Software Engineering Homework #1 – due January 24, 2008

Write a 1-2 page proposal. What software system would you like to build this semester, and why? You must find somebody who would be interested in using this software system (try a local business, a campus office; friends or family are also acceptable but it is preferable to have a customer with whom you have a business relationship). The customer will help refine the specifications, provide feedback (to you) over the course of the project, and do acceptance testing at the end. They may also reject compromises that might seem reasonable to you and will help you prioritize the features.

Your proposal should include:

- the identity of your customer;

- a description of what problem the system would solve and why this is important;

- a description of what the system will do;

- a brief (one paragraph) justification that the proposal is neither too easy nor too ambitions for a group of approximately 4 programmers to undertake in one semester (a total of 14 weeks divided roughly into 2 weeks of specification, 4 weeks of design, and 8 weeks of implementation and testing).

Your proposal should *not* include a discussion of *how* the system will accomplish its task. Focus on the "what" and "why", not the "how", in this assignment.

Remember that your project will be implemented using C++ and UNIX. You will all be given accounts on CIMS machines. Cygwin or other flavors of UNIX are also acceptable. C++ should be used for everything you implement yourself with the exception of the user-interface. You may use any tools or techniques you like for the user-interface (such as Tcl/Tk or a web/html interface) as long as you can connect to your C++ program.

I will select some subset of the proposals that I think will be the most interesting and appropriate. These will be published to the class (without the names of the proposers). Your next assignment will be to rank your favorites and provide a brief profile of your programming experience and team preferences. I will then make team assignments based on this information. If your proposal is selected, you are guaranteed to be part of that team.

Those students whose proposals are selected will receive bonus points on their proposal grade. You can a link to winning proposals from the last couple of years on the course web page. Please turn your assignment in by email to barrett@cs.nyu.edu by midnight on January 24. The email should have the following format:

Subject: hw1
Body:

⟨Your Name⟩

⟨Your Proposal⟩

Your proposal should be written in plain ASCII text. Please do not send an attachment or an html-encoded email.