

DP1 Proposal, CI guidelines
Spring 2014

A design proposal is typically used to propose a particular solution to a problem. It explains how the author's design works, demonstrates that the design meets all the requirements, and if necessary shows how the author's design is superior to others. As in a professional environment (and unlike a problem set) we ask you to clearly lay out the problem, then match your solution to that problem description. You should be able to characterize your proposed system at a high level and describe your proposed implementation and how it will meet requirements. Use technical language as appropriate, but write for an audience outside your specific field. A sample 200-word technical abstract is reproduced on the back of this paper. The DP1 Proposal should be no more than 800 words.

- Title** names/describes your proposed project.
 - I.e. "Provenance Tracking in the Unix File System" not "6.033 DP1"
- Overview** presents the problem and your solution.
 - Explain the problem to be solved by your design
 - Summarize your proposed solution, including your overall design approach
 - Specify how your design solves the problem and meets requirements
- Design description** gives a fuller presentation of your design, demonstrating to your reader that your design will work and will solve the problem.
 - Uses some hierarchy (subsections, logical groupings of material) and briefly introduces each subsection
 - Uses summary to support hierarchy
 - Organizes and introduces implementation by task or function, not by I/O
 - Describes the design's interface
 - Specifies your plan for implementation
 - Explains how the interface will be used by applications
 - Includes one titled, labeled, captioned figure which illustrates a challenging concept
 - If bullet lists are used they are always introduced with a few sentences
- Conclusion** briefly summarizes how your design will meet the requirements, and notes problems which remain to be resolved.
 - May be a separate section or may be the final paragraph
- Overall** the language of your report should be professional but not legal or bureaucratic.
 - We expect correct grammar and syntax, careful proofreading, and visually appealing layout