1 Introduction

Object oriented programming is a commonly used coding paradigm. C++, which is a very powerful language, provides us abundant features. In science, technology, and engineering preferred language is C++. A programming language is learned best by coding projects. So go ahead and start coding using standard C++ now. Your code must be runnable with GNU’s g++ compiler.

2 Assignment

We are building an online auction system for selling cars. Car is a class having attributes such as make, model, year, color, price, etc. I want you to design a Car class composed of an interface and implementation, Car.h, and Car.cpp.

Instantiate 10 Car objects, assign values of your liking via constructor and store these 10 cars in a vector. An object of Auction.cpp serves as a bridge between buyers and these 10 cars. Buyers access car information through keyboard. A potential buyer can view the whole list of cars, including all the attributes. Also can provide a price range for searching, for example 10000 35000. Auction class shall search through the vector holding 10 cars and display the cars such that price is in the provided range, i.e. 10000 ≤ price ≤ 35000. Your Auction class prompts users options (just like an ATM).

Have fun coding your first programming project. Don’t forget commenting your code.

3 Rules and Regulations

I run plagiarism detection software, this will catch plagiarism. I will apply university rules and regulations for cheating. If you search internet, state what you used in your code in memo.doc. Write your experience about this project in memo.doc.

4 Deliverables

Test your code. Provide the test results in memo.doc. On paper, and in electronic format, deliver following files: Car.h, Car.cpp, Auction.cpp, and memo.doc