Object Oriented Programming

Week 1 Part 2
Setting up Eclipse to Create a Class

Setting up a Java Object using Eclipse

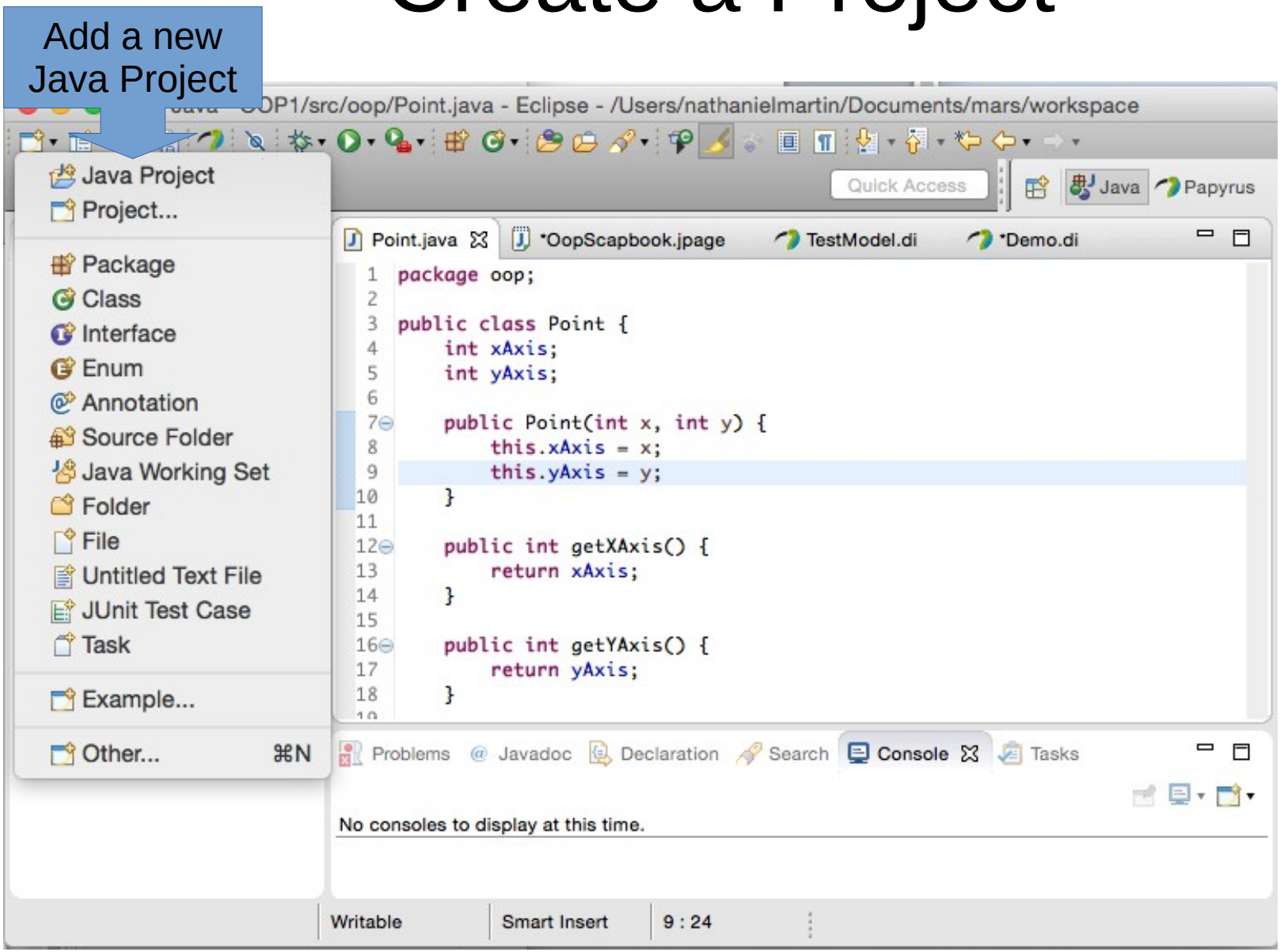
Eclipse

- Eclipse is an IDE (Integrated Development Environment)
  - It provides and editor
  - A build system and compiler
  - A test system
  - A Software Configuration System
  - And more
- IDE simplify programming, once you learn to use them.

