**C++ - Inheritance Assignment**

You are supposed to write a console application which use the class information below

Please read the instructions, following rubric has information for assignment.

Here is the rubric for your assessment.

For each of the item I will give yourself the mark that is indicated in each cell of the table

|  |  |  |  |
| --- | --- | --- | --- |
| Code | Commenting | Well structured | User friendly |
| runs with no error 40% | There are sufficient comments 10% | Uses well-structured loops and nested ifs 25% | Create prompts and print outs so all users can understand and follow the program 25% |
| Has logical errors  30% | There are limited amount of comments 5% | Program is not cleanly written 15% | Limited prompts and outputs 15% |
| Not Compiling 0% | No Commenting 0% | No structure is followed 0% | Not enough prompts, ambiguous output 5% |

You are working in mechanic shop where the owner of the shop is asking you to implement a class hierarchy for vehicles that are repaired in his shop.

You are supposed to create a class **Vehicle** that has an integer *VIN*, String *Make* and *Model* and *Color*. (20 Marks)

Under this class you are supposed to create a class **Truck** that has additional properties, string CabSize which could be QuadCab or DoubleCab and integer HorsePower as well as a Boolean HasWinch. (20 Marks)

Under class Truck you can have **HeavyDutyTruck** that has a double Tonnage and an integer numberOfWheels. (10 Marks)

Under class Truck you also have another class called **Pickup** which has a string Usage and an integer Length. (10 Marks)

Right beside class truck and as a child for class Vehicle you have class **PassengerVehicle** that has a string type and an integer as NumberOfPassengers. (10 Marks)

After creating all these classes you need to create a driver (main) that shows your hierarchy works. (10 Marks)

Good luck