

Noah Hoffman CS 202 Project 1 documentation sheet

Purpose:

The purpose of this program is to read a file inputted by the user. This file must contain a list of names. Then the program runs through the list of names and records them as they are originally written down. Then the program sorts the list of names based on the length of the names inputted. It then posts the length list onto the terminal with the names having the same number as the original list. Then it takes the length list and creates a brand new file with this information on it. Then the program sorts the names alphabetically and then posts the alphabetically sorted list onto the terminal with the names having the same number as the original list. Then it takes the alphabetically sorted list and creates a brand new file with this information on it. After this the program has done its job and is finished.

Design:

When starting this program we were given 3 functions to make by the teacher. Those functions were the `myStringCopy`, `myStringLength`, `myStringCompare` and I decided to use those as tools for other functions that I was going to have to make to help this program run. I chose to make 4 other functions that would help compile this program. One of those functions was my swap function. I also made an `intswap` function which is pretty much the same. Those functions would create a temporary holder so that the program was able to swap name places and number places as it went through the names to sort them. My next function was my bubblesort function call `sort`. This went through each name and would sort them based alphabetically. Another function was the length function. This function would sort the names based on their length. After creating all these functions, I would throw my `Cstring` with all the names in each function in the order that I was to by directions.

Problems:

I had many problems going through this program. I spent about 6-7 hours in the ecc and had to work with multiple people to find the problems in my functions. A lot of the problems I was having involved syntax and typing errors because it has been awhile since I have coded. Another huge problem I found was the numbering system. I had to create a brand new function `swapint` and integer array to hold the different numbers based on their names.

Changes:

I worked very hard and spent a lot of time so it is basically perfect and the program gives everything that was asked for. If I did choose to spend more time on this program I would simply just clean up my code and make it look more clean. I had a really hard time wrapping my head around the concepts but I feel that I have do it to the best of my abilities.