

Fall 2024 CIS 620 Homework 2 II

(Due Oct. 3)

2-6 EXERCISE

Modify the example **stat** program (Program 2.2 or p2.2.cxx) so that its output is as *close* as possible to the **ls -l** output on your system when passed a file or directory name on the command line. Note, the **stat** call will not return the user's name (only the **UID**). The **UID** can be passed to the **getpwuid** library call. The **getpwuid** call will return the user's name (along with additional password entry information). A description of the **getpwuid** library call is found in Section 3 of the manual. If needed, a second library call, **getgrgid**, can be used to map the **GID** value to the actual group name.

Assume that you already have the modified p2.2.cxx in the current working directory on the **spirit** machine. Please replace the following xxxxxxx with your actual csu id.

Instructions:

1. Issue "who am i && date" command in a terminal on the **spirit** machine.
2. Compile your modified p2.2.cxx using the command of "g++ -o xxxxxxx p2.2.cxx" (please replace xxxxxxx with your csu id)
3. Run your program using the command of "./xxxxxxx p2.2.cxx" (please replace xxxxxxx with your csu id)
4. Issue "who am i && date" command again.
5. Do a screen capture and save it as ex-xxxxxxx.png where xxxxxxx is your csu id. Please make sure that the above two "who am I && date" commands and the contents between these two commands are captured.
6. Upload the above ex-xxxxxxx.png to the current working directory (same directory as where p2.2.cxx is located) on the **spirit** machine.
7. Open another terminal and login to the **grail** machine.
8. Go to the directory where the modified p2.2.cxx and ex-xxxxxxx.png are located on the **grail** machine.

Turning it in

Turnin your modified source code file p2.2.cxx and the screen capture file ex-xxxxxxx.png where xxxxxxx is your csu id on the **grail** machine using the following command:

```
turnin -c cis620x -p hwch2iib p2.2.cxx ex-xxxxxxx.png
```

Start on time and good luck. If you have any questions, send e-mail to a.shetty13@vikes.csuohio.edu or w.xiong15@csuohio.edu.