How to write the report

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If you are doing a **reading project**, the report should be up to 6 pages long, together with optional appendices that can be as long as you like. The report should be organized as follows:

- **Introduction**: A broad overview of the context in which your project topic sits, a high-level description of the main results surveyed by your report, citations to the main papers in the area.

- **Preliminaries**: Definitions and background notions. Stick to those which the reader needs for understanding your report.

- **Main Content**: One or two sections which present the main technical material that you survey.

- **Open Problems**: Describe the open problem(s) that you have identified and any preliminary ideas you may have had.

If you are doing an **implementation project**, the report can be shorter (up to 5 pages long), along with optional appendices of unrestricted length. The report should be organized as follows:

- **Introduction**: A broad overview of the context in which your project topic sits, a high-level description of the main problem you tackle, citations to the main papers in the area.

- **Preliminaries**: Definitions and background notions. Stick to those which the reader needs for understanding your report.

- **Algorithm Description**: Pseudo-code level description of your algorithm. Describe what the algorithm does in your own words, state what's known about the performance and correctness guarantee of the algorithm.

- **Implementation**: Describe the choices you made in your implementation. How did they affect its behavior? How does your findings match/differ from the theoretical results? Which inputs did you run your program on? Show some plots illustrating how your implementation scales.

- **Conclusions**: Describe what you learned from your work. If you had more time, what would you explore?

Also, you must put a publicly accessible link to the code for your project (ideally on `github.com`).

Examples: For inspiration, you can take a look at some final projects for a class on quantum complexity theory at MIT: `https://www.scottaaronson.com/blog/?p=2109`.