

Senior Project Design Proposal

- The Project Proposal document on the course webpage gives the due dates of the entire proposal process and the grading rubric.
- The Common Proposal Format document gives an overview of the entire proposal document and explains the formatting requirements for the proposal and the CS 497 final report.

Senior Project Design Proposal

- The Problem Statement and Background section, and the Requirements and Specifications section are submitted in preliminary stages for comments as shown in the schedule.
- A complete proposal draft is due to the instructor by the Thursday before Easter break (April 13)

Senior Project Design Proposal

- After each stage, the document will be returned with comments by the instructor on both technical content and writing mechanics.
- Project advisors may also provide comments.
- These comments are expected to be incorporated into the next stage.

Senior Project Design Proposal

- The final design proposal is due on Reading/Study Day (April 26).
- It is graded by both the project advisor and the course instructor.
- The project advisor grades the technical content in any manner he chooses. The course instructor grades according to the proposal rubric.

Other Requirements

- As previously noted, all work done in conjunction with the project design proposal must be logged in the on-line design notebook. Entries should be made at least once a week.

Other Requirements

- Regular meetings (at least once every two weeks) with the project sponsor and/or project advisor is required.
- In particular, **you must meet with your project sponsor and project advisor at least once** before submitting the Problem Statement and Background section.

Problem Statement and Background

- The goal of the problem statement is to motivate the reader to want to know more about the project.
- It should give the reasons why the project is being undertaken and motivate (but not describe) the benefits of the completed project.

Problem Statement and Background

- Two questions to be considered:
 - Who are the stakeholder groups?
That is, who is or will be most affected by this project.
 - What is the current situation of each stakeholder group without this project (i.e. what is the problem)?

Problem Statement and Background

- Note that this section does not talk about what the stakeholders want (Requirements and Specifications) or how to implement what the stakeholders want (Design Approach)
- Solely focus on what the current situation is and why this project is needed and/or interesting.

Problem Statement and Background

- For some projects, identifying the problem may be straightforward. E.g., most application programs are created to fulfill a perceived need.
- For other projects, there may not be an obvious stakeholder group. E.g., a research project.

Problem Statement and Background

- But for any project, there must be a reason for its existence, even if it is just “it would be cool” or “my project sponsor wants this”, and the problem statement is used to articulate why.

Problem Statement and Background

- Background is any information needed to understand the problem. This includes, but is not limited to:
 - History
 - Previous attempts at solving the problem and current solutions, if any.
 - Other similar, related work
 - Note: don't forget to cite the sources for this information.

Organization

- The problem statement and background can be provided in either order.
- Sometimes it is best to just state the problem up front and then provide the reasoning and background.

Organization

- Other times it makes more sense to give the background first to build up understanding of the current situation and then summarize with the problem statement.
- Often a motivating example is used to show how the problem affects various stakeholders.

Organization

- There is no required length for any of the proposal sections. The point is to be clear and make the reader understand the project.
- Typical problem statement and background sections have been 2-4 double-spaced pages in length.

Assignment 3

- Email a **PDF copy** of the Problem Statement and Background to the instructor by **Friday, September 16.**
- Reminders:
 - Work done on the proposal should be logged in the on-line notebook
 - Project sponsor and project advisor should be consulted at least once before submission.