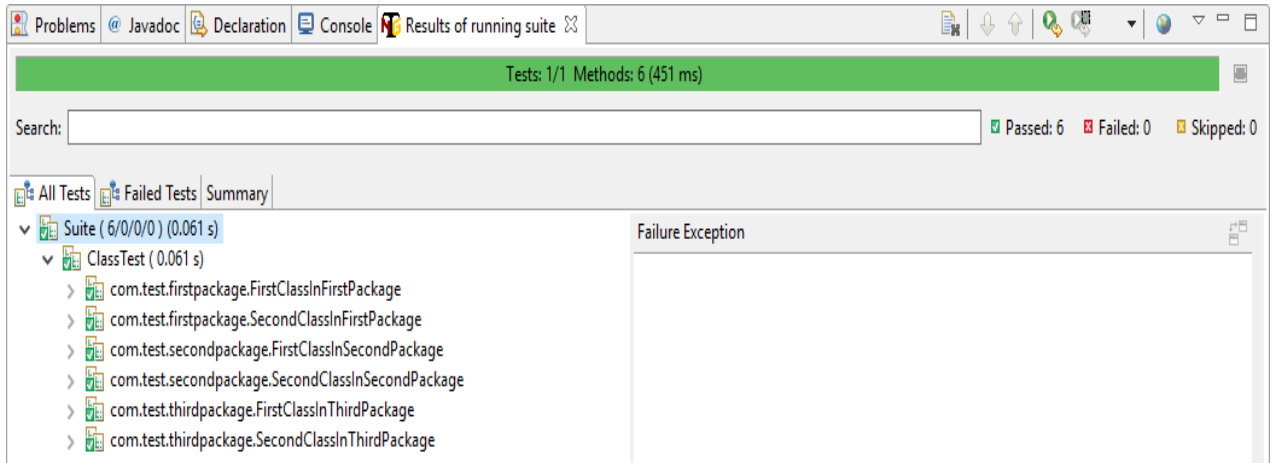
2. In the above project; created 3 packages called (com.test.firstpackage, com.test.firstpackage, com.test.secondpackage and com.test.thirdpackage) and each package had 2 classes.

3. Now create a testng.xml file (here the xml file name is “testng-classes.xml”) with below code/configuration content.

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd>
3 <suite name="Suite">
4   <test name="ClassTest">
5     <classes>
6       <class name="com.test.firstpackage.FirstClassInFirstPackage"/>
7       <class name="com.test.firstpackage.SecondClassInFirstPackage"/>
8       <class name="com.test.secondpackage.FirstClassInSecondPackage"/>
9       <class name="com.test.secondpackage.SecondClassInSecondPackage"/>
10      <class name="com.test.thirdpackage.FirstClassInThirdPackage"/>
11      <class name="com.test.thirdpackage.SecondClassInThirdPackage"/>
12    </classes>
13  </test> <!-- Test -->
14 </suite> <!-- Suite -->
```

In the above code, Classes will be reside in the “classes” tag and the each individual class will be in the “class” tag with “name” attribute.

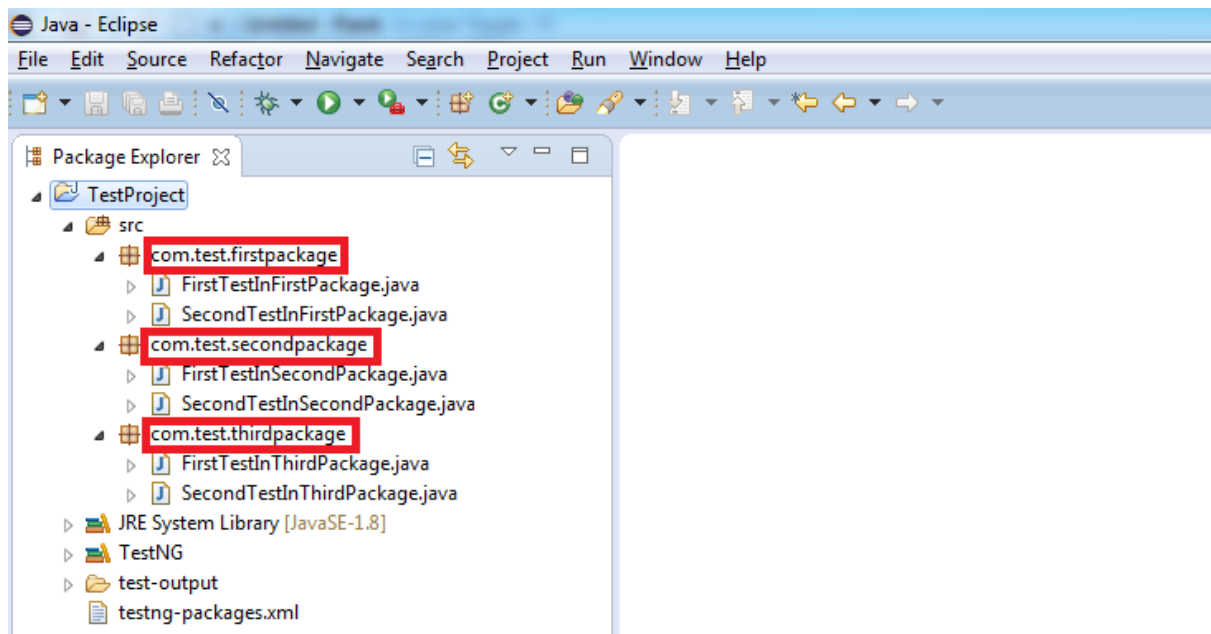
4. Now execute the “testng-classes.xml” file from eclipse as TestNG suite. Then you can see the following output.



This way we can configure the classes in the testng xml configuration file to execute the scripts as classes and can analyse the test results.

**Below are The Steps for Adding Packages to testng.xml file:**

1.Create a java project with multiple packages and multiple classes in each package.



2.In the above project; created 3 packages called (com.test.firstpackage, com.test.secondpackage and com.test.thirdpackage) and each package had 2 classes.

3.Now create a testng.xml file (here the xml file name is “testng-packages.xml”) with below code/configuration content.

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">
3 <suite name="Suite">
4   <test name="PackageTest">
      <packages>

