Project 1 Report – Antonio Turner

The goal of this project was to create a program that would take in a text file from the district office and compile the data in three separate categories, printing the values. After completing this task, we would have to outsource the data we received to an output file that would display our numbers. This project serves as preparation for our final assignment, implementing a chatbot.

To start this assignment, my initial goal was to outline how the process would function, giving me a detailed outlook on the planning step of the process we mentioned in class. I began my outline by depicting the variables needed for output, and those variables were the number of lines, number of characters, and number of words. A difficulty that I immediately recognized was the idea of having the computer translate the difference between lines with words and blank lines. Additionally, I knew there would be a difference between what is noted as a word and what is noted as a character. For example, how would I define a colon or a comma, and were they their own separate words? My solution to this problem was to use word doc and, before I start, allow that system to give me a finite base for what I would be working towards.

After receiving the values from the word doc, I began working on the initial task of taking an input. I realized that if the user inputs font issues into the file's name, the file would not print, so I made a note when asking for the user to enter the value in a specific way; otherwise, they would be prompted to retry. Following the setup, I researched and read about the "getline" function and used that to take in the lines from the file and separate the lines for input. Following this, I was able to separate the string itself to count the word and characters. Some difficulties I ran into were the program

reading the blank spaces as words and the initial URL formatting to text file being difficult. One example is when my program would read an invisible triangle as a character, so I redownload the format to eliminate this issue.

All in all, I believe I learned quite a bit about while loops in C++ and how they translate back to my knowledge of java programming. Additionally, learning about built-in functions can help, but it is important not to rely on them as they would not work if you do not understand the program or the general goal of the projects. I successfully converted the text file into a series of characters and used that number to output to the file while doing the same for the words and lines, so I would say this project was a success.