

Take a Turn

Primary Actor: Player

Stakeholders and Interests:

Player: Wants to place a piece on the board according to the game rules of Blokus.

Preconditions:

A game has already been initiated and it is the player's turn.

Success Guarantee:

The player places a piece on the board if able, the system displays the piece on the board.

Main Success Scenario:

1. The player selects a piece. *[Alt1: Player has no pieces]*
2. The player chooses an orientation for piece.
3. The player chooses a location for the piece. *[Alt2: Player puts piece back]*
4. The system determines if the move is legal. *[Alt3: Move is not legal]*
5. The system redraws the board.
6. The system determines if there are legal moves remaining. *[Alt4: No legal moves remain]*
7. The system allows the next player in turn order to take a turn. *[Use case ends]*

Alternative Flows:

Alt1: Player has no pieces:

1. The player cannot take turn. Skip to Main Success Scenario Step 6. *[Use case ends]*

Alt2: Player puts piece back:

1. The player puts the piece back in the collection.
2. Return to Main Success Scenario 1.

Alt3: Move is not legal:

1. The system prompts the player that the move is not legal.
2. Return to Main Success Scenario Step 3.

Alt4: No legal moves remain:

1. Game ends, the system proceeds to final scoring. *[Use case ends]*

Exceptions:

- Instead of taking turn the player elects to save the game and exit. Flow will stop until the game is resumed.

Special Requirements:

- User should be able to enable or disable hints.
- User should be able to enable or disable vision impairment settings.

Open Issues:

- Differentiating between players and control of a colour.
- Determining the status of the game (ie. Number of legal moves remaining) efficiently.