**DANIEL ABEL**

**MET CS521 Information Structures with Python**

**Professor Eugene Pinsky**

**Facilitator Anatoliy Aleksandrov**

Project Summary

For my project, I opted to create a Chess move calculator. In game of Chess both player have a finite number of moves available to his or her disposal for a given board. It is theorized that in the midgame section of Chess, that maximizing the number of moves available to you while minimizing the number of moves available to your opponent will help you gain an upper hand before moving to end game. With this in mind, I thought that creating a script that could quickly calculate the number of moves on a Chess board might be useful when analyzing which player has an upper hand in a seemingly even board.

Chess is a complex game with many rules and nuances that must be accounted for. For the scope project, I just focused on being able to account for all the moves in a game and sum them together. No further analysis on who had the upper hand in a board was made, the application was just used to sum boards. For reading chess boards from a file, I chose Forsyth-Edwards Notation, since it is easily human readable which allowed for simplest debugging. For more information on the design, board files, and running tests, please see the README.