

Program 1 Report

The main objective of this programming assignment is to extract all the data from a district's URL or a local text version of the district page. Then uses the extracted data and calculates the number of lines, words, and characters that the district's text file has. Afterwards, record those statistics and send them to a separate text file. My C++ program completes this main objective given to me by my professor.

In my program, I ask the user to type the district text file name, which I take in and store in a string variable called filename. Then I use an if statement that checks to see if the user's file gets open correctly. If the user types in the wrong filename, it outputs a "Sorry file did not open!" message in the terminal and ends the program. Else, if the user types the district name correctly, it outputs "file successfully opened" in the terminal. Then I have a while loop that reads each line of the text file. Inside the loop, I have a line counter variable that increments each time there is a new line. In addition, I have an if-statement that checks for the number of empty lines and increments each type there is an empty line. Then I tied in an else, and inside of the else, I used a stringstream to break apart each line. Afterwards, I made another while loop which reads each word from the line and increments a word count variable each time it counts a word. Later, I made a loop that goes through each character of a word and increments a char count each time it loops. Afterwards, I output the number of lines and empty lines, words, and finally, the number of characters.

Overall, the program was moderate difficulty but with an excellent learning curve. Some problems took me a long time to figure out the proper way to word the conditional statement to check for every word in the line. However, through extensive research, I learned more about stringstream and a few of its applications. Another problem was using multiple different .pdf to

.txt converters to convert my district page to a text file. Each one was formatted differently, and some of them had invisible characters, which the program would read or sometimes not read, alternating the value of the character count. Although, with these obstacles, I believe I manage to complete the main objective of the lab report.