Use case: placePiece

Iteration: 1

Primary Actor: Player

Goal in context: Allow the player to place a piece (specific to connect 4 and tic tac toe)

Preconditions: There is a game ongoing between the player and another player, and it's this player's turn

Trigger: player is ready to make a move

Scenario:

1. Player turn to place piece
2. Player chooses cell on board for piece to be placed to

Post conditions: If cell is open and move is legal based on piece movements, piece is placed in that cell

Exceptions:

1. Move is illegal (cell is taken)

Priority: High

When available: when it is player's turn

Frequency of use: every turn so long as the game is ongoing

Channel to actor: Controller class, player chooses piece and placement

Secondary actors: N/A

Channel to secondary actors: N/A

Open issues: N/A

Use case: surrender

Iteration: 1

Primary Actor: Player

Goal in context: allow player to surrender the game

Preconditions: there is a game ongoing between the player and another player

Trigger: player wants to surrender

Scenario:

1. Player thinks they cannot win

    2. Player presses surrender button

Post conditions: Game ends, player gets a loss, enemy player gets a win

Exceptions:

    1. N/A

Priority: Medium

When available: all game

Frequency of use: not often, likely rarely

Channel to actor: Controller class, GUI button to surrender

Secondary actors: N/A

Channel to secondary actors: N/A

Open issues: N/A

Use case: inCheck

Iteration: 1

Primary Actor: Player

Goal in context: player is in check in chess

Preconditions: Enemy player moved a piece in a way where it puts the King piece at risk but can be defended

Trigger: King is then in check

Scenario:

    1. Enemy player's move puts player's king in check
    2. Player is blocked from doing any moves that would not move king to safety or block the check with another piece

Post conditions: Player must stop the check either by moving the king out of the way or blocking the check with another piece

Exceptions:

    1. There is no way for the player to save the king, making this a checkmate not a check

Priority: High, required for proper chess functionality

When available: all game

Frequency of use: often

Channel to actor: Controller class

Secondary actors: N/A

Channel to secondary actors: N/A

Open issues: N/A