CIS 1.5 Spring 2007 Lab 6

Instructions

- This is the sixth and last homework/lab assignment for CIS 1.5.
- The assignment will be worth 7 points and will be distributed and worked on in class on Tuesday May 14th
- **It is due on Tuesday May 22nd** and must be submitted by email (as below).
- **Follow these emailing instructions:**
  1. Create a mail message addressed to *parsons@sci.brooklyn.cuny.edu* with the subject line **CIS 1.5 HW6**.
  2. Attach ONLY the **.cpp** files for each part, as outlined below.
     DO NOT ATTACH THE **.cbp** (CodeBlocks Project) files!
  3. Failure to follow these instructions will result in points being taken away from your grade. The number of points will be in proportion to the extent to which you did not follow instructions... (which can make it a lot harder for me to grade your work — grrrr!)

1 A first class

1. Write a program that defines a class called `car` which contains two data members. One of these members should be a string which holds the model information. The other should be an integer which holds the year the car was built.
2. Have your program create a `car` object and initialise it so that the model is "chevy" and the year is 1962.

(2 points)

2 Another class

Have your program declare another class, called `name`, with data members `first` and `family`. Both these data members are strings.

(1 point)

3 Nested classes

1. Have your program declare a class, called `patient`, with four data members.
2. The first is an object of class `name`, and holds the name of the patient.
3. The second is an integer that holds the age of the patient.
4. The third is a string that holds the address of the patient.
5. The fourth is an integer that holds the disease that the patient is suffering from.

(1 point)

4 An array of classes

Have your program declare an array of ten patients. Each element of the array should be an object of the class you defined in the previous question.

(1 point)

5 More with the array of classes

Add a while loop to your program that allows the user to enter information on six patients. The data on the patients should be stored that in the array you defined in the previous question.

(2 points)

6 Extra credit

Have your program write the information in the array of patients to a file called `hospital.txt`.

(1 point)

7 Now hand it in

Save the (working) program that you have written as **hw6.cpp** and send it to me.