

Lab 05: Bookshelf and JUnit

Instructions: In this assignment we will finish up our discussion on composing classes and begin work with JUnit—a very important tool for testing. For this assignment, first design/implement a class called `Book`. The book class shall contain:

- 1) data for the title, author, publisher, and copyright date
- 2) a constructor that takes title, author, publisher, and copyright date and sets the respective internals
- 3) getters and setters for title, author, publisher, and copyright
- 4) write a JUnit test for the `Book` object

Then create another object, `bookshelf`, that contains 5 books. The object shall have

- 1) internal data for 5 books
- 2) a empty constructor that leave the 5 book slots empty (null)
- 3) getters and setters for the 5 books
- 4) a `numBooks()` function that returns the number of books in the shelf

Finally write a JUnit tester called `BookShelfTester` that tests your `BookShelf` object. Make sure it tests:

- 1) an empty `BookShelf`
- 2) a full `BookShelf`
- 3) the getters and setters of `BookShelf` and `Book`
- 4) the `numBooks()` function

Write some test cases:

Create some test cases that you believe would cover all aspects of your code.

How to turn in:

Turn in via GitHub. Ensure the file(s) are in your `lab05` directory and push via IntelliJ (VCS ↑)
OR use the command line:

- `$ git add <files>`
- `$ git commit`
- `$ git push`

Due Date: September 22, 2015 2359

Teamwork: No teamwork, your work must be your own.