AI Final Project Report Winter 2022

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1 Motivation

1.1 Approach

March 25th 2022 Today, we played a few games against each other in order to understand the fundamentals of the game as well as to develop a few basic strategies. Our first instinct is to avoid corners as we can easily get boxed in if we are near corners. This means that we would like to move towards the center.

We also discussed about strategies to inplement our code. First, we need a heuristic function for our agent to evaluate the current position. Given the maximum steps allowed and the heuristic function, the agent will compute an evaluation for each of the reachable squares. The agent will then pick the best square and make its move. Our heuristic function will be based on the following ideas:

1. In case our heuristic function of a tie between two squares, our agent will prefer to move towards the center.

2. Trying to box in the opponent as much as possible.

3. Use our agent as a wall to limit the opponent's movement.