CS355 Lab Notes #3 Shell design

Read hw3 handouts. Form your group.

Study the following system calls:

- `sigaction()`
- `sigprocmask()`
- `sigemptyset()/sigaddset()`
- `getpgrp()/setpgrp(), getpgid()/setpgid()`
- `tcgetpgrp()/tcsetpgrp()`
- `tcgetattr()/tcsetattr()`

Lab exercise (for next lab):

Each group will be assigned a specific system call to experiment with and present sample code for during Tuesday 2/20’s lab. You should write notes that explain how to use the system call and provide sample code that demos how the system call works, particularly in the context of the shell we are working on.

Each group should also come prepared to give a 5-minute presentation on how your shell is supposed to work. Be specific on the following:

1. Which signals does your shell handle explicitly? Which does your shell ignore? Do these cover all possible signals?
2. What data structures are you using?
3. What parameters are you storing for each job?
4. Explain what your shell plans to do with a newly submitted foregrounded job as well as a newly submitted backgrounded job
5. How are you handling concurrency issues?