## **Lab 4 Grading**

First, the TA attempted to simulate games with the student's Monte Carlo opponent vs. various levels of other AI's. For a score of 4, the following requirements needed to be met.

- Against a random opponent, the Monte Carlo AI should win around 90% of games.
- Against the TA's Monte Carlo AI, the student's Monte Carlo AI should evenly match or outperform (i.e. beat the TA's AI or end in all cat's games).
- Against simple AI that tries for per-determined 3-in-a-row sequences, the student's AI should always win.

If the simulation of games failed (runtime error occurred), the simulation results did not get close to the above stated performance goals, or the simulation of games took too long with the student's code, the following rubric was used.

3.5	3.5	3.0	≤3.0
Simulation requirements achieved, except against TA Monte Carlo AI.	AI plays well with few errors, but in general logic of the code is good	AI plays well (good move choices), but with frequent errors. or  AI does not play well, but logic of good is correct in general (a few changes should fix it)	Anything worse than all boxes to the left.

## Notes:

- "errors" can refer to either runtime errors such as index out of bounds exceptions, or clearly wrong moves by the AI (such as failing to block a simple three-in-a-row attempt).
- "plays well" means that the AI in general will choose the best spot. For example, it will choose the middle spot if it gets to go first.