

Since the visualization doesn't work and time is very very limited due to deadlines of term I, I just tried 3 strategy and here are the results. You can better understand them if looking at the code. Don't worry, I add those analysis as comments on the customized_score() functions.

Strategy: all opponent's legal moves are equal

Results: 42.86%

Discussion:

This scoring function just blindly evaluate the number of possible legal moves left as if the player can make move immediately instead of waiting for the opponent to finish.

So, it doesn't consider locations, nor the future board after opponent's move.

It's surprisingly win the MM Improved by 11 to 9

Strategy: Copy-and-paste

Results: 85.00%

Discussion:

Borrowing from the improved score from lecture. This works I guess because it includes both legal moves for me and for opponents.

Strategy: Edges are more important

Results: 76.43%

Discussion:

This heuristic was an attempt to weight the number of moves left to the player with them respective position on the board. By multiplying by the absolute value of the difference between their x and y positions and the total width of the board, I am penalizing positions in the center of the board and rewarding positions closer to the edges.