Outline for May 28, 2008

Reading: Text, §8, 9

- 1. Greetings and felicitations!
- 2. File Systems
 - a. virtual vs. physical
 - b. Names
- 3. Directories
 - a. One-level (flat), hierarchical, graph-structured
 - b. Direct vs. indirect aliasing
 - c. Naming, deletion, accounting
 - d. Information kept there
- 4. Access Control
 - a. Rights: read, write, append, delete, privilege, owner, search
 - b. Access control lists, how they can be abbreviated
 - c. Associate rights with name of file or file itself?
- 5. Process View of File
 - a. Access via create, open, close, read, write, rewind, delete system calls or commands
- 6. Access Methods
 - a. Read/write pointer
 - b. Sequential
 - c. Direct mapped
 - d. Structured
- 7. Disk directory
 - a. What blocks are in use, where files are, etc.
 - b. Free list implementations, bit maps
 - c. File maps: linked list, pairs
- 8. Allocation of Disk Blocks to Files
 - a. Contiguous allocation
 - b. Linked allocation
 - c. Indexed allocation
- 9. Network File System (NFS)
 - a. How it works
 - b. Protocol
 - c. Generation numbers