

WELCOME TO CIS 241

SYSTEM-LEVEL PROGRAMMING AND UTILITIES

WHAT'S THIS CLASS ABOUT?

- Working in Linux (1st half)
- C Programming Language (2nd half)

SYLLABUS

<https://github.com/cis241-w20/class-material/blob/master/syllabus.pdf>

- You will need to create a github account at some point (might as well just do it now)

CIS LABS

- We are in EOS
- Everyone should have an account -- try logging in
- Want to work here? -- Get a keycard
- More info: <https://github.com/cis241-w20/class-material/blob/master/eos-info.pdf>

DON'T WANT TO HERE -> REMOTE ACCESS

SSH - SECURE SHELL

- What's a shell?
- What shell am I using? `echo $0`
 - `$0` is expanded into command being run
- SSH is a way of securely connecting to a remote shell
- Try it!

TAKING A STEP BACK: BIGGER PICTURE

- Who cares?
 - Why is this important?
 - When will I need to use the shell?
- Answers:
 - Efficiency
 - Necessity
 - Only have shell access
 - Tools only available from command line

TAKING A STEP BACK: LINUX FILESYSTEM

- Hierarchical filesystem
- root directory /
- other directories branch off from root (home, tmp, etc, ...)
- home directory for each user ~
- absolute paths from / or expanded by ~
- relative from current directory

NAVIGATING THE FILESYSTEM

- `mkdir` - make a directory
- `cd` - change into a different directory
- `ls` - list files
- `rm` - remove
- `cp` - copy - careful
- `mv` - move/rename - careful
- `pwd` - print working directory