## **Performance Measure Report**

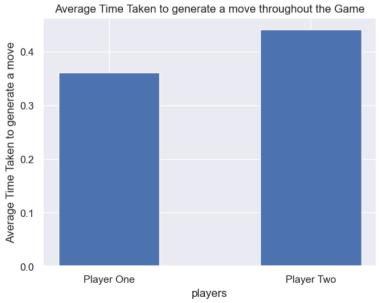
- The graph below illustrates the time taken by each algorithm to make a move

player one: Alpha-Beta Pruning

player two: Minimax

- As it can be seen Alpha-Beta Pruning takes slightly less time than the Minimax algorithm throughout the game and the difference is highlighted by the second graph as it shows the average time taken by each algorithm
- The cause of that time difference is also more clarified by the number of nodes expanded graph



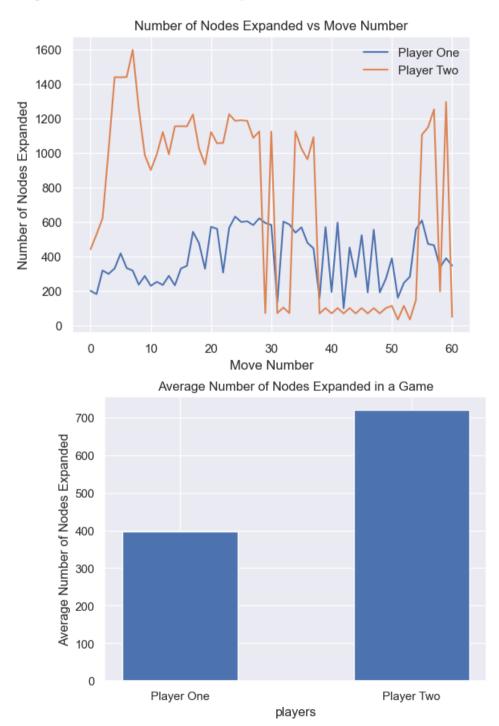


- The graph below illustrates the number of nodes expanded by each algorithm to make a move

player one: Alpha-Beta Pruning

player two: Minimax

- As you can see the Alpha-Beta Pruning agent expand a lot less nodes than the Minimax in each move throughout the game, Due to the pruning technique that the Alpha-Beta agent uses to reduce his search space.



Note: You can find full code that was used to generate the plots in 'report.ipynb'