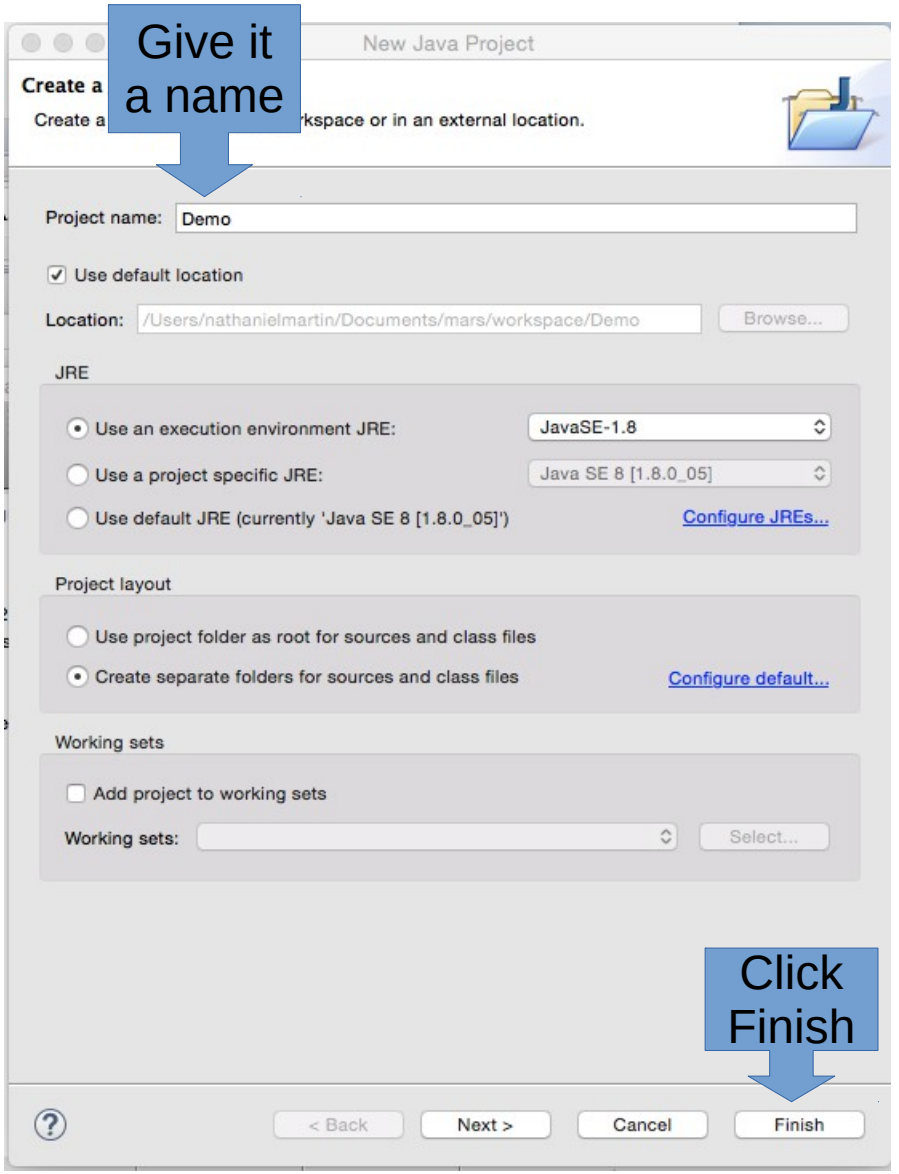
Writing a Program in Eclipse

1. Create a Project
2. Inside the project create a class
   - Add the class to a package
3. Add the instance variables and methods to the class.
   - The IDE notifies you immediately if there are compiler errors

