

# Take a Turn Use Case

## Group 5

**Primary Actor:** Player

**Stakeholders and Interests:**

- *Player:* wants to make a move, wants to either make a single move, wants to move one space vertically or horizontally on the board if applicable, wants to make a multiple move, wants to move the whole stack if their pawn is on top of the stack, wants to choose how much of the stack they want to move, wants to reserve/capture the pieces if the height of the stack the player moved the pieces to is more than five.

**Preconditions:**

- It is the player's turn (i.e., the player can make the desired move).

**Success Guarantee (Postconditions):**

- The player has made their move.
- The player has made their move by selecting among the choices available to them.
- The pawn's position that the player chose to move has been updated with other necessary changes.
- The play is then passed to the next player.

**Main Success Scenario:**

1. The system allows player's to take turn.
2. The system notifies the player that it is their turn.
3. The user makes their move and the play passes to the next player.
4. The user then selects their pawn that they want to move.
5. The system shows all the possible places on the board where the user can drop their pawn.
6. The user selects a position to land their pawn it can be an empty space or a stack of pawns. [*Alt1: Pawn Lands on stack, Alt2: Pawn captures another player's pawn*].
7. The system then validates the move made by the player.
8. The system updates the pawn's position. [*Use Case Ends.*]

## **Alternative Flows:**

### *Alt1: Pawn Lands on stack*

1. After moving a piece/stack the player needs to check the height of the stack that they mover their piece to.
2. The system informs the user to remove the pieces from the bottom of the stack if the height of the new stack contains more than five pieces.
3. The pieces removed by the user will either be captured or put into reserve.
4. If a player has playing pieces in reserve, they can make a reserve move instead and can place it at position of their choice(empty or non-empty).
5. The system then updates the position of the pawn.
6. Flow resumes at Main Success Scenario Step 8.

### *Alt2: Pawn captures another player's pawn*

1. The system sends the captured pawn to the player's house whose pawn was captured and will not be used for the rest of the game.
2. Flow resumes at Main Success Scenario Step 8.

## **Exceptions:**

- A player can forgo a turn if and only if player is playing with a partner and there are no possible moves.

## **Special Requirements:**

- The colour of the pawn should accommodate for vision deficiencies and the system must accurately display the number that the user has rolled.

## **Open Issues:**

- How to update the position of the pawn when the user makes the move, do we want to make the pawn directly jump or make the pawn jump one step at a time?