CS 175: Project in AI (Minecraft/Sokoban): Winter 2023
Project Proposal

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https://canvas.eee.uci.edu/courses/52276

We assume that you have selected your group members. In this assignment, you have to propose your idea for the course project

1. Summary of the Project (40%)

    In a few paragraphs, mention the main idea behind your project. Focus on the problem setup, not the solution, i.e. what is your goal, what is the task? At the very least, you should have a paragraph that clearly explains the input/output semantics of your project, i.e. what information will it take as input, and what will it produce. Mention any applications, if any, for your project.

    The focus here is on "what" and not on "how". While it is a good to think about how to implement a project idea, and writing it down can clarify your thinking, and reveal any issues/problems/difficulties, it is not required at this point.

2. AI/ML Algorithms (20%)

    In a paragraph, mention the AI and ML algorithm(s) you anticipate using for your project. It does not have to be a detailed description of the algorithm, even the sub-area of the field is sufficient. Examples of this include "planning with dynamic programming", "reinforcement learning with neural function approximator", "deep learning for images", "min-max tree search with pruning", and so on.

3. Evaluation Plan (40%)

    Describe how you will evaluate the success of your project. In a paragraph or two, focus on the quantitative evaluation: what are the metrics, what are the baselines, how much you expect your approach to improve the metric by, what data will you evaluate on, etc. In another paragraph or two, describe what qualitative analysis you will show to verify the project works, such as what are the sanity cases for the approach, how will you visualize the internals of the algorithm to verify it works, what's your moonshot case, i.e. it'll be awesome and impressive if you get there.

    Note that these are not promises, we're not going to hold you to what you say here, but we want to see if you are able to think about evaluation of your project in a critical manner. It may happen that not everything you set out to do will be successful. But we will expect to

analyze your successes and failures - if something did not work out as you expected, why? What would be needed/required for it to work? Etc.