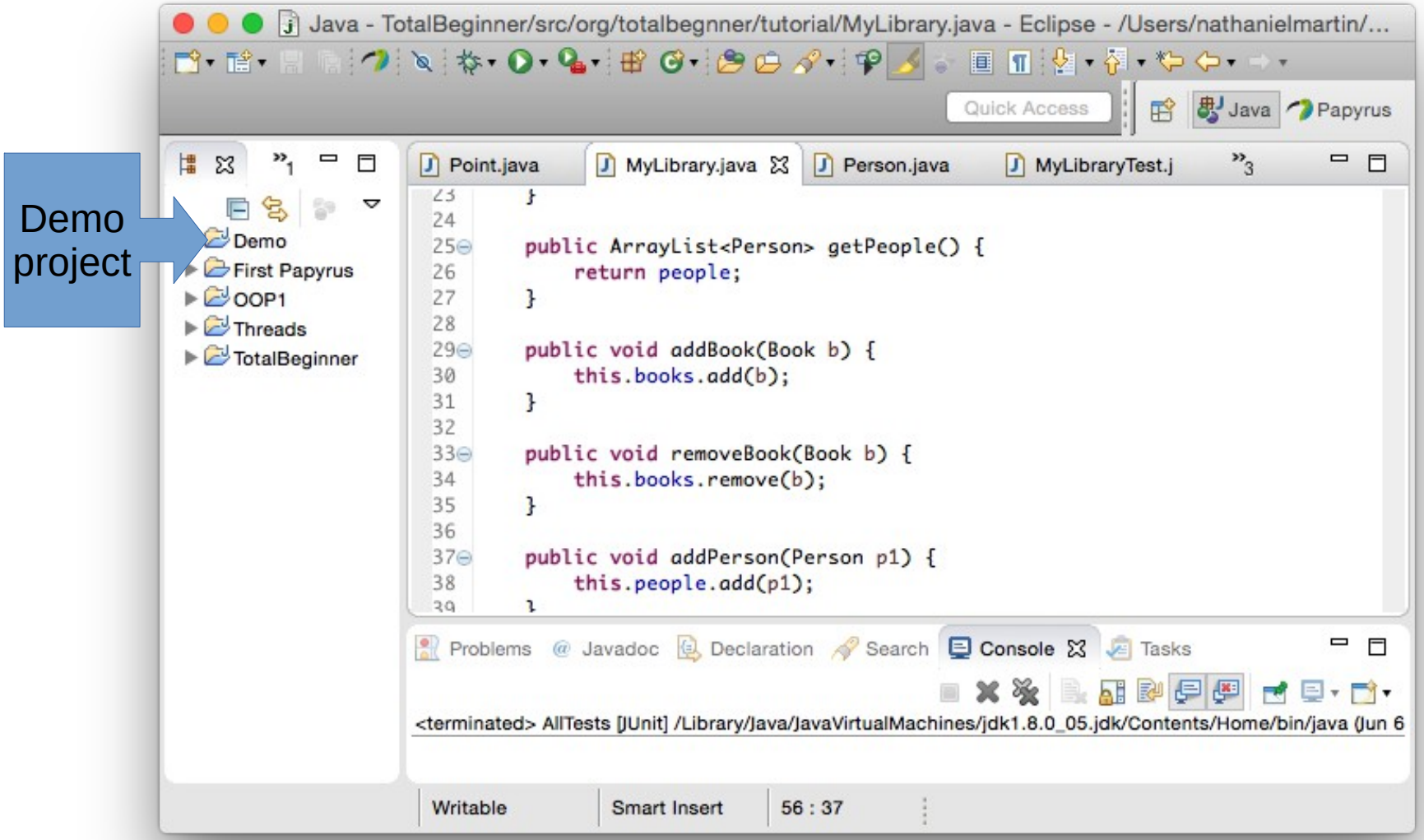
Create a Project



Name your Project

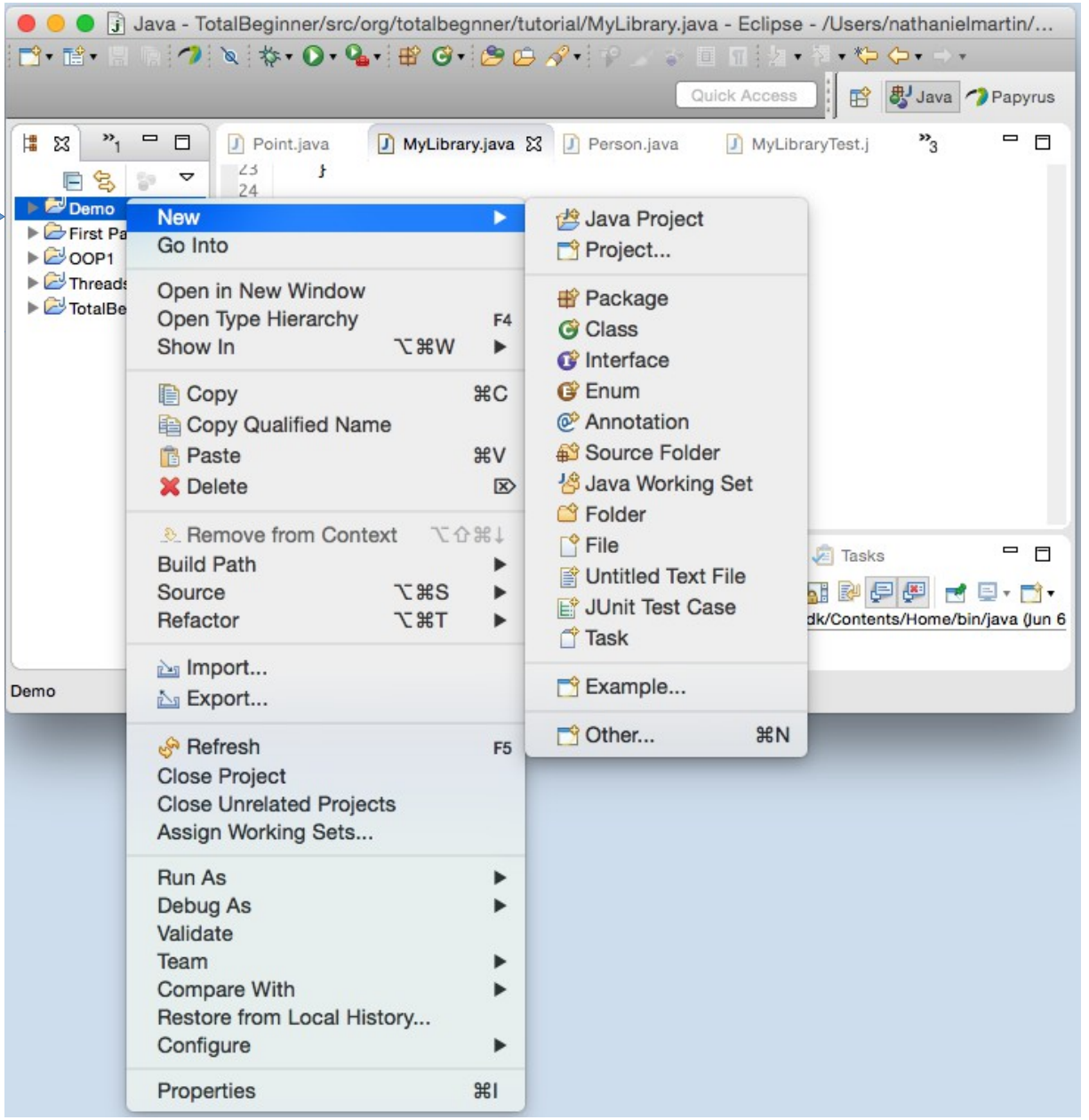


Now you have a project

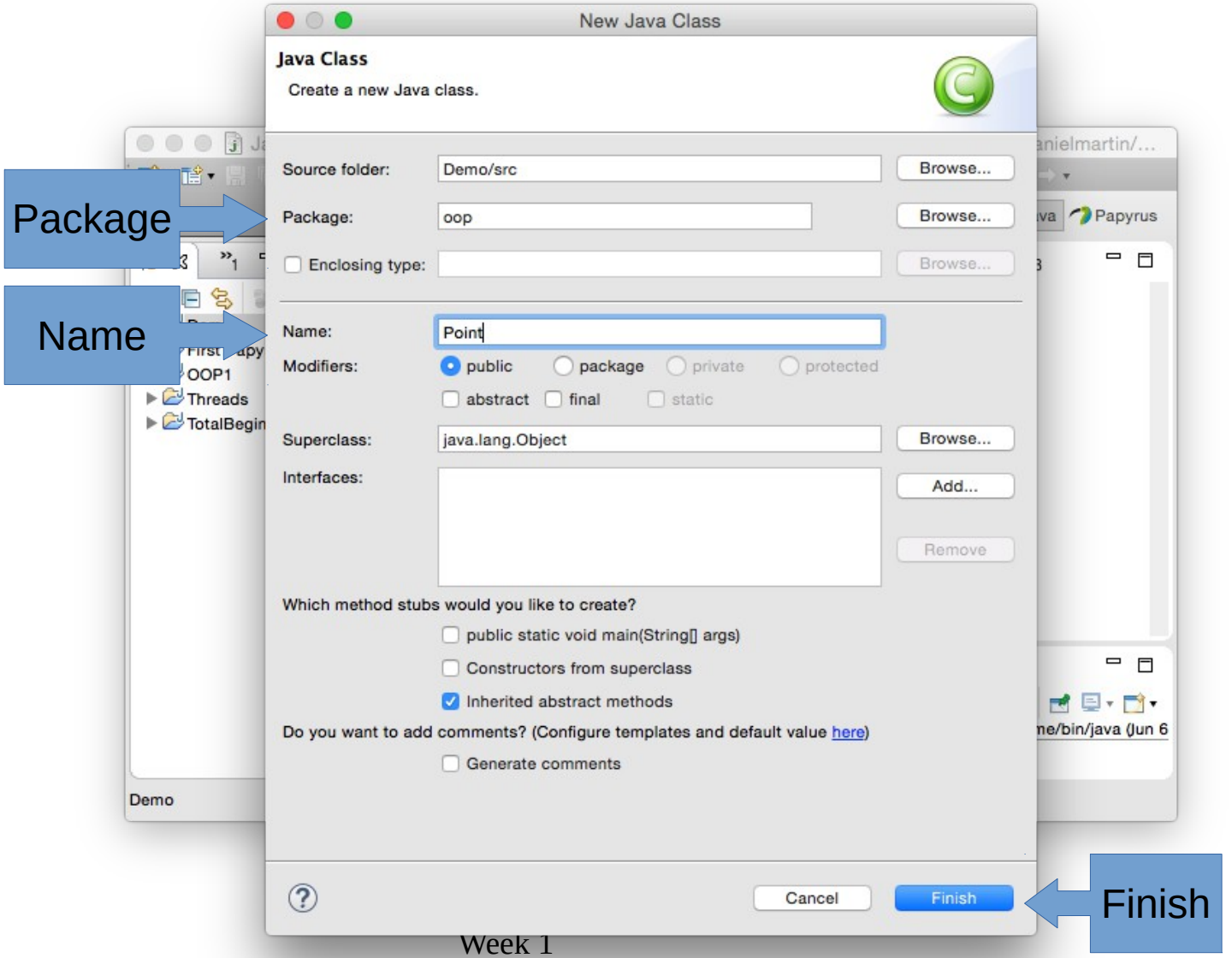


