# CS493 Software Engineering I

# Project Proposal

**Date assigned:** Thursday, September 7, 2017

**Date draft is due:** Thursday, September 14, 2017

**Date final paper is due:** Thursday, September 21, 2017

**Category:** Planning documentation – project proposal

**Total Points:** 15 pts for the draft, 10 pts for the final paper

**Brief**

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 if 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.

**Your Mission**

Write a proposal for your Senior Capstone project that you will work on during the 2017-1018 academic year and present to your peers on Senior Projects Day.

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.

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

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

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 are allocated to the draft.

You need to use the following sections in your project proposal:

1. Cover Page
   * Department, University
   * Project Title
   * Name(s) of proposer(s)/author(s)
   * Instructor/Advisor
   * Date
2. Abstract (between 100-200 words)
3. Project Description (between 600-1000 words). Indicate the following:
   * Main goals – what is the project about
   * Main functionality and characteristics
   * Intended users and key usability goals (that is, how users will benefit from your project)
   * Potential for further development beyond CS 493 / CS 494
   * Challenges that you may encounter during the project’s development
   * Intended technology, e.g. platform, languages, libraries, tools, etc.
   * A note on how the project can help your professional growth
4. Market Potential or Open Source Significance (between 250-500 words). Address the following:
   * Market potential, commercial promise, or open source value
   * Evidence of user interest (provide references)
   * Notes on similar/related products (provide references)
   * Novelty of your solution, innovative characteristics
5. Software / Hardware Requirements
   * List any software and their cost
   * List any hardware and their cost
6. Project Related Resources
   * At least three reference articles (journal, conference, or web scientific publications)
   * At least three related websites with useful resources

**Assignment Submission**

* An electronic copy of this document is available on the course website.
* Type up your proposal using Microsoft Word: use a 12pt font, and your lines should be double-spaced.
* Turn in a pdf of your document to the CS 493 drop folder on Grace. Name your pdf (03ProjectProposalPUNet), replacing PUNet with your specific PU Net ID.
* Turn in a hard copy at the start of class time on the day that it is due.

**Evaluation Criteria and Grading Rubric**

* **Draft:**
* Completeness (2)
  + All sections were completed.
* Clarity of descriptions and language (2 pts)
  + I can understand the project that you are describing.
  + You make it easy on the reader to follow your writing.
* Thoroughness and thoughtfulness (8 pts)
  + Each section is well thought out and researched.
* Writing (2 pts)
  + Correct spelling, grammar, and punctuation
  + Appropriate use of language and terminology. For example, no slang.
* Neatness and Organization (1 pts)
  + Document followed guidelines above.
    - Sections and blank lines are used appropriately.
    - Pages are numbered.
* **Final:**
* Completeness (1)
  + All sections were completed.
* Clarity of descriptions and language (1 pts)
  + I can understand the project that you are describing.
  + You make it easy on the reader to follow your writing.
* Thoroughness and thoughtfulness (4 pts)
  + Each section is well thought out and researched.
* Writing (1 pts)
  + Correct spelling, grammar, and punctuation
  + Appropriate use of language and terminology. For example, no slang.
* Neatness and Organization (1 pts)
  + Document followed guidelines above.
    - Sections and blank lines are used appropriately.
    - Pages are numbered.
* Good revision (2 pts)
  + Incorporated suggestions from draft.