Format for Project Reports

The project reports should be like conference papers: concise and focussing on what you did.

Format: Use 1 inch margins (left and right), 1 inch margins (top and bottom), 11 point times font for the main text, and use 10 point courier font for computer code. Use your judgement for other situations (for example indented, italics, and 10 point courier font for quotations). Single space your text. Make the text fully-justified (where the letters are aligned on both the left and right). The text should be in 2-columns, with 3/8 of an inch of space between columns. Your paper should be 4 pages long. Having only 3 pages is fine, as long as the content is good. Anything 6 pages or longer will not be graded.

If you want to use <u>LaTeX</u>, here are two examples with the formatting already done. You can just remove the text that you do not need. You will also need either the <u>ieee.cls</u> class file or the <u>IEEEconf.cls</u> class file. Just download both class files until you decide which one you like.

- 1. Example final report, journal style <u>.tex file</u> and <u>its output</u>.
- 2. Example final report, conference style .tex file and its output.

You are allowed to have appendices, as needed. Appendices are mainly for code or mathematical derivations. Appendices do **not** count in the page count. For example, if you have 4 pages of report, you may also turn in an appendix that is as long as you like. The appendix should be like a separate document, with your name(s) on it. Attach it physically to the report, e.g. with a binder clip.

Yes, your code should be in the appendix, monospaced, single column. You do not have to turn in *all* code used in your experiment; use your best judgement. You may want to include only relevent sections of code. For example, you should not include code that someone else wrote, unless you made major modifications. If your code is 100 pages, you should not print all of it. If your code is 6 pages, then you should print all of it.

If you include a work-log, you can put it in the appendix. Or you could incorporate it into one of the sections of the report, if it is appropriate.

The references must be in the same 2-column format as the rest of your paper.

You can use <u>this PDF example</u>, but follow the instructions below. If you want to use LaTeX, here are <u>directions</u> and <u>an example file</u> you can use as a template.

- Under authors' names, instead of address put the Class name, number, date, and instructor
- Abstract should be no more than 150 words.
 The abstract is a short summary of the paper. If you had to re-state what your

paper says in 150 words or less, what would you say?

For a conference paper, most people will read the abstract to see if they find it interesting enough to read the whole paper. This makes a lot of sense if you go to a conference in a topic that interests you, but find that there are 100+ other papers.

By the way, I recommend writing the abstract LAST, since it is easier this way.

Introduction

- Why your topic is important (convince us!)
- Where is it used? Applications
- What you will talk about/do
- Overview of the rest of your paper (section 2 covers...section 3 presents...)

Background

- Any relevant and specific info
 e.g. hardware statistics, equipment used
- What other people had to say on this topic(s)
 (be sure to cite your references, and quote as appropriate)
- You are expected to discuss the books and papers that you include in your references. You must also cite them. If nothing else, include a brief rationale explaining why you thought it was useful.
- What other people did on this topic (or related topics)
- Problems and shortcomings of their work
- How your work is different and better

• Project

- Your approach to the problem
- What you did
- Design
 - what you already had (and where it came from)
 - what you added/changed
 - for parts, include close-up drawings (e.g. Magic screenshots)
- What did/didn't work?
- Include graphs, equations, pictures, etc. as appropriate
- Results

Include relevant observations, measurements, and statistics. For example, for the VLSI Class: Include statistics such as timing information if available by simulation, or if not, your own analysis about critical path, delays, and clock cycles. Be sure to include size information: the total size of the circuit measured (X lambda by Y lambda), and the transistor count.

Summary

- Try to draw together the intro, background, and project sections.
- How do they all relate together? (They may appear to be disjoint sections to an unfamiliar reader).
- Restate important results
- Conclusions
 - What was accomplished / learned

- What you would have done differently
- Future work
- References
 - You should include a number of books and papers that were useful. If no number if specified, then include at least 5 books or papers. (If this is a group project, include at least 5 per person.) Webpages do not count toward this minimum number. Wikipedia is not appropriate, and you will be penalized if you include it.
 - Cite the papers/books that you used
 - Anything you found useful
 - Include textbooks from class if you want

Each team member must submit an individual report. It is possible to refer to someone else's report, such as a team member. But you must document that report like you would any other source. You can quote from it, as long as you enclose it in double-quotes, and put the citation after it.

See the following guide to documenting your sources.

See the <u>paper summary feedback</u> for useful examples of what to do when writing a technical document.

Remember your audience - your paper should be understandable by any CS student (at your level) who has taken this class.

Things to include in the report:

- Pictures
- Your observations and measurements
- Equations
- Graphs
- Figures
- Simulation, model (E.g. our design took 200 cycles to do task #1. We ran it 10 times, and the time for each run is: 12, 15, 16, 14, 13, 15, .. Therefore, we expect the second task, which is twice as long, to take about 30 sec).

Note: If you use color graphs, make sure you use a color printer when printing the report! I have seen several reports that say things like "the blue dots represent ..., while the red ones represent...", only to have the figure printed in grey-scale.

For references, use the following style.

Grading the microproject project

Grades for project deliverables are weighted so that the final project presentation and final project report constitute the majority. The final project presentation is worth 35% of the project grade, the final project report is worth an equal amount of the grade (35%), and the remaining deliverables (proposal presentation, proposal write-up, project update presentation(s), any code updates, etc.) are weighted equally and are collectively worth 30% of grade.

For example, here is the spreadsheet formula used in a typical semester for the project grade:

(AVERAGE(J2:L2)*0.3 + AVERAGE(M2:N2)*0.7)

J2 = proposal presentation

K2 = proposal write-up

L2 = project update presentation

M2 = final project presentation

N2 = final project report

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