Project 1 Documentation

Name: Cicelia Siu Date: Jan 27, 2020 Code File: proj1.cpp

Code Zip File: PA1 Siu Cicelia

Purpose of the Code:

The purpose of this code is to learn how to take names from an input text file and assign them to an index in an array of strings. Sort the names alphabetically, along with their original indexes, and print them to the console. Sort the names and indexes that are already in alphabetical order by length. Print these results into the console. After sorting, write the original order of the names and the sorted order of the names into an output file.

Design:

- Loops: Because of my consistent use of For loops in CS135, I am comfortable using them; however, I do know how to implement while loops as shown in the code.
- Sorting: Bubble sort was used because it is the only sorting I know from CS135.
- Original Index: I assigned a number 0-9 for the original order of the names. If the sorting changed the order of the names, then the assigned number will also move with it.

Problems:

- I had trouble compiling as one of my function calls required an index in its argument. I didn't understand why I needed it. I asked a few friends if they could find the problem. All of them said there was no problem. If I did add an index, I wouldn't be able to use the whole 2D array. I would be using part of one of the strings depending on what I would've put in the index. Instead I rewrote the function prototype and made sure I didn't forget a bracket or parentheses in the function declaration. I'm not sure what was the problem, but it works now.
- My second problem was finding out how to get a line from a file using C++. I tried using the same way I did it in CS135 with two for loops, EOF, and end lines, but it never stopped. In the end, I went with a getline syntax. Although it did work, I wonder how to make it so I don't have to use getline.
- My third problem was my comfort with using C syntax that I forget C++ Syntax. I would always have to go back into my code and find where I used C syntax instead of C++. I need to get used to C++ Syntax

If I had to go back and do it:

- I would go to a PASS session and see if I did it correctly.