Value Iteration Agent Report



Student Declaration of Authorship

Course code and name:	F29AI – Artificial Intelligence and Intelligent Agents
Type of assessment:	Individual
Coursework Title:	AI CW2 – Tic Tac Toe
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Student ID Number:	H00373987

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Date: 30/11/2022

Against Aggressive Agent

```
Against Aggressive Agent:
                                 Playing move: X(2,0)
Playing move: X(2,0)
                                 Playing move: O(1,2)
Playing move: 0(0,1)
                                      Playing move: X(0,0)
Playing move: X(2,2)
  |0|
Playing move: O(1,1)
                                 Playing move: 0(0,1)
| |0| |
| |0| |
                                 |X|0| |
|x| |x|
Playing move: X(2,1)
                                 Playing move: X(1,0)
  0
                                 |X|0| |
  101
                                 |X| |0|
|X|X|X|
X won!
Playing move: X(2,0)
                                 X won!
                                 Wins: 50 Losses: 0 Draws: 0
```

Against Defensive Agent

```
Playing move: X(2,2)
Against Defensive Agent:
Playing move: X(2,0)
                                 Playing defensive move
                                 Playing move: 0(2,1)
Playing random move
Playing move: O(1,2)
                                  | |0|
                                 |x|o|x|
                                 Playing move: X(0,0)
Playing move: X(0,0)
                                 |X| |0|
                                 |X|O|X|
                                 Playing defensive move
                                 Playing move: O(1,0)
Playing defensive move
Playing move: O(1,0)
                                 |X| |0|
                                 |X| |
ioi ioi
                                 |X|O|X|
|X| | |
                                 Playing move: X(1,1)
Playing move: X(1,1)
                                 |X| |0|
                                 |0|X|
|X|O|X|
|X| |
                                 X won!
                                 Wins: 42 Losses: 0 Draws: 8
Playing defensive move
```

Against Random Agent

Against Random Agent: Playing move: X(2,0)	Playing move: X(2,0)
Playing move: O(1,0)	Playing move: O(2,2)
Playing move: X(1,1)	Playing move: X(0,0)
	X
Playing move: O(2,2)	Playing move: O(0,2)
	X 0 X 0
Playing move: X(0,2)	Playing move: X(1,0)
	X 0 X X 0
X won! Playing move: X(2,0)	X won! Wins: 50 Losses: 0 Draws: 0