

DP Preliminary Report, Spring 2019

The preliminary report in 6.033 has several purposes: to provide a framework within which you can articulate your preliminary design and justifications for design choices; to get feedback from technical instructors which will guide the remainder of the design and/or modifications to the design; and to gain mastery of many of the skills needed to write a systems design paper. Like the final design report, the preliminary report explains how your design works to solve the assigned problem. It further demonstrates that the design meets all the requirements and justifies design decisions. The preliminary report is jointly written.

Your description should be written for a broad range of systems experts from different fields, and the paper should build on key reasoning patterns and concepts (defining behaviors and properties in relevant use cases; naming techniques used to produce desired outcomes), using specific technical language as appropriate. Your paper should:

- Briefly introduce your system by identifying the purposes and goals, then summarize your system's modules, behaviors, and innovating techniques or strategies. Give your system a name for easy of reference.
- Include a system diagram (titled, labeled, captioned, and referenced in the text) and include figures if appropriate to illustrate complex or challenging concepts.
- Define your system completely, clearly linking design choices, techniques, or strategies to the behaviors and properties they produce. Justify your choices with use cases, scenarios, and design principles, and identify major design decisions, tradeoffs, and choices.
- Conclude by summarizing how your design will meet the requirements, highlighting the novelty or specific focus of your system, and note problems which remain to be resolved. (May be a separate section or may be the final paragraph.)

The DP Preliminary Report should be approximately 2500 words.

DUE: March 22nd, 5:00pm