

Project 2: Generalized Tic Tac Toe



Due Date: March 27th (For written portion/logic)

General Instructions

- Use Blackboard to submit your assignment. If there are any technical issues, you can e-mail your assignment to the grader.
- No homework is accepted after the deadline. If you have an urgent reason, you can explain that to the instructor
- You can use either Java or Python in your implementations.
- Please always submit a document that shows your algorithm choice with a brief description of how it applies to the problem (1 to 4 sentences) and how to run your script.
- You must submit your implementation along with the document.
- Graphical User Interface is NOT required.

Note: Group Project. Include a section that describes the work distribution per student. Work distribution will be considered when grading each member. Only one member of the group submits the whole working project.

Generalized Tic Tac Toe $n \times n$

A generalized Tic Tac Toe is an $n \times n$ board game where each player chooses one of the parts X or O, and then plays in an alternate order to place his choice on the board. A player wins when he places m parts of his choice in a consecutive order. The game may end in a draw when no one wins. Given m and n , the agent can play against another agent in an $n \times n$ board and tries to place m parts in a row to win.

What to Submit

Submit a document that shows the environment, search space, and the evaluation function of this problem and a general description of each agent. Indicate if the game is a loss, win, or draw and submit your source code.

Use of API

We will play and record the games interactively with each other. Details of the API will be shared via Slack and discussed in class on March 6th.