Announcements

Assignment 4 Out Today

- Due May, 18th just before midnight.
- Probably the most involved one of the quarter, lots of code to write, complex thread interactions to manage.
- You know everything you need to know to get started, so tackle it as soon as possible.

■ Midterms being returned during Monday's lecture

- Will post solution and criteria over weekend, after we grade everything.
- Lecture will likely be in NVIDIA on Monday, as I expect a larger crowd to show up to grab their midterms. Look for an announcement this coming weekend.

Today and Monday

- Review the sequential version of a networked program that polls all of the myth machines to see which one is the least loaded.
- Work through a few concurrent versions of the same program to speed it up, and to understand why it's so much faster.
- Work through one final concurrency example so large it deserved its own handout.
 - o This one final program—the ice cream store simulation—illustrates all of the many synchronization patterns in one large (but still manageable) program.
 - Full program can be found right here
 - o Code for ice cream store simulation isn't inlined into the slides, because it's just too large.

■ Monday and Wednesday: Networking

- We'll learn how the file descriptor concept is extended to allow data (text, HTML, images, JavaScript) to be read from and written to anywhere—not just to and from local files, from **stdin**, or to **stdout** and **stderr**.
- We'll study how to write scalable, networked applications using the Berkeley and POSIX sockets API.
- Reading:
 - Read Sections 4.1 and 4.2 of our second textbook by Saltzer & Kaashoek. These two section provide a wonderful discussion of the client-server model.
 - Read all of Chapter 11 of Bryant & O'Hallaron (which is the third of the four chapters in your reader).