

CSc 422/522 — Final Project

Description due Thursday, April 19

Demonstration May 7 or 8; report or paper due *no later than* 9:00 AM May 9

Grading Weight: 60 points for undergrads, 75 points for honors and grads

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 SR, Java, C plus a message passing library (sockets, MPI) or some other language. Your project may use client/server interactions, but it *must also employ interacting peers*. 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. Even some of the Exercises 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`.

You may work on your own or with one other classmate; two person groups are expected to undertake a more ambitious project. Undergraduate students are not expected to do as ambitious a project as graduate or honors students.

By April 19 give or email me a brief (one page) description of what you propose to do. I will give you feedback on your proposal by April 24.

If you do a programming project, I want to see a demonstration on May 7 or 8. *To the demonstration bring:*

- A written summary (2-3 pages) of your project *and* an assessment of what you learned.
- A 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 or books that you consulted in writing the paper.