Add a Class

1. Right click project
2. Roll over New
3. Select Class

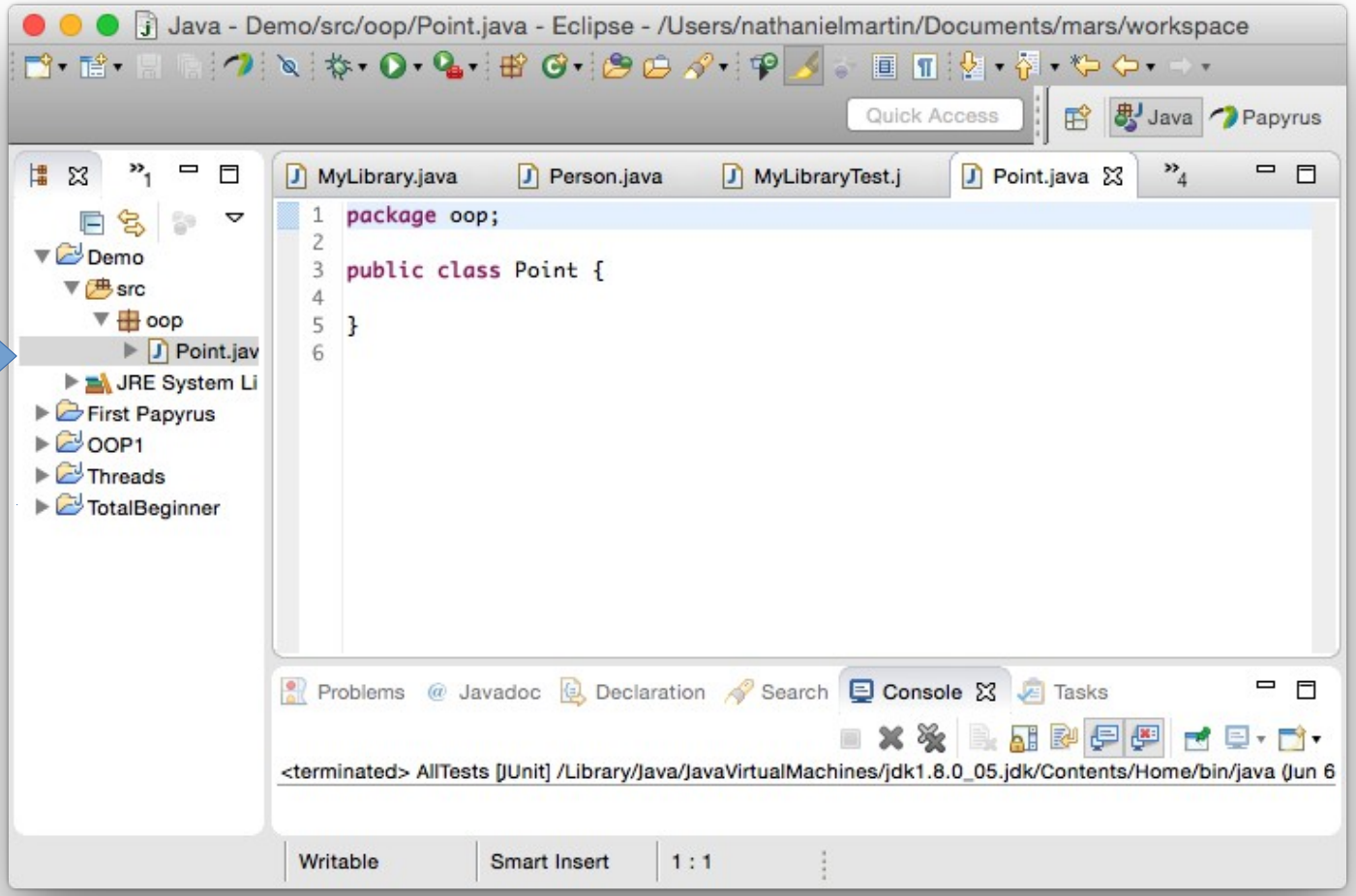


Add Class Name and Package



