CS 175 (W26): Project in Artificial Intelligence
Project Report

Due date: Monday, March 16, 2026 (Pacific Time)

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This is the final submission for the course, a summary of what you have achieved in the past ten weeks. It should build upon the status report, and extend it with your additional approaches, experiments, and results. You will be evaluated on how extensive your efforts were, how thoroughly you have evaluated your proposed approach, the scope and success of your attempts at gaining insight, and the quality of your report. A significant component of this submission will also be to evaluate your individual contributions. The final submissions add up to a total of 100 points (which makes up 40% of your final grade), 60 points of which are given to the group as a whole, and 40 points specific to individuals. The breakdown of the points is:

- Effort: 15 points

- Evaluation: 15 points

- Insight: 15 points

- Quality of report: 15 points

- Your contribution: 40 points

- Total: 100 points

The project report itself is due by midnight on Monday, March 16, or later as per your group's remaining grace days, if any. The contribution part is due the following Friday, March 20 (no grace days for this), so that you can take into account the final stretch of the project report.

Part 1   Project Report (60 points)

The primary submission for the final report should be included on the website by adding a filename called `final.md` in your repo's `/docs` folder. This file should start exactly with the following lines:

```
---
layout: default
title: Final Report
---
```

The report should be self-standing, i.e. it should not need the previous submissions to understand what you are doing. It should consist of the following sections:

- **Video:** The instructions for the video are the same as for the status report, except that a length of ~3 minutes is recommended and a maximum length of 4 minutes will now be strictly enforced. The video should contain a brief problem description (using images, screenshots, or video captures), as well as "before" and "after" training performance captures in an early stage and (respectively) end of the agent's training. If you identify failure modes (cases where the AI fails), include them as well. You are free to include any other parts of the technical description, such as a summary of your approach or future ideas, but no specific part of this is required. You should embed the video on the final report page on the website. For example, if you upload the video on YouTube, add the embed video code provided by YouTube to the top of `final.md`. The video should be of reasonably high quality (minimum resolution of 720p), and the speech, if any, should be comprehensible.

- **Project Summary:** Write a couple of paragraphs summarizing the motivation and goals of the project; yes, yet again, but a more comprehensive version. In particular, make sure that the problem you're addressing is clearly defined here, and feel free to use visual aides (e.g. an image or two) to clarify the setup. Part of the evaluation will be on how well you are able to motivate what's interesting and challenging about the problem, i.e. why it is not trivial, and why you need AI/ML algorithms to solve it.

- **Approach:** Give a detailed description of your approach, in a few of paragraphs (at least a couple). You should summarize the main method you are using, such as by overviewing the structure of its data, how it samples that data, and the equations of the loss(es) it optimizes (you can copy this information from scientific publications or online resources, in which case cite them clearly). You should also provide details about the approach as it applies to your scenario, such as how you set up inputs and outputs (e.g. states / observations, actions, and rewards), how much data you use (e.g. for how many interaction steps you train), and the values of any hyperparameters (cite your source for default hyperparameter values, and for any changed values detail if and how you tune them and the numbers you end up using). A good guideline is to incorporate sufficient details so that most of your approach is reproducible by a reader. You're encouraged to use figures, pseudocode, and tables for this, as appropriate.

- **Evaluation:** An important aspect of your project is evaluation. Be clear and precise about describing the evaluation setup, for both quantitative and qualitative results. Present the results to convince the reader of the effort that you've made to solve the problem, and to what extent you can claim that you succeeded. Use plots, charts, tables, screenshots, figures, etc. as appropriate. For each type of evaluation that you perform, you'll likely need at least a paragraph or two (excluding figures etc.) to describe it.

- **Resources Used:** Mention all the resources that you found useful in implementing your method, experiments, and analysis. This should include everything like paper references, code documentation, AI/ML libraries, source code that you used, StackOverflow, images you included that you didn't create yourselves, and any other websites/links you found useful. You do not have to include every tiny (or commonplace) thing you used, but it is important to report the sources that are crucial to your project. One aspect that does need to be comprehensive is a description of any use you made of AI tools, including what the tool was, how you used it, and in what form it appears in your report.

Part 2 Contributions (40 points)

In a separate Contributions assignment on Canvas, describe your own contributions and those of your teammates, and evaluate yourself relative to your teammates. Keep in mind that if your project didn't work out, we may already be taking that into account in other sections (e.g. effort and insight); this part is primarily to evaluate how much effort you individually put into the project.

- **Your Contribution:** In the first part, describe your own contributions to the project as a list of things you did, in no more that 250 words (the fewer the better). These can also include things that maybe didn't make it into the source code, for example you tried some feature but it didn't work, or were responsible for the video, or you read a lot of papers and shared your understanding with your teammates. You can also mention any justified reasons for project meetings with the instructor that you had to miss or join late. In addition, give yourself a letter grade (+/- modifiers allowed) summarizing how well you think you did, in terms of effective effort, relative to your teammates, using the text above as justification. Needless to say, this will not be your grade, so it's more important to be honest than to try to inflate this.

- **Teammates' Contribution:** For each teammate, give them a letter grade (+/- modifiers allowed) for how much you think they contributed. Again, be fair; give them a higher grade than you if they did more effective work than you, and try to avoid finding blame for why (if) the project didn't come together well. Also, justify your grade by providing a list of their contributions, using a maximum of 100 words for each teammate. This will not directly be your teammates' grade, but is rather a tool to assess extreme unfairness in teammate efforts. For most teams, it wouldn't be a bad idea to make a list of your and your teammates contributions, and have a group meeting to go through those and make sure everyone is on the same page.