# CSC 335 Team Project – Chess

For this project, you will implement the typical implementation of chess! If you are unfamiliar with the game or are rusty with the rules, please be sure to check out the following link - http://www.sakkpalota.hu/index.php/en/chess/rules . If you look around the website, you'll find tons of more information about the game as well.

Overall, you'll have an 8-by-8 grid that looks something like this –
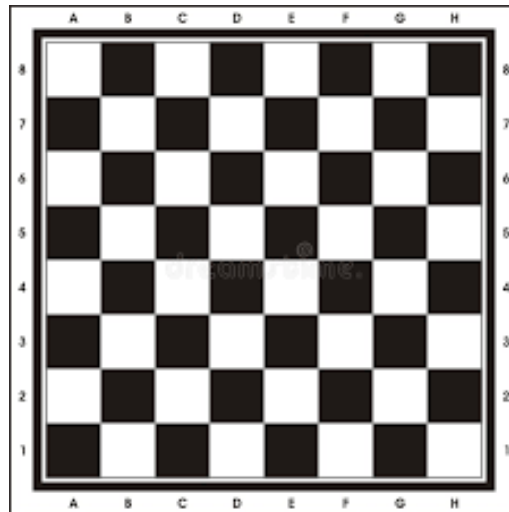


There'll be two sides black and white, and a game just before the first move should look like this-
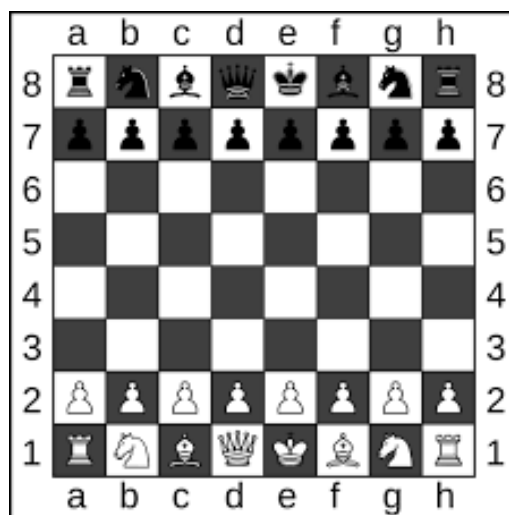


In your MVP implementation, you need to support the following –

1.  Have an 8-by-8 board with all pieces arranged as shown when the game begins. By convention, white plays first. **You need to make sure that the correct pieces play each**

**turn.** For instance, when the game begins, white cannot play their rook since it is blocked by other pieces on all sides. However, white can play any of the pawns, or the knight. Of course, this will be different as the game progresses, but you need to make sure that only pieces with valid moves for that turn can be selected and moved.

2. **Every player plays alternately, and during the turn of the opponent, any moves made for the opposing side should not be registered/valid.** So, if it is the black side's turn, if the white side tries to make a turn, it should not work and of course the vice-versa will also be true.
3. Multiplayer via one local process as well as networked multiplayer
4. Recognize end of game
5. In terms of features, support the following: saving the last game's progress, saving and exiting, quitting to menu, starting a new game.

# Potential Wow Factors -

1. A smart AI, so you can choose to play versus the computer.
2. Saving multiple games.
3. Competitive mode, where each side has a fixed amount of total time and whatever time they take to make a move, their clock runs out during that time. When they make a move, their clock should stop running out, the control should move to the opponent and now the opponent's clock should start running out.
4. Cool movement graphics.

# Milestones –

Sprint 1 – Basic Board implementation with all pieces – this will include your main class and subclass for all pieces.
Sprint 2 – Legal moves enforced on the board. Networked and Local Multiplayer.
Sprint 3 – Complete chess game with wow factors.