

CHESS2 PROJECT DOCUMENTATION

ChessBoard Class: manages the state of the chessboard. It determines the size of the board, places pieces and portals, moves pieces, and removes pieces from the board. It also provides methods to print the current state of the chessboard and to retrieve pieces and portals from specific positions.

ChessPiece Class: Represents individual chess pieces. It contains properties such as the piece's type, position, color, move rules, and cooldown. It also provides methods to set the piece's position and type, and to update the cooldown.

MoveValidator Class: Calculates and checks the valid moves of chess pieces. This class calculates all possible moves for a given piece and determines whether a move is valid or not. It also checks whether there is an enemy piece or portal at a given position.

GameManager Class: Manages the main logic and flow of the game. It allows starting the game, checking valid pieces and moves, executing moves, checking if the game is over, and switching between players.

Portal Class: Represents portals on the chessboard. It contains the portal's entry and exit positions, their IDs, and portal properties. It provides methods to retrieve information about the portal.

Additional Information

- *The chessboard is 10x10.

- *Pawns are also placed on the sides of the board.

- *Pawns cannot move backwards but they can move sideways.

- *Knights have two types of moves:

- Small L: 2 squares in one direction and 1 square in a perpendicular direction (like in standard chess).

- Big L: 4 squares in one direction and 2 squares in a perpendicular direction.

- *Each piece can enter and use portals. There are double orange and double blue portals, allowing two-way movement.



