Charlie Ang

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CSC 3350

Lab 5 – Source-Filter-Sink Lab Summary Report

Instructions for running lab:

To run this lab, make sure all the executables (Source.exe, Filter.exe, Sink.exe, and lab5.exe) are all in the same directory. Then, run the command line and call lab5 with the existing source file and destination file to be created: **C:\-> lab5.exe srcfile destfile**.

The program will then execute and the new destination file should have a filtered out copy of the source file, where all the uppercase letters are now lowercase.

Summary:

This lab works very good. The Source program works as expected. The Filter program converts upper-case letters to lower-case. The Sink program also works as expected. In doing this lab, I learned quite a lot about concurrent processes with pipelining. I got to understand the CreateProcess function much better by using the function to create Source, Filter, and Sink in my lab5. I also got an in-depth look into the STARTUPINFO structure to map the hStdInput, hStdOutput, and hStdError handles. Additionally, I learned how to create anonymous pipes for interprocess communication purposes. All in all, this was a very great lab as an introduction concurrent processes and working with pipes.