

## Choosing Difficulty

**Primary Actor:** Player

**Stakeholders and Interests:**

- Player: Wants to select the difficulty of the CPU players for the following instance of Blockus

**Precondition:**

- The player has compiled the game
- The player has run the game
- At least one of the players is a CPU player

**Success Guarantee (Postconditions):**

- The player has selected the level of difficulty for their CPU opponents. Gameplay begins, with the difficulty of the CPU players as was selected.

**Main Success Scenario:**

1. The player indicates that they wish for there to be at least one CPU player. *[Alt1: There are no CPU players]*
2. The system presents the player with a choice of three difficulty settings: Easy, Medium, and Hard.
3. The player selects one of the levels of difficulty.
4. The system records the choice of the player
5. The system updates the UI to show the players choice. *[Alt2: The player chooses another difficulty setting] [Use case ends]*
6. The player sets all other settings as they desire.
7. The player indicates that they wish to begin the game.
8. The system presents the board.
9. The system creates computer players
10. The system sets the difficulty of the created computer players to the chosen difficulty.

**Alternative Flows:**

*Alt1: There are no CPU players*

1. The player chooses the number of human players (Use case resumes at Step 6)

*Alt2: The player chooses another difficulty setting*

1. The recorded difficulty setting is replaced by the newly selected difficulty setting.

**Exceptions:**

- If the player doesn't choose a difficulty setting the play button doesn't begin gameplay, and a popup window appears informing the player that they must select a difficulty before proceeding.

**Open Issues:**

- Will the player choose the number of human players before or after CPU players?

**Notes:**

- The use case ends at “[Use case ends]”. Everything beyond that point is there to give context and make it more understandable.