

Programming-Assignment-2 Report

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CS433 - Assignment 2

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1 Name and Description of the submitted files:

1.1 Main.cpp

This is the main class of the project. It reads the input given in the shell interface and operates on it based on what it was given (to more details, check the the file functions' description). It outputs the value of the commands executed in the `execvp(2)`; unix command.

1.2 Makefile

There is also a makefile given with the main.cpp file. I've used it to make the object files, it is the makefile given on assignment 1 with some changes to allow the compilation of the .cpp files within this project.

2 Compilation of the program

To compile the program, use the Makefile to create the object classes of each .cpp class. I used the makefile file available on the example code on the server, making small changes to it in order to compile the program and to be able to execute it. It was compiled and executed on linux. I solely recommend executing it in Linux.

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3 Results of the program

I believe that I've made all the requirements asked to. I haven't made the `pipe()` communication because of excessive project works, though it's optional. The program was first written on visual studio and then transposed to the unix virtual machine environment, with some adjustments made and some errors fixed. I did not find myself into any troubles with the libraries used, except that, to make the `.cpp` file, I've used an ssh connection: it didn't work with an sftp connection. When it comes to performance, I'd say that my shell performs well and that I've learned more of c++ techniques, from the previous assignment to this assignment, related to performance. I will also remind that any information not explicitly describe here is well-commented on the program's source code. It is good to remember that, as my second c++ project, this code may look pretty simple or general, but I do affirm that I have not made use of any means of code copy or even used other's code. I have not taken any reference on any procedure involved on my code, except that I took the example given in the Operating Systems ed. 10 book as a strong reference, which guided the development of my program with much emphasis. I've executed the code both on a linux and a windows environment and the code performed well on both of them.