We have a class

Class **Point** in Folder **src** and Package **oop**



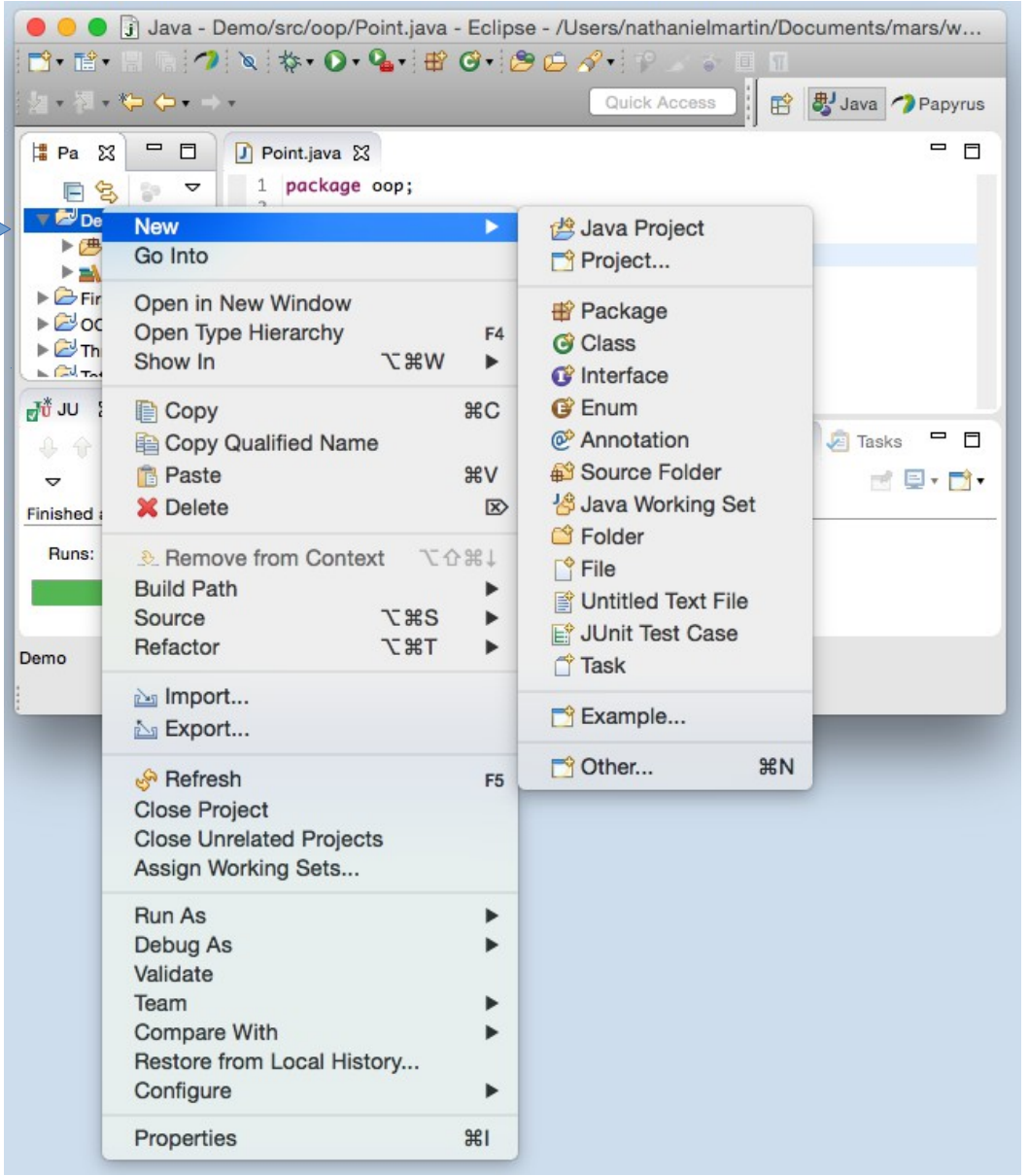
Setting up Eclipse to do Test Driven Development

Eclipse and TDD

