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Lab Section: 1108

**Project 2**

The purpose of this program is to take in a file by name and read the contents from it so that the data can be printed to the terminal, sorted, and printed to an output file. This program has been designed to have one function call in main, and within that function call are all of the user menu functionalities. It asks the user to enter an output file name, and then after that write the data to the output file. This program also shows cars that are available or not and has the ability to rent a car which then makes it unavailable. It must handle entering the wrong menu option properly by displaying a message to the user and then reiterating the user menu.

The biggest challenge I had with this project was figuring out how to split up the files correctly. I originally wanted to use a make file, but the project did not specify to do that. Instead I compiled the files together individually, and at first it was very challenging to get everything to compile. I kept getting unrecognized symbols as an error. At first, I thought this had something to do with not including the right files, or including them when they shouldn’t be. It turned out I had misspelled one of the functions names in a header file. Another issue I was having involved terminating the user menu prompt function. I made it a void function and once I got to case 7, which terminates the program, I realized I couldn’t return 0. I did a lot of research on ways to terminate the program without returning zero, but they were not working for C++ 03. I even wrote my own function called end program and its argument was return 0. Even though I thought I was smart for coming up with that, it ended up doing nothing. After hours I finally figured out, I could just use “return” without 0 since it would return to int main, then the next statement in int main was return 0.

If I had more time, I would definitely try to mess with the menu some more to make it look more appealing. This obviously is not a requirement of the project, but it was fun to mess with it and make it look different than everyone else’s menu. I would also try to write a different output file function. I used what I knew worked, but I wanted to try a function that takes in the file name through memory address. I was having issues trying to get that one to work. To compile this project I used the C++ 03 standard with the -Wall command. It creates an executable called a.out.