Game

+ setup
+ updateScore
+ printScore
+ isrunning

2

Board holds vector of ChessPiecek, captured piece gets deleted & set to nullptr, empty spaces are also nullptr.

Board

+ printBoard
+ resetBoard

draw arrns a to each # of pieces

＊ Player ＊

＊ + takeTurn ＊
+ validMoves
+ is in Check
+ movesOutofCheck
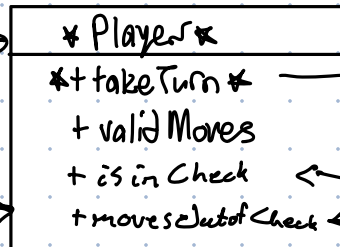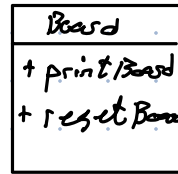
does this need to be pure virtual?

Human

+ takeTurn
+ resign

＊ Computer ＊

＊ + chooseMove ＊

L1

+ chooseMove

L2

+ chooseMove

L3

L4

1

(for constant time capturing)

＊ ChessPiece ＊

＊ + move ＊
＊ + validMoves ＊
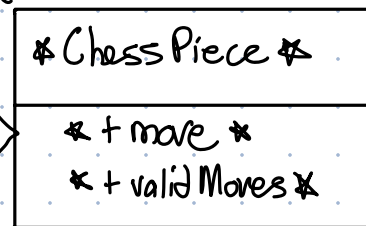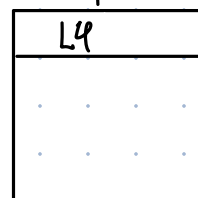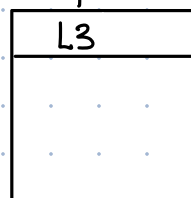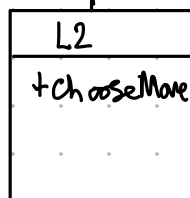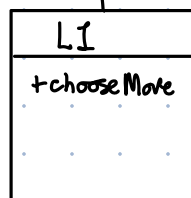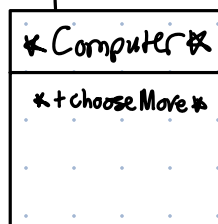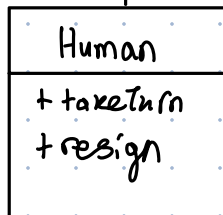
promote(piece) private
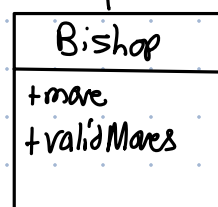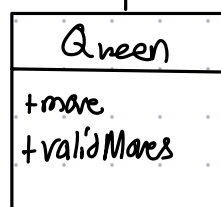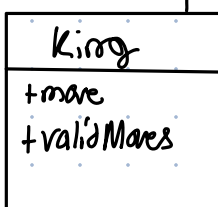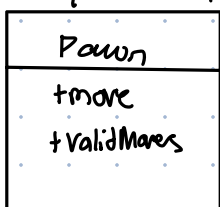 | method called conditionally
 is move override

Pawn

+ move
+ validMoves

King

+ move
+ validMoves

Queen

+ move
+ validMoves

Bishop

+ move
+ validMoves

Rook

+ move
+ validMoves

Knight
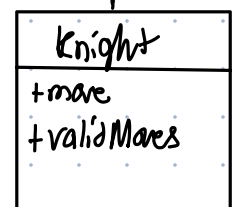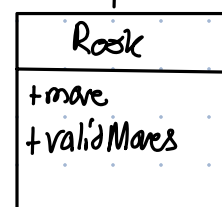
+ move
+ validMoves

|
single move double
move forward for first
move (bool field)
|
enpassant in
valid moves

Castle()

1) Chess pieces
2) Board
3) Player / move
4) Valid moves
5) Valid moves in check
6) Game
7) Setup