

Project 2 README

Group Members:

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Division of Labor:

Split evenly throughout the project for the most part. There are some small discrepancies here and there where one person did a small part individually but otherwise it was split evenly.

Tar Archive Contents:

- Part 1
 - o empty.c
 - empty C file to show difference between having and not having syscalls
 - o part1.c
 - C file with 6 syscalls to show addition of syscalls
 - o log
 - showing 6 more syscalls than empty.c
- Part 2
 - o my_xtime.c
 - holds/prints number of seconds since Unix epoch & prints elapsed time if another command is used
 - o Makefile
 - builds and runs my_xtime.c
- Part 3
 - o issue_request.c, start_elevator.c, stop_elevator.c
 - caller/wrapper functions for syscalls
 - o elevator.c
 - elevator module that services different floors
 - o Makefile
 - builds and runs elevator.c
 - o README
 - read me file

How to invoke:

- Part 1
 - o `$ gcc -o part1.x part1.c`
 - o `$ strace -o log ./part1.x`
- Part 2
 - o `$ sudo insmod my_xtime.ko`
 - o `$ cat /proc/timed`
- Part 3
 - o `$ make clean`
 - o `$ make`
 - o `$ make insert`
 - o `$ make start`

- \$ make watch_proc
- \$ make issue (repeated)
- \$ make stop

Bugs:

- Part 3
 - If the starting floor of the first request is one, it will start the elevator without waiting until it's full
 - Weight is doubled, we didn't worry about dividing it because we were getting to more essential parts of the program
 - Possible bug: When there is no one on the floor to load and the elevator can load, it crashes

Things you should know:

- Part 3
 - Locks
 - We didn't implement a proper lock with the 'mutex' thing, we used an int instead and treated it like a Boolean for locked and unlocked'
 - \$ make stop
 - When running make stop, everyone isn't unloaded. It just stops the process with people still in the elevator.