

## Noah Hoffman CS 202 Project 2 documentation sheet

### Purpose:

The purpose of this program is to read a file imputed by the user. This file should have a list of cars on it . It should have the year , make, model, price, and availability on it. The the program opens with a menu . On this menu you have 7 options: 1) Ask the user for the input file name, and then read ALLdata from that file.The data have to be stored into an array of structs. 2) Print out ALLdata for each of the cars to the terminal, preceded by their current index number in the array.3) Print out ALLdata for all of the cars to a separate output file (when the user chooses menu entry 3, they should also get asked for an output file name), following the original data format of the provided file (with no index number).4) Sort the cars (i.e. sort the array of structs used to store all data) by ascending price.5) Ask the user for how many days they want to rent a car.Then print to the terminal only the available cars preceded by their current index number in the array, sortedby ascending price, as well as the total estimated cost to ake the rent (number of days multiplied by price per day).6) Ask the user which carthey want to rent (expected user input is an index number for the array of structs)and for how many days. If the corresponding car is not available,print a warning message o terminal. If it is available, mark it as rented (modify the available member appropriately) and print out to terminal a success message that mentions the total cost(number of days multiplied by price per day).7) Exit program.

### Design:

I made my menu by a do-while loop. I also did not use any functions on my program because I did not see a need for any. Therefore inside each separate case I would code everything inside that specific command. For example, case 4 is my sort by price code. I did not add this into its own function because it was just used in this and case 5 so I just copied and pasted it.

### Problems:

I did not have nearly as many challenges with this program from the 1st one. My biggest problems in this program was learning how to use structs and implying those structs in my code.

### Changes:

I spent around 4 hours completing this program. If I had more time I could make some of my cases into function and just call those functions to make it easier to read. Other than that I would not change anything.