

CS 495 - Senior Project Phase I

Spring 2017 - Common Report Format

The sections of a common report format are presented below. This will be approximately the same format for both the CS 495 design proposal and the final report at the end of CS 497.

Title Page

The title page should indicate the name of the project, the project engineer(s), the sponsor, the project advisor, the major program, the University, and the date.

Abstract

An abstract is a one-paragraph summary of the report and appears on the title page.

Introduction (or Summary)

Present a quick rundown of the entire design process: the motivation, problem definition, and approach. By giving the reader a good, overall "big picture," you will vastly simplify their task of reading and understanding all that follows.

Problem Statement and Background

Give a more detailed statement of the problem as it was presented and as it has evolved to its current state in the design process. Include any technical discussions that help bring the problem into focus. It should be made clear why this project is interesting.

Requirements and Specifications

State the client requirements and specifications for the project. What is this project supposed to accomplish? What kinds of restrictions were in place?

Design Approach

Tell how you decided to attack the problem. Include the classes, methods, algorithms, etc., to be used in the various components of the overall task. Relevant technical discussions should be inserted as needed, but if they are too bulky or do not continue the flow of discussion, put them into appendices and cite accordingly. Diagrams are often useful, especially an overview system architecture diagram to start with.

Design Evaluation

The reader may wonder "so what?"; this concluding section should tell them. Explain how the project will meet the client requirements and specifications. Include the qualifications of developer, and the projected timeline and costs for completing the project.

References

Provide a complete list of all references cited in the report in a suitable format. The referencing requirement is to list and number each reference. Citations should be either in superscript form with references in order of appearance, or in "[#]" form with references in alphabetical order by first author's last name.

Appendices

Extensive side discussions are packaged by topics in separate appendices designated by uppercase letters (i.e., Appendix A, Appendix B, etc.) The order of presentation should follow the order in which they were mentioned in the main body of the report.

Notes on preparation

The prose in a technical report should follow standard English usage for this type of document. In particular, it should not be "folksy" in tone except in rare cases where such language would enhance the reader's understanding. Likewise, use of contractions and the second person pronoun ("you") generally is discouraged. The report should use technical vocabulary as appropriate, but also define them on first use.

A good outline is indispensable in turning out a coherent report; it will keep you from omitting things or repeating yourself. A detailed outline is especially valuable if you parcel out sections in a team project. A team report written in this manner will need to have one person do a rewrite to make the style and vocabulary consistent.

When you have "completed" the report, it is helpful to put it aside for a few days and then read it in its entirety. Not only will you catch errors that were overlooked in proofing, but you also may become aware of omissions, redundancies, and obscurities. An "outside" reader – someone unfamiliar with the project – can provide another good check on clarity.

Formatting Requirements

- **File type:** An electronic version of the proposal should be submitted as a **PDF** file.
- **Title Page:** The title must be centered with at least a one and one-half inch margin on the left and right. Times New Roman typeface is required, bold faced, 14 point.
- **Author, Program, University, and Date:** The author name(s) should be centered below the title with two spaces between the two. There should be a one and a half inch margin on the left and right. If there are multiple authors, they must be divided by commas (.). The program name must be 1 line below the author name with the same one and one half inch margin on each side. If there are multiple programs due to multiple authors, they must be separated by slashes (/). Times New Roman typeface is required, bold faced, 12 point.
- **Abstract:** The abstract should be appear on the title page 2 inches below the title and author information with the heading word "ABSTRACT" above the abstract paragraph.
- **Page numbers:** DO NOT number the pages.
- **Header and footer:** DO NOT use a header or a footer in your paper. Leave these spaces blank, and they will be added later (in the final report for CS 497).
- **Body of the report:** The body of the report begins with the Introduction/Summary section starting on a new page. Subsequent sections optionally may start on a new page. There should be a 1 inch margin all around in one column format, left justification, skipping one line between paragraphs. Times New Roman typeface is required, 12 point, using only standard symbols and abbreviations in text and illustrations. **For drafts, used double-spacing. For the final proposal, use single spacing.**
- **Headings:** Use headings for all major sections. They may be numbered or unnumbered. The headings should be left-justified in all uppercase using bold Times New Roman 12 point. Subheadings should be left justified in mixed case and in italics.

- **Figures and tables:** Figures and tables should be incorporated in the report text. All figures must be numbered consecutively and captioned. All tables must be numbered consecutively (but separately from the figures) and captioned. Figures and tables copied from other sources must have an appropriate reference citation at the end of the caption. All figures and tables must be referenced in the report body as "Figure X" or "Table Y".
- **References:** References should follow the body of the paper with 4 spaces between it and the last sentence of the paper. Times New Roman typeface is required, 10 point.
- **Appendices:** Each appendix should start on a separate page after the references in the standard page format.