CS493 Software Engineering

Project Proposal

Date assigned: Friday, September 3, 2010
Date draft is due: Friday, September 10, 2010
Date final paper is due: Friday, September 17, 2010
Total Points: 20 pts for the draft, 5 pts for the final paper

The project proposal will help you define your project so that you will be able to begin designing and implementing it. The biggest thing that you need to address is the scope of your project.

At this point, it is best to plan a project that is potentially a bit too big as opposed to a bit too small. The secret to this strategy is to modularize your plan and design so that you will still have produced something even if you did not finish everything you had planned to do. Also, having more things in mind will help give you some flexibility in case you have to abandon part of your project in case it does not work.

When describing your project, it is better to include more meaningful information than to assume the person reading your proposal will be able to read between the lines.

The quality of the writing in your proposal will be as important as the content. Your paragraphs should flow together, the sentences should be formal and grammatical, and you should be consistent when citing your references. Your proposal should also be word-processed. We will go over some writing tips throughout the semester.

Consider the audience for all of your writing to be fellow computer scientists in their senior year.

Your draft should be a complete project proposal written to the best of your ability. As you can see above, the majority of the points for this assignment will be allocated to the draft.

The following is the format for your project proposal, which you must follow.

Google Docs:
Through BoxerApps you have available to you Google Docs. This is an online office suite that allows you to share your documents with other people. You need to write your proposal using Google Docs and share it with me (ShereenKhoja@gmail.com).

Name of Your Project

Senior Project Proposal

Your Name

Department of Mathematics
and Computer Science
Pacific University

September 10, 2010

1 Introduction

Begin by laying out the big picture. Describe how this system or idea is used (or could be used) by real people. Give a short example of why this topic is difficult or interesting.

The first thing you need is an introduction to the subject area.

Next, you should have an introduction to your problem/project within that subject area. Make sure that this section has a good flow and tells the story of your project.

Finally, you should give reasons why your project is important, or why it's important to investigate this problem. This is the motivating paragraph that explains why your project is worthwhile. You could describe the history of the problem, explain why it's interesting, and when and why does it occur.

You may choose to write the introduction last. It's much easier to write after you've thought about your project in detail.

2 Similar Work

In this section, demonstrate that you have a good grasp of your chosen project idea by describing similar work that has been accomplished. These might include projects that you may refer to as you create your own. Be sure to do enough research so that you have a good feel for what is already out there. Remember, your project does not have to be unique, but you do have to know why it is not. If your project has been implemented before or if your problem has been solved, then be sure to mention that here.

Make sure to include citations to references to any outside work that you describe in this section. I expect that you will cite references in this section. Use a proper format for citations such as MLA (Berndtsson et a. 2002, pp.39-44; Zobel 2004, pp.19-26)

3 Proposal

Here you will describe exactly what you wish to accomplish. What will you build? What will you demonstrate? How is this different from what has been accomplished before?

3.1 Deliverables

List all the things you expect to create in the project. The big deliverable will of course be your completed project, but list any smaller accomplishments along the way, too. Being able to think of your project as a collection of smaller projects will ensure that you will have something to show at the end, even if you didn't finish everything.

3.2 Tasks

Tasks differ from deliverables in that tasks are things that you need to accomplish in order to complete your deliverable. This includes any research or learning of new concepts. You don't need to be very detailed when describing the tasks, or make your tasks too small; just try to logically divide your project into steps. For each task, provide a brief explanation of what the task will entail.

3.3 Timeline

Create a timeline for your project. For each of the above listed tasks, estimate how long it will take. This timeline is a first stab at your schedule. You will nail down the details in your specifications later in the semester. The total number of weeks that you will work on your project (not including the initial design, the testing and writing the final report) is roughly 18-19 weeks.

3.4 Evaluation

Describe how you will evaluate your project once it is completed.

3.5 Contributions

Summarize in a few sentences what your contribution to computer science will be.

4 References

Give citations to papers mentioned in the previous sections. The exact format is not important as long as the citation is clear.

List all the references you've used to develop your project proposal. Quantity isn't too important, but you do need to make sure you do a thorough search for readings for your project. If you've found the reference online, be sure to give the author and title of the work along with the URL.

Berndtsson, M, Hansson, J, Olsson B & Lundell, B. Planning and Implementing your Final Year Project with Success!. Springer-Verlag, London, 2002.

Zobel, J Writing for Computer Science. Springer-Verlag, London, 2004.