Use Case: Start Game

Primary Actor: Player

Stakeholders and interests:

- Player: Wants to start a game, and have the ability to play with any number of human or computer opponents
- Other Players: Want to be able to be included in a game

Preconditions: Player has access to the game

Success Guarantee: A game starts with the specified number of human and computer players

Main Success Scenario:

- 1. The user selects to play a game
- 2. The system displays options for how many human and computers are playing
- 3. The user selects the number of human and computer players
- 4. The system displays options for difficulties for computer players [Alt1: no computer players]
- 5. The user selects a difficulty
- 6. The system provides options for visual impaired players
- 7. The user selects any options needed
- 8. The system displays the selected game scenario for the user to confirm
- 9. The user confirms the information is correct and starts the game [Alt2: the user says the information is incorrect]
- 10. The system initiates a game

Alternative Flows:

Alt1: no computer players:

1. Flow resumes at Main success scenario 6

Alt2: the user says the information is incorrect:

1. Flow resumes at Main success scenario 2

Exceptions:

If the system is unable to initiate the game, it attempts to find the reason for the failure, informs the user, and the use case ends.

Special requirements:

• Customization of game colours to aid players with visual disabilities

Use Case: Take a Turn

Primary actor: Player

Stakeholders and interests:

- Player: wants to be able to make a valid move, and be able to cancel a move if they decide against it
- Other players: wants to be able to have the turn rotation flow properly

Preconditions: Player has access to the game

Success Guarantee: The move the player wants to make happens, and play moves to the next player

Main Success Scenario:

- 1. The server presents the player with their available pieces
- 2. The user selects a piece to play on the board
- 3. The user selects a place for the piece on the board [alt1: the placement is invalid]
- 4. The system requests that the user confirm their placement
- 5. The user confirms the placement [alt2: the user cancels the placement]
- 6. The system shows the piece on the board
- 7. The turn moves to the next player

Alternative Flows:

Alt1: the placement is invalid

- 1. The system informs the player that the placement is invalid
- 2. Flow resumes at main success scenario step 2

Alt2: The user cancels the placement

1. Flow resumes at main success scenario step 2

Exceptions:

If the system is unable to place the piece, it attempts to find the cause of the issue, informs the user, and restarts the use case

Special requirements:

• Ability to rotate pieces while going to place them