Announcements

- **Schedule This Week and Next**
  - Assignment 6 Out, due Wednesday at 11:59pm
  - Assignment 7 Out Wednesday, due Thursday, June 1st

Announcements (Continued)

- **Today's Agenda**
  - Finish up multithreading by covering the **`ice-cream-parlor`** simulation.
  - Start networking!
    - Review **`telnet`**, ports, Google, RSS News Feeds, and the Facebook Graph from the command line and the browser.
    - Implement a time server two ways.
      - Introduce the notion of a socket, which is a glorified descriptor that allows two-way communcation (that means reading and writing on the same descriptor).
      - Implement a time server using raw sockets and the **`write`** system call.
      - Implement a second time server that layers a third-party C++ stream over the client socket so we can use C++'s stream semantics instead of the raw **`read`** and **`write`** system calls.
      - Implement a third time server that's similar to the second one, except that it uses multithreading. Yay!
    - Present set of high-level parallels outlining how similar normal function calls, system function calls, interprocess communication via pipes, and (finally) interhost communication via sockets are all fundamentally the same thing.
    - Time permitting, implement a few network client applications.
  - Reading:
    - Read Sections 4.1 and 4.2 of the Saltzer & Kaashoek textbook. These two sections provide a wonderful discussion of the client-server model.
    - Read all of Chapter 11 of Bryant & O'Hallaron (which is the third chapter of your reader).