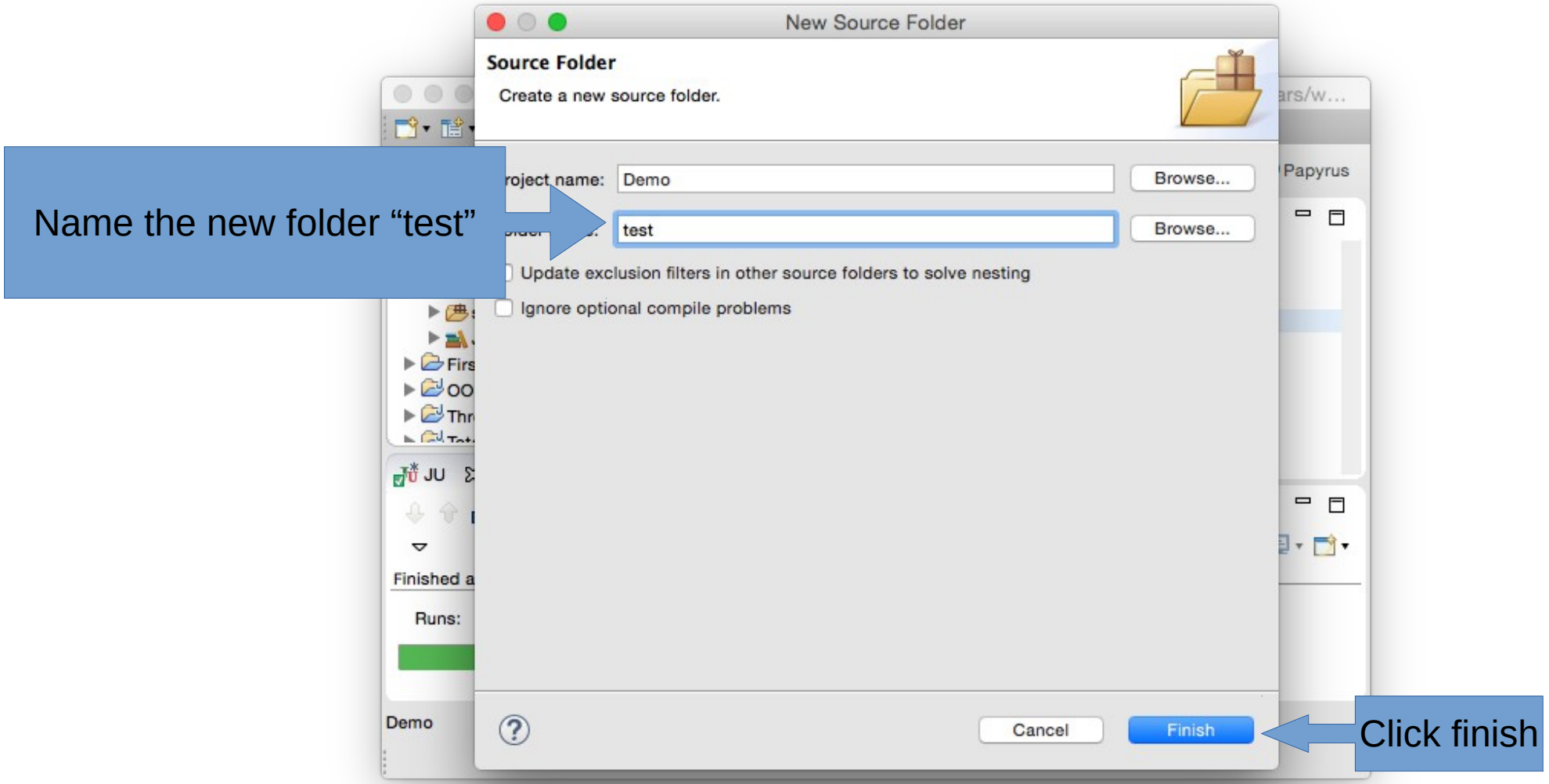
- Eclipse for Java is designed for TDD
  - JUnit is integrated into the Java development environment
  - You can run JUnit tests from the IDE
  - You can access failing tests with a click of the mouse
  - Eclipse suggests solutions to failing tests
- But first you need to set up the tests

