

Slide 1

### Administrivia

- Reminder: Projects due next week (May 5, presentations during finals time). All homeworks due no later than May 8.
- Information about grades so far mailed (a bit) earlier today.

Slide 2

### Course Wrap-Up — What I Hope You Got From This Class

- More things in your “bag of tricks” (see next slide).
- Practice in reading man pages and otherwise learning more.
- Exposure to a different operating system / user interface paradigm — many small programs that work together, information kept in text files, emphasis on being expert-friendly and scriptable, etc.  
“A tour of UnixWorld / TextWorld.”

Slide 3

### Course Wrap-Up — Topics

- Shell features — command history, redirecting input and output, scripting features (if/then/else and loops).
- Pipes.
- Filter programs (`awk`, `sed`, `grep`, etc.).
- Text editors.
- $\LaTeX$ .
- `make` and makefiles.
- Regular expressions (for text editing, `grep`, etc.).
- Miscellaneous other text-mode tools — `mail`, `screen`, `games`, etc., etc.
- A little about X, installing software, and CGI scripting.

Slide 4

### From First Lecture — Shameless Evangelism/Ranting

- “UNIX is obsolete — history goes back to 1969!”  
You can fix a lot of bugs in 35 years, and the odds are better that what you learn will still be useful years from now.
- “It’s not user-friendly!”  
Sure it is; it’s just choosy about its friends. Designed by programmers for programmers — “expert-friendly” as opposed to “novice-friendly.”
- “Everyone knows GUIs are better!”  
For some things and some people, maybe so. But which is more expressive, pointing and gesturing or speech?
- (You don’t have to agree with me; listen and decide for yourself.)

### From First Lecture — The UNIX Philosophy

- As stated by one of its developers (Doug McIlroy):  
“Write programs that do one thing and do it well. Write programs to work together. Write programs to handle text streams, because that is a universal interface.”
- There’s more, but the emphasis is on (1) providing a set of lightweight tools that can be put together to do interesting things, and (2) providing choices to users (sometimes almost too many!)

Slide 5

### Minute Essay

- None — sign in.

Slide 6