Project 2 Documentation

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Code File: proj2.cpp , menu.cpp, my\_string.cpp

Header Files: menu.h, my\_string.h

Code Zip File : PA2\_Siu\_Cicelia

Purpose of the Code:

The purpose of this code is to be able to help the user to rent a car. The coder creates a car struct, each containing year, make, model, price, and availability. The program shows a menu prompt where the first option in the menu reads an input file with 5 cars’ information and inserts this information into an array of car structs. Using the menu prompt, the user can print all cars into a terminal, save to a file of the user’s choice, or sort the cars by price. In addition, the user can see the total cost of any available car, given the rental period. Finally, the user is able to rent out a car and change the car’s availability to “false”. This coding problem is used to teach how to use, access, and change structs.

Design:

* All functions except for one uses the array of car structs as a parameter. It seemed like the simplest way to input an array of car structs into a function.
* I did add a header whenever the user menu prompt shows up to make it cleaner.
* In addition, when the user clicks “6” to rent their car out, I show them the list of cars in the terminal to make it seem more practical.
* I used a pass-by-reference on the menu choice because I needed the menu choice to change every time the user chooses a number. If I didn’t, the menu choice would only change locally, not outside of the function.

Problems:

* I added the headers but my IDE kept saying that I was missing my prototypes in my menu.cpp and my\_string.cpp even though I included the header files for those functions. In the end, I just ran it and it didn’t have any problems.
* The assignment is worded extremely weirdly and makes it difficult to read. I had to change my code several times because it wasn’t clear.
* I did include the my\_string functions that work, but I didn’t use any of them.

If I had to go back and do it:

* I would make the whole thing easier to read for the user.
* I would automatically save the array into a file if this were real.