#### CSE 451 Section 4

- Project 1 Notes
- Looking ahead: Project 2

# Project 1 Notes

- Project 1
  - Due Tomorrow At 11:59pm!
- Make it obvious who is in your group in write-up
- Follow turnin instructions again good job last time
  - Only one team member needs to use turnin
  - No turned in files should be outside of your "username-project1" directory!!!!!!!!

## Project 1 Notes

- For changed Linux source files:
  - Give full path names in your modified files write-up
    - USE "./arch/i386/kernel/process.c"
    - NOT "process.c" there are many of these
  - Maintain directories when submitting changed files:
    - When I extract your changed files, they should go to the right directory, so it is unambiguous which file you changed
    - This is easy to do with tar

## Project 1 Notes

- Libc wrappers versus syscalls?
  - Trace the code!
- Fork versus Clone?
  - Trace the code!
- Returning info from syscalls?
  - access\_ok() checks pointers
  - copy\_to\_user()
    - Use LXR to trace what it actually does!
  - return values work as well

#### Ryan Should Now Show Code

• This is a reminder that Ryan should show code now

## Looking Ahead: Project 2

- Project two: User-Level Threads!
  - Implement a user-level thread manager.
  - Add a set of common synchronization primitives to your thread package.
  - Implement a simple synchronization problem.
  - Add preemption to your thread package.
  - Implement a multithreaded web server to test your thread package.
  - Analyze your design and report test results.

### Project 2 Goals / Admin

- Learn how context switching is done
- Learn how to preempt
- Learn how to write correct multi threaded code
- Generally project groups will be the same
- One Steve has released the project, we will go into more detail at next week's section

# Questions

- Office hours at 2:30 in CSE 002
- Use GoPost!
  - https://catalysttools.washington.edu/gopost/board/arcanius/11020/
- I'll probably be in the labs on and off over the next couple of days