

## **Board**

- + String[][] board
- + getBoard() – returns the board
- +newBoard() – creates a new board with pieces in their default positions
- +printBoard() – prints the board along with coordinates
- +flipBoard() – prints the board from the perspective of opposite side
- +setPieceLocation(String name, int destinationX, int destinationY) – sets a piece to a particular coordinate
- +String getLocation(int x, int y) – returns the piece at a particular coordinate
- +setBoard(int Oldx, int Oldy, int Newx, int Newy) – sets a particular piece to a specific destination

## **Player**

- + String: color
- Boolean: checkMate
- + Pawn: P1
- + Pawn: P2
- + Pawn: P3
- + Pawn: P4
- + Pawn: P5
- + Pawn: P6
- + Pawn: P7
- + Pawn: P8
- + Knight: N1
- + Knight: N2
- + Bishop: B1

+ Bishop: B2

+ Rook: R1

+ Rook: R2

+ Queen: Q

+ King: K

+Boolean noPieceThere(int x, int y, Board z) – Check to see if target coordinates contains a chess piece

+boolean ownPieceThere(int x, int y, Board z) – Check to see if the target location is occupied by a piece of the player's color

+String kilPiece(int coordX, int coordY, Board b) – Removes the piece at given location

+pieceDeath(String p, int coordX, int coordY) – sets the removed piece's isAlive instance variable to false

+pieceRevive(String p, int coordX, int coordY) – If the move made was illegitimate, this sets the piece's isAlive instance variable back to true

+String canMove(String piece, int coordX, int coordY, Board b) – returns a list of all the pieces of the inputted type that can move to inputted location

+move(String piece, int coordX, int coordY, Board B) – Sets the board and moves the piece

+boolean dangerCheck(String colour, int x, int y) – Returns true if the king is in check

+Boolean isCheck(King Henry) – Simpler, shorter call to see if a king is in check

+Boolean checkmate(King Louis) – checks if the king is checkmated – it cannot move out of check, it is in check, and no piece can block the check.

### **Squishies**

+Boolean isAlive

+int xCoord

+int yCoord

+String color

+String pieceType

+Boolean canMove(int startX, int startY, int destinationX, int destinationY) – checks to see if the piece can move to destination

+Boolean canEat(*Squishies food, Squishies eater*) – *returns true if eater can capture food.*