

CS2401: Programming Assignment #6

Purpose: practice the use of inheritance

Due date: October 11, 2009

Background: Suppose the following: that **class** *PassengerVehicle* is derived from class *Vehicle*; **class** *Truck* is derived from **class** *Vehicle*; **class** *Car* is derived from **class** *PassengerVehicle*; and **class** *SUV* is derived from **class** *PassengerVehicle*. Further, for every object that is a *Vehicle*, it is known the *VIN* (vehicle identification number), *color* and *maker*. For every object that is a *PassengerVehicle*, it is known the number of passengers. For every truck, it is known its towing capacity.

Task: Follow the steps below to create a java program that generates a report about six vehicles.

1. Implement the classes above in Java;
2. Add *toPrint()* methods to these classes that print all information available for a given vehicle. For instance, if the vehicle is a car, the *toPrint()* method in the **class** *Car* must print car's VIN, color, maker, number of passengers;
3. Visit a vehicle dealer website and select 6 vehicles: two trucks, two SUVs, and two cars;
4. Use the implemented java classes to instantiate objects representing the six objects selected in step 3 above;
5. Using the *toPrint()* methods of these classes, write a java program that generates a report with information available about selected vehicles.