Use case: “Start Game”

Initiating actor: Player

Pre-conditions: Player is logged in

Primary Scenario:

1. Player selects the “Start PvP Match” or “Start AI Match” option from the UI
2. If Player selected to play against another player, they are entered into a lobby. If they have selected to play against the AI, they are taken to a difficulty options screen for the AI.
3. If the Player has selected to play against the AI, upon selecting a difficulty the game starts.

Exceptions:

1. The Player’s login cookie has expired during the process and they are no longer a verified user.
   * *The user will be then redirected to the login page.*

2. The Player no longer wishes to start a game or wants to reset their decisions. Upon clicking “Return”:

* + *The user is redirected to the main menu*

3. The Player somehow loses connection to the webpage during an AI match.

* *The game will not count as a loss or a win.*

Post-conditions: The Player is entered into a matchmaking lobby if they have chosen to play against another player, or if they have chosen to play against the AI the game starts with the specified settings.

Benefiting Actor: Player

Use case: “Find Opponent”

Initiating actor: Player

Pre-conditions: Player is logged in and has selected to start a game against another Player

Primary Scenario:

1. Player is entered into the lobby
2. Player is given a choice of opponents to challenge
3. On clicking an opponent the player sends an invite to their opponent
4. If the player being challenged agrees to start the match, both players are entered into a game and the player who starts the game will be the white pieces

Exceptions:

1. The Player’s login cookie has expired during the process and they are no longer a verified user.

* + *The user will be then redirected to the login page.*

2. A Player is challenged to a match, and the following message displays:

* + *You are being challenged! Would you like to accept? Yes No*

While the Player sending the challenge is shown the following message:

* + *Challenge sent. Response pending… If you are rejected you will return to the lobby*

If the Player rejects the invite, both players are returned to the lobby.

3. The Player somehow loses connection to the webpage while in a game.

* *The game will not count as a loss or a win.*

4. The Player wishes to exit the lobby. Upon selecting “Return”:

* + *The user is removed from the lobby and redirected to the main menu*

Post-conditions: Player is in a game against their matched opponent

Benefiting Actor: Player

Use case: “Forfeit”

Initiating actor: Player

Pre-conditions: Player is logged in and currently in a game

Primary Scenario:

1. A Player or the AI wins the game
2. The result of the match is displayed, and the appropriate game statistics are updated
3. The Player selects to “Return to main menu” in a match against the AI, or “Return to lobby” if playing player versus player and is redirected appropriately, ending the game

Exceptions:

1. Player willingly leaves a match partway. System ends game and presents a message to remaining Player:
   * *Your opponent has forfeited!*
   * *You win by default*  *Return to lobby*

The Player who is leaving is presented the following message on exit:

* + *Forfeit?*
  + *This match will be recorded as a loss Yes.*

2. A fatal connectivity error occurs during the match.

* *The game will not count as a loss or a win.*

Post-conditions: Player is no longer in a game

Benefiting Actor: Player