**Proj3.cpp Documentation**

**Notes: Please compile proj3.cpp and RentalCar.cpp at the same time**

**Purpose:**

The purpose of this project was to be familiar with file I/O, classes, constuctors, and the use of pointers. The goal was to read from a file then print the contents out on the screen for the user, print out the most expensive car, print out the only available cars, and more.

**Design:**

The design of the project seemed difficult. I had tremendous problems understanding constructors and how they work and getting them to put the data into private sections of a class. I had to reach out to my friend and the internet. I first started by wanting to be able to read the contents of Agencies.txt and storing them into the private section of a class then be able to manipulate the array for the contents to be displayed. I defined my functions at the top and then have my “main” function then I include all my functions at the bottom. This was to make everything easier to read. I also did not include the “using namespace std” because I read that it was bad practice, so I did not want to get in the habit of using it.

**Challenges:**

As I mentioned above, the pointer arithmetic and algorithms were the hardest part of this project as well as understanding structs and getting them to work properly. I understand that it is useful to understand the algorithm especially for job interviews. I need to better understand how to use constructors as I am still confused. At first, I was struggling to get all the contents in Agencies.txt into the class. The methods I was using were very frustrating, so I had to reach out to a friend in class for help in order to understand how to do it.

**Changes:**

I don’t have any recommendations for the changes. I thought it was a good project, but I wish the instructor explained how to set variables in private sections of the class better. This was the most difficult part for me. I will learn this eventually. Unfortunately I was very busy this week with work and stuff that I did not have time to finish the 5th function. For some reason I get “warning: ISO C++ forbids converting a string constant to 'char\*'” warnings but my program still works. Not sure how to fix this problem.