

E28 - Class 1

29 Jan 2029

What and How

This first class will introduce you to CSCI-E28.

Frame 1: Course, Staff

Frame 2:

Here is the outline

Where are we going?

How we get there?

- course mechanics
- context, overview
- operating environment
- our approach

Frame 3:

Where are we going?

- by the end you will understand, written, and will know enough to write:
 - [a] the Unix bc tool
 - [b] Internet multi-player bridge
 - [c] Web browser, server
- What ideas do we need to learn to understand and/or write these?
- Let's start with bridge
 - multiple users, distributed data
 - communication, cooperation, coordination
- Then we look at bc -- seems totally different
 - but in fact, it is like bridge
 - communication, cooperation, coordination
- Then we look at web browser/server
 - two players, communicate, cooperate, coordinate

Frame 4:

Course mechanics

- look over the sheet
- explain the way the course works

Frame 5:

Our first step: Taking the bigger picture

Old view: single program in isolation

New view: multi user/task/devices

Big idea: operating system - split the work

Frame 6:

What does this system look like to the user?

Login, run, logout

storing, getting, putting data

files, directories

dir commands: mkdir, cd, rmdir, ls, pwd

file commands: cat, more, chmod, rm, mv

data flow: pipes, <, >

Frame 7:

Learning by building: let's write more