**Introduction:**

**Chess is a board game for two players. In real life, the chess game consists of Pieces, Board, Players.**

**1. BOARD**

**The Chessboard is the playing ground for the**[**game of chess**](https://www.chessprogramming.org/Chess_Game)**and its up to 16 white and black**[**pieces**](https://www.chessprogramming.org/Pieces)**each. It consists of**[**64**](https://en.wikipedia.org/wiki/64_%28number%29)[**squares**](https://www.chessprogramming.org/Squares)**, eight rows, eight columns.**

Represented using an array of squares (tiles): Tile[8][8]

**a. Square**

- Attributes: Piece, isOccupied

**2. PIECE**

**There are 1 King, 1 Queen, 8 Pawns, 2 Bishops, 2 Rooks, 2 Knights**

**Special moves: Pawns can go 2 steps if it is their first move. Rooks and King can do castling. Pawns can be promoted.**

Attributes**: x, y, isKilled, allMove -> contains all possible move from x and y (**Pseudo-legal move generation)

**3. MOVE**

Attributes**: x, y, isAttack**