

## Initiate Game

**Primary Actor:** Player

### Stakeholders and Interests:

- Player: Wants to select the number of players (human/CPU opponents), wants to indicate any visual deficiencies, wants to select the level of difficulty, and wants to begin gameplay

### Precondition:

- The player has compiled the game
- The player has run the game

### Success Guarantee (Postconditions):

- Player has selected the total number of players to participate in the game. The player has selected the level of difficulty of their CPU opponents. The player has indicated if they have visual deficiencies. Gameplay begins, whereby game pieces are coloured (or styled) in accordance to any visual deficiencies identified and the number and difficulty level of opponents is as was selected.

### Main Success Scenario:

1. The system presents the player with various options/preferences. This would include the number of players, the difficulty of the CPU players and any visual deficiencies. [*Alt1: there exists a previously saved game*]
2. The player selects the number of human players that will participate in the game.
3. The system records the selected number of players.
4. The system displays the players selection
5. The player chooses a level of difficulty for opponents.
6. The system records the selected difficulty.
7. The system displays the players selection
8. The player identifies how they would like the pieces to be displayed to accommodate for their visual deficiencies..
9. The system records the selected appearances of the pieces..
10. The system displays the players selection
11. The player indicates that they have set all options to the desired values and wish to begin gameplay. [*Alt2: change player number selection*] [*Alt3: change difficulty selection*] [*Alt4: change piece appearance selection*]
12. The system hides the menu UI.
13. The system presents the game board.

14. The system creates the necessary number of CPU players with their difficulties set to the selected value.
  15. The system colours (or stylizes) the game pieces to comply with any visual deficiencies.
  16. The system allows gameplay to begin, and prompts the first human player to take a turn.
- [Use case ends]*

#### **Alternative Flows:**

##### *Alt1: there exists a previously saved game*

1. The system prompts the player, asking if they would like to resume the instance of the game that had been previously saved.
2. If the player indicates that they would like to start a new game, continue at Main Success Scenario step 2.
3. Otherwise the system hides the Menu UI.
4. The system displays the board.
5. The system creates the number of CPU players specified in the saved game.
6. The system sets the difficulty of those CPU players to the difficulty specified by the saved game.
7. The system populates the board with pieces in accordance to the data in the saved game.
8. The system allows the player that is specified as having the next turn by the save game to take a turn.

##### *Alt2: change player number selection*

1. The player indicates a number of players that differs from that which had previously been selected.
2. The system overwrites the previously recorded number of players with the newly indicated number.
3. The system displays the players updated selection.

##### *Alt3: change difficulty selection*

1. The player indicates a difficulty that differs from that which had previously been selected.
2. The system overwrites the previously recorded difficulty with the newly indicated difficulty.
3. The system displays the players updated selection.

##### *Alt4: change piece appearance selection*

1. The player indicates a way of displaying the pieces that differs from that which had previously been defined.
2. The system overwrites the previously recorded display settings with the newly indicated settings.
3. The system displays the players updated selection.

**Exceptions:**

- If the player tries to initiate gameplay without first selecting a difficulty or number of players, the system informs the player that they must do these things before continuing.

**Open Issues:**

- How will the selection of display settings to accommodate for vision deficiencies be presented to the player?