CSc 422 — Final Project

Description due Tuesday, April 16

Demonstration on May 6, 7, or 8; paper due no later than 9:00 AM May 9

Grading Weight: 60 points

For your final project, you are to do one of the following:

- Design and implement a distributed program that makes creative use of several processes. You may use Java, MPD, C plus a message passing library (sockets, MPI), or some other language. Your project *must employ interacting peers*; it may also use client/server interactions. In short, it should have a rich set of process interactions.
- Write a paper that analyses some aspect of concurrent programming. For example, you could study one of the topics in the textbook that was not covered in class, such as a type of algorithm, or a different programming language, or a different application. The Historical Notes and References give pointers to additional information. Some of the Exercises also introduce new topics.

Exercise 7.26 of the text gives several ideas for final projects. Many of the other exercises in Parts 2 or 3 of the text could also serve as the starting point for a project. The choice of topic is purposely unspecified; pick something that *you* think would be interesting and educational. You can find a few samples from prior years in `/home/cs522/SampleProjects`, although be forewarned that these were quite elaborate projects.

You may work on your own or with one other classmate; two person groups are expected to undertake a more ambitious project. For example, a simple interface would be fine for a single-person project, but I would expect two people to have a nice interface as well as a solid system.

By April 16 email or give me a brief (one page) description of what you propose to do. If you pick a project from Exercise 7.26, just say which one. Be sure to say how you will employ interacting peers. I will give you feedback on your proposal by April 18.

If you do a programming project, I want to see a demonstration no later than Wednesday, May 8. We will do signups for project demos at the end of the last class period on April 30. *To the demonstration bring:*

- A written summary (2-3 pages) of your project *and* an assessment of what you learned.
- A one-page block diagram showing the structure of your program.
- A well-commented program listing.

If you write a paper, it should be about 10-15 pages in length, be your own original writing, and contain a good reference list of the papers, books, and Web sites that you consulted in writing the paper.