CMPS 1600 Introduction to Computer Science II – Spring 2019

due at 11:59pm on Monday, 1/28/18

Lab 0

Objectives

- To get familiar with developing Java projects in Eclipse.
- To practice reading, comprehension and testing of Java code.
- To adjust existing Java classes to your needs.

Note

Keep your code nicely formatted (simply speaking, imitate code style in Zybook). Add comments describing the functionality of parts of your program as you work on the code (not just before the submission). On top of each file, add a comment describing the purpose of the class, date, and author(s) names and lab sections. Submitted code should be clean and and free from commented-out sections of code.

1 Imitate!

When you start programming in Java, you will see some new code elements for you - keywords (public, private, static), new syntax (curly brackets, semicolons after each statement), and so on. Don't worry about understanding them fully just yet, try to complete this assignment by modifying the code that's already there.
Open the file `Octopus.java`. It defines Octopus class.
Look for the constructor in `Octopus.java`. In it, there is one parameter `n`, which contains a `String`. Change this by adding one more parameter, `a`, of type `int`. This is the age of the octopus. Save this in the appropriate instance variable (imitating what was done for the `name`).
Open the file `Lab0.java` and look for the place where variable `ocky` is defined to be a new `Octopus`. Add an "age" to the constructor so that we are specifying two features, not one, in the construction of an `Octopus` object. Delete or comment out the `"ocky.setAge(10)"` method call in the next line. Recompile and re-run the program and see if it correctly provides the age you specified.

1.1 Imitate Some More!

Edit the file `Lab0.java` and add commands to it that would accomplish the following tasks (compile and run the project after each step to make sure the additions were correct):

1. Declare a second `Octopus` variable (don't just change the name of the one that's there, create another one) and assign it any name and age that you want.

2. Create a second `Utensil` of any type you wish, imitating the declaration and initialization of `spat`.
3. Assign a cost and a color to this utensil.
4. Assign this utensil to the new `Octopus` you created.
5. Print out the name, age, weight, and favorite utensil of your new octopus.
6. Print out the type, cost, and color of your new utensil.

Upload your `Octopus.java, Lab0.java` files on Canvas for grading.

Soccer team roster

Complete text and submission entry for this problem are available in Zybook (ch. 4).

Rectangle

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