DS 4440 Final Project rubric, Spring 2024

Your final project should be done with a partner (team of two people). And it should have a primary paper that it is based on, that you have read that that you explain as part of the project. It should involve some code that you have written, running a neural network and analyzing or visualizing its behavior. Specifically:

1. Your final project report should be handed in as a webpage, by following the instructions on this github. On project presentation day, you will share your webpage with your classmates. https://github.com/davidbau/Final-Project-Template/tree/main. The report should include:
2. List the team members.
3. Identify the main research paper that you have read. This paper should be cited properly, with a hyperlink to the paper (e.g., on arXiv), and an academic citation in the bibliographic information at the bottom of your report.
4. Include a section 1 “introduction” that describes the main question that you are asking in your project. It should describe the problem that you are taking on that builds on the paper. For example, you can try seeing if the method in the paper can be applied to some new data, or you can measure or visualize the methods of the paper in your own way that varies from what was done in the paper. Or you investigate whether it is possible to build a new application or new method that incorporates or extends the work in the paper. You should keep it simple: it is just a short project.
5. Include a section 2 that reviews the paper, i.e, that summarizes and explains the paper in a paragraph or two, and be sure to include the main takeaways from the paper as you see it. This review should include a couple words that mention how the paper is related to your project.
6. Include a section 3 that describes the technical structure of your method or implementation. This should be brief, no more than one screenful of webpage text. You may also include an architectural figure in addition to the text.. Include a pointer to the code to your implementation.
7. Include a section 4 that reports your experimental findings. This should include graphs or images that visualize the results that you have obtained. Ideally this will compare your method to some simpler approach (this is called a “baseline” comparison), and/or it should compare your method to a simpler version of your method (this is called an “ablation”).
8. Include a section 5 that has one paragraph to summarize your conclusions, including any implications for applications or impacts on society, or ideas for future work.
9. Finally include a bibliography at the bottom, where you have cited the main paper that you read, plus any other citations that you’ve taken as inspiration or otherwise mentioned in your project.
10. Before the report is due, on the final class day of the term we will have a “presentation day” where all the teams present their projects in a poster session. Optionally you can

create a paper poster (tall, no bigger than 24 inches wide) summarizing your project to present at the session, or you can just bring your laptop to show your report. The session is a chance to get feedback from your classmates and your professor and TAs on your project.