

cmput 355 fall 2020 assignment 4 instructions

Write a solver, player, tutor, or visualizer for a puzzle or game. Choose a puzzle or game that interests you: **you must not have worked on this game before**. There are 15 marks. You will receive 1 bonus mark if you

- write a player and compete in the 2020 Computer Games Olympiad
- or write a player or solver for geodesic-Y or mudcrack-Y
- or write a player or solver that helps establish new bounds for random-v-perfect Hex on $3 \times n$ or $4 \times n$ boards.

The CGO is a games competition hosted by the International Computer Games Association: read more here https://icga.org/?page_id=3131 . I will pay entrance fees for the first 10 groups that declare their intention to compete in the 2020 CGO.

Submit a two page report on your project, 12 point format, preferably using LaTeX. **On page 1** answer the questions below. **On page 2** give a 1 page diary of *your individual* work on the project. In this diary, **explain why you picked this project** and then begin each paragraph with the date of a Monday, the number of hours you spent on the project *that week*, and a brief summary of what you did. I hope that you spend at least one hour on the project each week. If you spend less than 12 hours total on this project, please explain why.

1. What is the name of your group? (create a name that will be unique to your group, it makes it easier for us to mark)
2. List all members (including yourself) of your group, and student number for each.
3. For each member (including yourself), briefly explain how you contributed to the project (different groups might divide the work in different ways). If any member performed above or below expectations, mention it here.
4. If there is any code in the project that you started with, give the url. Explain carefully what parts of your final code is yours, and what was written by others. Include the url of your github repo.
5. Give a short description of the game or puzzle for your project. Also include a url of the best description of the game you could find.
6. Give a 1/2-page summary of what you accomplished for the project. What were your original goals? Did you achieve some/all of them? What was the most satisfying part? What was the most disappointing part? If you continue to work on this project later, what else would you like to do?
7. Include data that measures the performance of your project: if it's a player, compete it with some other player, or a random player. If it's a solver, describe what problems it can solve, and what it can't. If it's a tutor or visualizer, find some people to try it out and give you feedback.

You will receive up to 6 marks for the report (did you follow instructions? is it clearly written?), up to 3 marks for time spent (≤ 12 hours, 1 mark; 13 to 16 hours, 2 marks; ≥ 17 hours, 3 marks), up to 3 marks for data, and up to 3 marks for quality (strength? user-friendliness? effectiveness? beauty?)

If on this project you are found to violate the code of student behaviour (e.g. cheating, report falsification, etc.) your score will be 0 and the matter might also be referred to the Dean.