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CS202

Project 1 Writeup

**Structure and Design Direction**

The overall structure of this program was designed to be a fluid program that took into account user error and ability. The program starts by displaying a simple message with given instructions for the upcoming parts. The screen then prompts the user to enter the name of the file from which data will be programmed from. The program implements its own get_name function and that is used to store the name of the file in a local variable that the fstream variable later accesses.

The <fstream> library is used to create an ifstream variable that reads from whatever file name is given from the user. It is important to realize that this ifstream variable will read all of the names entered, regardless of the number of data items in the file, until the end of the file is reached. I chose this design because limiting my program to only 10 reads seemed ugly and unnecessary as I know that regardless of how many data items I have as long as my delimiters and eof are found than my program will work every single time it is accessed, regardless of the data size. The data read-in is stored in the local variable, name_table. This will be used to write-to an external data file.

The <fstream> library is again used to create an ofstream variable, name_out, that is responsible for writing data from the program to a new file in unsorted order. That is, I omitted the append function because it's important to start fresh with a new file to maintain a file with only a single entry of the data. After I've taken the data from the local variable and placed it into the external data file I have now created a file that can be appended to when I sort the contents of the data.

Depending on how much more I can get done tonight, I'll either have completed the entirety of the program with the sorting functionality or I'll have to turn in what I have tonight. If I could do anything differently it would be to not have had to move to Reno and do this assignment in less than 24 hours. I'm taking about 20 units this term and it's a lot to come to. This assignment took all of my time today and I'm still going to lose points on it because there just isn't a way that I'll be able to finish the sorting algorithm in time to meet the deadline. Hopefully this is sufficient enough as I have to keep moving forward in the class. I definitely can write a sorting algorithm, but not in 20 minutes and with everything else that is going on. I'll try again at it tomorrow and turn in a more completed version, but for now I choose to meet the deadlines.