## **Instructions for Class Projects**

Wednesday, November 08, 2006 11:00 PM

If you want to do a project for the class, either send me a brief description of what you intend to do, or discuss it with me. This way, I can tell you whether what you propose should count as one or two problem sets. You should do this before Thanksgiving break.

The final product of your project will be a written report detailing what you did and explaining the results you obtained. Ideally, it will have some pretty graphs. I'm guessing that this will take 3-5 pages, but maybe more if you have a lot of data to present. You should submit this to me, as well as send me your code and data.

It's fine if your result is "the proposed idea didn't work". But, you should explain how it failed, and be sure that the failure wasn't the fault of an implementation error (thus the code and data).

In your project you should first obtain a graph or many graphs. In a typical 1-problem-set project, this would be a moderated sized graph or one you already have (to avoid the complications of dealing with large data), and you might compute some statistics of the graph. (For example, look at lecture 17, and the quantity r defined in problem set 4, even if you are not going to do the problem set).

In a larger project, you might do some experiments, and try to find meaning in them. For example, you could try clustering a graph and then checking how the clusters you find agree with clusterings assigned by an external source.

Teaming up is fine, as long as your project scales accordingly in complexity.

I know that many of you have interesting ideas. I'm waiting to hear them.