

COMP 1451 Lab 1-a (2 points)

Create a project with the following classes and functionality. Be sure to use good style.

Two classes: Dog and Kennel.

Dog has instance variables for name, breed, and age in years. This class has a default constructor and an overloaded constructor. The default constructor sets both name and breed to default values. The overloaded constructor expects all three values to be passed as parameters and calls the "setters" to assign.

The set methods validate their parameters. If a null or "" is passed to setName or setBreed the field is not changed. If a negative number is passed to setAgeInYears the field is not changed.

This class also has appropriately-named accessors.

Kennel has one instance variable, an ArrayList of Dog. It has these methods:

- `void addDog(Dog theDog)` - adds a dog to the kennel.
- `void displayDogs()` - displays name, breed and age of all dogs in the kennel.
- `Dog getRandomDog()` - randomly selects a dog, returns it, and removes it from the kennel. Returns null if there are no dogs.
- `void adopt()` - calls getRandomDog() to get a dog, and displays the dog's details on the screen. If there are no dogs it displays this information.

FINALLY create a driver class that creates a few Dogs and places them in the Kennel. Then test the Kennel methods by calling them from the driver class.

Show your completed project to your instructor or TA before leaving the lab and have it checked off.