## **Checkmate**

Use Case: Checkmate in Chess

Iteration: 1

Primary Actor: Chess Player 1

Goal in context: To deliver a checkmate and win the game by placing the opposing Chess

Player 2 in a position where it cannot escape the attack.

**Preconditions**: A game of chess is ongoing.

**Trigger**: The player's move places the opponent's king in a position where it is in check and no legal move exists for it to escape check,

## Scenario:

- 1. A game of chess is being played between two players
- 2. As the game goes by, Chess Player 1 recognizes that their opponent's king is in a position for checkmate.
- 3. A player moves their pieces to attack the opponent's king.
- 4. The king is unable to move or block the attack and no longer has any possible moves outside of accepting a capture in the next move.
- 5. A "checkmate" is declared by Chess Player 1.
- 6. The game ends with Chess Player 1 winning.

<u>Postconditions:</u> The opponent's king is checkmated and the player wins the game. The victory is recorded along with the captures of pieces made in the session.

## **Exceptions**:

- 1. The opponent's king can escape.
- 2. The opponent can use another piece to block or capture the attack piece.
- 3. The opponent made an illegal move due to a coding error.

**Priority**: High, it is an end goal in the game and one way to ensure that the match concludes.

**When Available**: As soon as the opponent's king is in a position where no legal moves are possible to avoid check.

Frequency of Use: At most Once each game, but can not occur at all if draw is called.

Channel to Actor: Game GUI

**Secondary Actors**: Chess Player 2 (Opponent/Player being checkmated).

Channel to secondary Actors: Game GUI

## Open Issues:

- 1. After a game has ended will there be the option for a rematch?
- 2. After a game has ended will there be the option for a match review?