

Report on Strategies used

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In order for my AI to play like real human, I have implemented the following strategies

Strategy 1: First move

(a) Bot plays as X

X		X
X		X

One of the four corners

- First move would be to randomly place X in one of the 4 corners

(b) Bot plays as O

X		
	O	

Bot places in center

O		
	X	

Bot places in one of the corners

- If user placed move in center, bot places it randomly in one of 4 corners
- If user placed it anywhere, bot shows a defensive move of placing O in center

Strategy 2: Attacking and blocking 3 corner strategy

X	O	
	O	
X	X	X

Possible move by X to win; same position can be used by O to block

- 3 corners can be used to create 2 possible ways to win a game
- When user tries to play this strategy, bot blocks before user can place move on 3rd corner
- When bot gets an opportunity, it places its moves in 3 corners

Strategy 3: Blocking 1 corner and 1 center move in adjacent row and column

X		O
	O	
X	X	

Possible move by X to win; same position can be used to O to block

- With this move, placing next at intersection of row and column gives 2 openings
- Bot blocks such move by placing its move in the opening

Strategy 4: Winning move

X		O
O	X	O
	X	X

- If bot finds an opening, either diagonally or grid-wise, it attempts to win

Strategy 5: Blocking move

X		O
	O	O
X		X

- If user can potentially win in its next move, bot places its move to block the win. However, if bot can win the game in that move, it does that!

Strategy 6: No strategy move

X	O	O
O	X	X
X		

- We simply place bot's move in the next possible open position while checking row-wise.