```

```

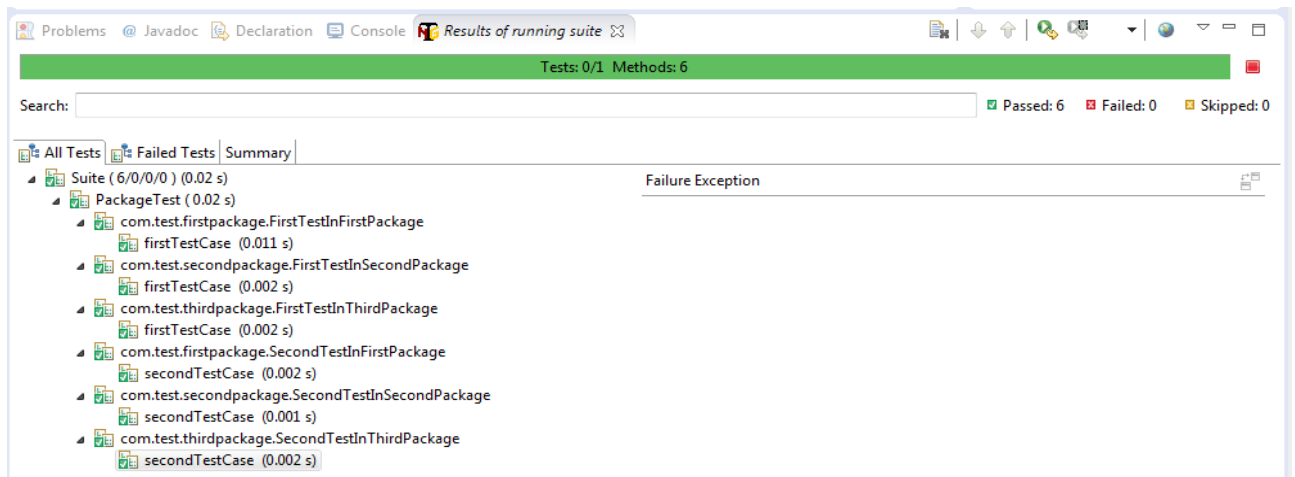
5      <package name="com.test.firstpackage"/>
6      <package name="com.test.secondpackage"/>
7      <package name="com.test.thirdpackage"/>
8      </packages>
9  </test> <!-- Test -->
10 </suite> <!-- Suite -->
11

```

In the above code, packages will be reside in the “packages” tag and the each individual package will be in the “package” tag with “name” attribute.

4.Now execute the “testng-packages.xml” file from eclipse as TestNG suite.

Then you can see the following output.



This way we can configure the packages in the testng xml configuration file to execute the scripts as packages and can analyse the test results.