## **Use Case Specification:**

**Primary Actor:** player, AI.

## **Interests and logic:**

- The player should be able to choose his opponent when he or she starts a game. This should be available via a windowed menu.
- The player should be able to choose whether to play offline or online through the internet.
- When playing vs an AI, the player would like the option to choose the difficulty of his or her opponent.
- When choosing an opponent the player would like to be able to choose to play as black or white pieces. Whether the player chooses white or black. White player always starts with taking a turn.
- The player must write a user name to identify himself and his ELO rating.
- Player can be select between blitz or FIDE (regular) rules.
- Advanced moves such as promotion, castling and en passant should be accepted by the client.
- A clock should count the time each player uses on their turns.
- The game should display who's turn it is.

## **Extensions:**

- Player would like a record of previous moves executed in the game displayed in a list.
- Player would like sounds to be played when events happen in game.
- At any time the player should be able to start a new game.
- Moving a piece to an invalid location should not perform move, but provide no reaction from the game.
- Trying to move opponents pieces should provide no reaction from game.

## **Success Guaranteed Scenario:**

- A player chooses to start a new game.
- A player choose whether to play as white or black, whether to play against human or AI, whether to play online and offline against a human and finally the player should be able to choose the difficulty of the AI opponent.
- A game can be played out without bugs causing the game to crash and refuse to continue.
- All moves are recorded in algebraic notation.
- All captured pieces for both black and white should be displayed at all times.
- Arbitrary many undos and redos without issues.
- Game plays out until game ends via checkmate or stalemate.
- Game ended screen is shown.