

LAB ASSIGNMENT 8

DUE TO NEXT LAB

1. A diary is a system for keeping track of appointments on specific days and specific hours. We are going to work with a diary that only can take one appointment per hour, starting at 9 a.m. with the last appointment going from 5 p.m. to 6 p.m. You will be given an implementation that probably contains errors. **Your job is to find the errors.** You are only to develop tests and to find and describe errors, **not** to fix them.

Start the diary project. Play around with the system for a few minutes. Create a method in DayTest to check that findSpace returns the value of 10 for a one-hour appointment, if a day already has a single one-hour appointment at 9 a.m. In essence, you need to use makeAppointment for the first appointment and findSpace for the second appointment. You will need to specify assertions for the results of **both** calls.

2. Create a test to check that findSpace returns a value of -1, if an attempt is made to find an appointment in a day that is already full.
3. Create a test class that has Appointment as its reference class. Record, using the record button control, separate test methods within it, that check that the description and duration fields of an Appointment object are initialized correctly following its creation.
4. Create a negative test in the DayTest class. For example, try and set up a one-hour appointment, and then put in a two-hour appointment at the same time. What happens when you run the test? Include a screenshot in your report.
5. Set up a fixture for an additional test case from your pre-lab. What did you have to do?

6. Add further automated tests (positive and negative) to the DayTest class, until you are reasonably confident of the correct operation of the classes. If you discover any errors, be sure to record tests that guard against recurrence of these errors in later versions.
7. (Only for the bored) Correct any errors that you find and run a regression test.