

CS251

Lab Exercise 01

Main topics: Multiple Classes
Declaring / Using Instance Variables
Driver Classes

Exercise

This week we will be practicing with writing and managing multiple classes, including a designated driver class.

Getting Started To start this exercise, you should:

1. Open eclipse and start a new Java project named **Lab01**
2. Add a Class (named **SMouse**) to this project, and copy the contents of the **SMouse** file provided into it.
3. Add a Class (named **SMouseDriver**) to this project, and copy the contents of the **SMouseDriver** file provided into it

Requirements

SMouse A simplified version of the book's mouse *class* that is incomplete. You must do the following to finish the class:

1. Write the body of the **display** *instance* method, so that it displays both the **age** and **weight** (in some reasonable format) of the specific mouse who's **display** method is invoked.
2. Remember with in an *instance* method, *this* is an available *instance* variable that refers to the specific *object* who's method is being invoked.
3. Look for and fix any compilation errors.
4. Remember that you can not "run" this class, there is no **main** method.

SMouseDriver A simple *driver* class to test your mouse class, that is also incomplete. You must do the following to finish the class:

1. Declare a variable that will hold the age of Mighty Mouse, prompt for this age and read it in to your variable.
2. **grow** Mighty Mouse this number of times.
3. **display** Mighty Mouse's new age and weight.
4. Declare a variable that will hold the age of Mickey Mouse, prompt for this age and read it in to your variable.
5. **grow** Mickey Mouse this number of times.
6. **display** Mickey Mouse's new age and weight.
7. Look for and fix any compilation errors.
8. Run your driver class and check the output and make sure it is correct.

Once you have completed the requirements:

1. Make sure that your program runs without errors or warnings.
2. Run your program enough times to verify its correctness.
3. If it runs correctly, then see your TA for a check-off.