

CSCI 1320 Computer Science I: Engineering Applications – Fall 2018

Instructor: Zagrodzki

Lab 11

Due Friday, Dec. 14, by 6pm

C++ Classes

Create a user defined class for storing veterinary patient information called AnimalPatient. Your class needs to contain the following **private** member data:

- patient name
- species (i.e. dog, cat, rabbit)
- age (integer)
- weight (in pounds)

Your class also needs to include the following member functions:

- Constructor overloaded with two definitions
 1. If declared with 4 arguments, takes in 4 arguments to initialize all 4 of the member variables.
 2. If declared with no arguments, initializes the 2 numerical members to -1 and the 2 string members to "liger" (think of these as sentinels that will let the veterinarian know that the variables haven't been filled in yet.)
- Mutator and accessor functions for each of the private member data. Put in checks to verify that weight and age are positive values. The string data doesn't need to have any checks.
- An additional member function that will convert the weight in pounds into kilograms (function doesn't take in any arguments).

Write a program with your class definition. Instantiate an array of length 3 of the objects of class AnimalPatient. Loop through the array and ask user to fill in all information for 3 patients via the console.

Submitting the Lab:

Make sure your .cpp file is well commented and it includes in a block comment your name, student ID, course number, lab number and recitation section.

Submit the .cpp file (*lab11.cpp*) through Moodle as Lab 11 by due date.