New Source Folder for Tests

1. Right Click Project
2. Select New
3. Select Source Folder

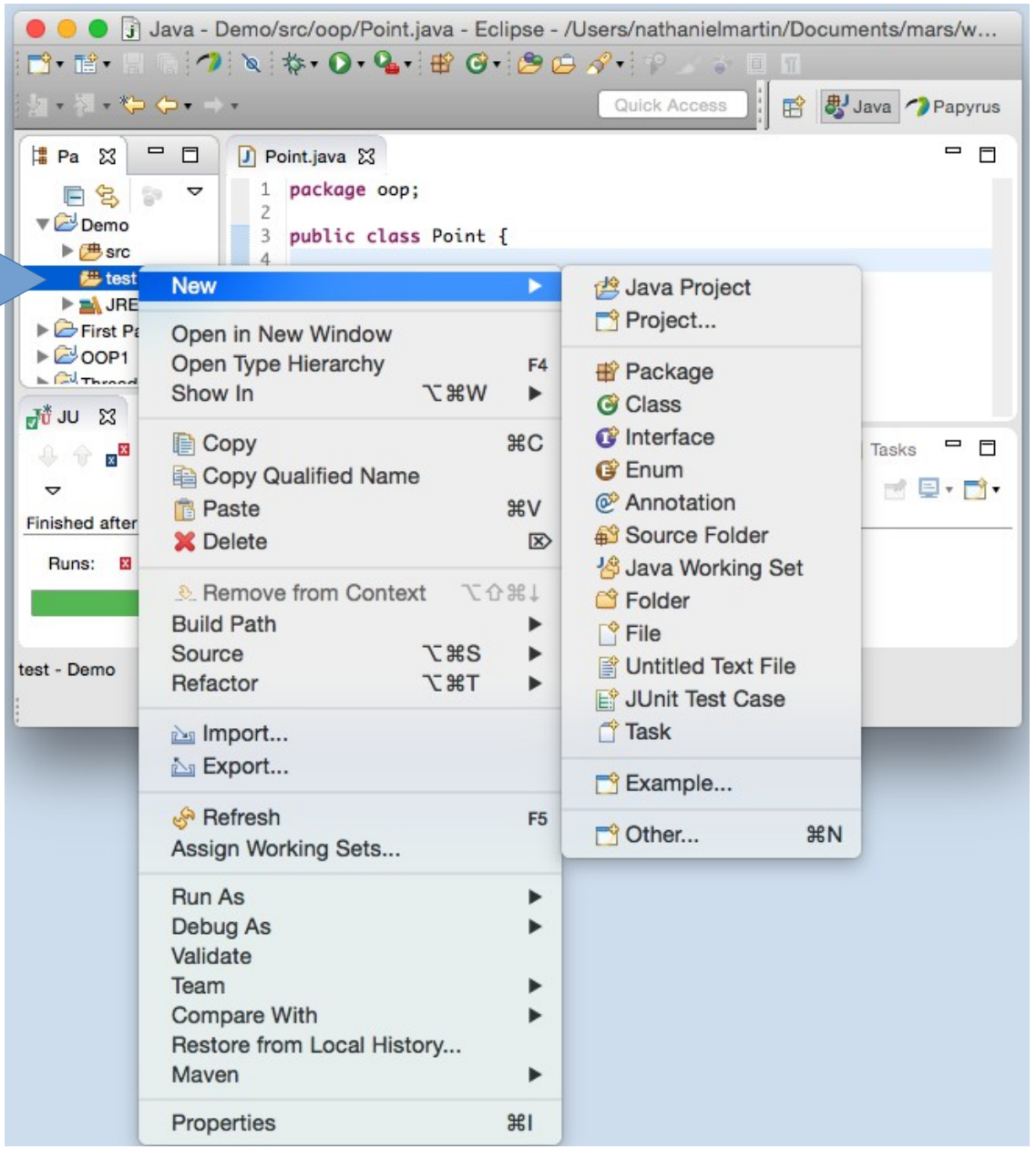


Give the folder a name

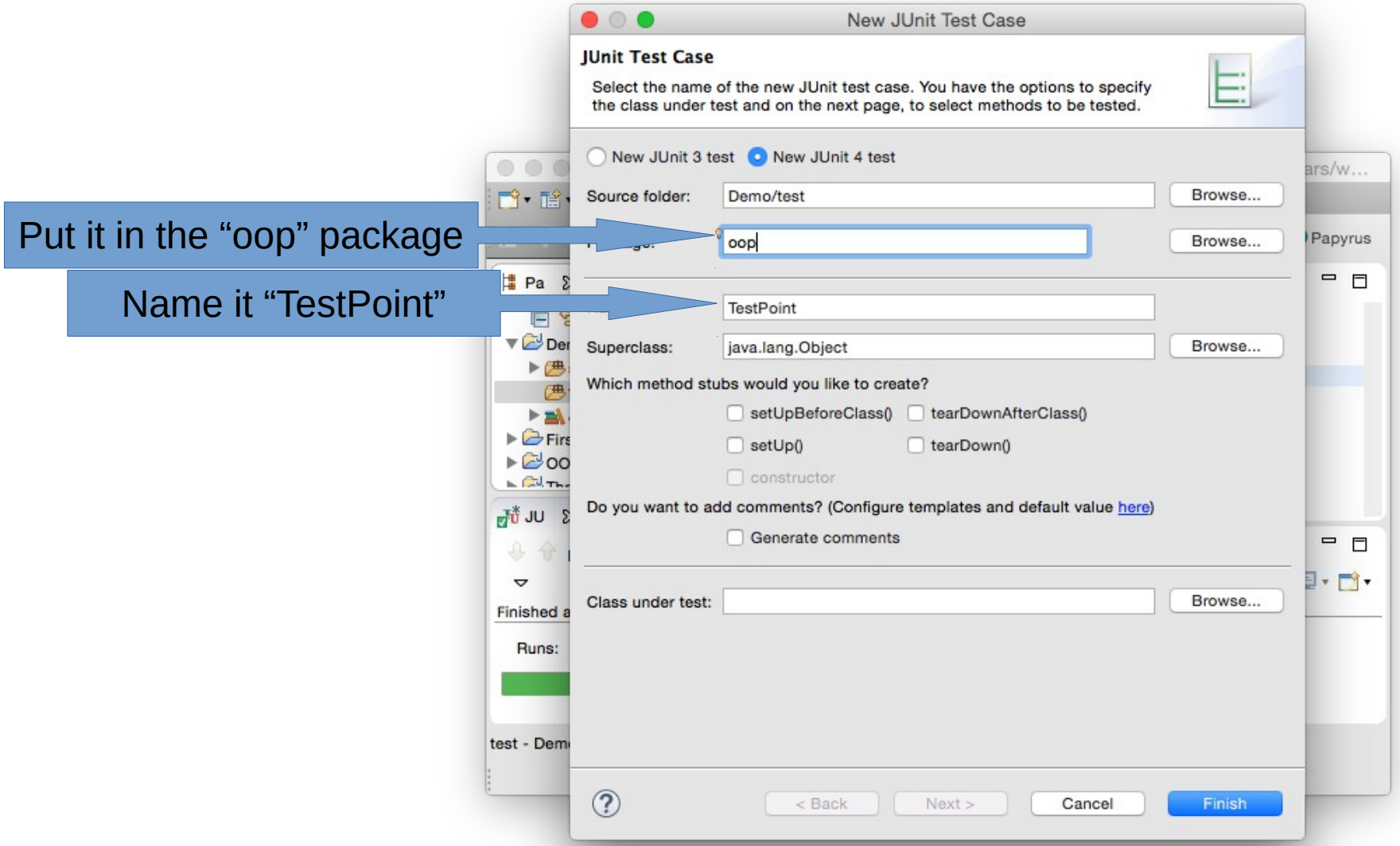


Make a New Junit Test

1. Right click new folder
2. Select New
3. Select Junit Test Case



Name the test and add it to package



Add JUnit 4 to the build path