Recitation Assignment #8: Classes and Objects

CS0007

Due: July 7th, at 11:59 PM

Instructions

The goal of this assignment is to test your ability to define your own class. You will create a Car class. It should have the following members:

1. The name of the class should be "Car".

2. Car should have 4 attributes (data members).

   (a) yearModel - An integer representing the year the car was made.
   (b) make - A string holding the make of the car.
   (c) model - A string holding the model of the car.
   (d) speed - The current speed of the car.

3. Car should have a constructor that accepts a year, a make, and a model as arguments IN THAT ORDER.

   (a) The yearModel, make, and model attributes should accept their values from the constructor.
   (b) The speed should be initialized to 0.

4. Car should have accessor methods for all attributes.

5. Car should have an "accellerate" method that simply increases speed by 5.

6. Car should have a "breake" method that simply decreases speed by 5. speed CANNOT be negative.

On the course webpage there is a demo java file (CarDemo.java) that should be able to run using your class. This is how your instructor will grade your assignment. The output should be the following:
```
1994 Ford Taurus

Accelerating...
Current Speed:  5 mph

Accelerating...
Current Speed:  10 mph
```

```
Braking!...
Current Speed:  5 mph

Accelerating...
Current Speed:  10 mph

Braking!...
Current Speed:  5 mph

Braking!...
Current Speed:  0 mph

Braking!...
Current Speed:  0 mph
```

You are required to have sufficient internal documentation for your program. This is meant to be AN INDIVIDUAL ASSIGNMENT. Also, taking large segments of code from other sources without citing is plagiarism. The majority of this assignment should be YOUR OWN ORIGINAL WORK. I recommend getting a small storage device such as a flash drive to save your work on. You can get these for under $20 at any Radio Shack, and many other stores. When you are done submit your project by zipping up the project folder and FTPing it to the drop box for this course as described in class and here: http://www.cs.pitt.edu/~eth13/cs0007/submissionGuidelines.html. On the course webpage there is a grading rubric which I will be grading from. Keep this in mind while doing the assignment.