

## Use case description: Take a turn

Primary Actor: User (at least one Human player)

### Stakeholders and Interests

User: Desires to play the game by taking their turn and interacting with their pieces. The user expects that the game is ready to play and that the computer players will take their turn on their own without having to interact with it.

System: Requires users to interact with the platform to take their turn and return the outcome.

### Pre-Conditions:

The game board is ready with pawns and barricades in place. The game is currently setup with the number of players and whether there are computers. The order of turns has already been determined and in place.

### Post-Conditions:

The pieces and game board must update along with a winner being determined once the game is finished. Barricades must be placed and moved to correct areas and AI movement should be automated. Should return a message declaring the winner of the game.

### Main Success

1. User/s will interact with roll dice button. **[Alt1: Computer's Turn]**
2. System generates a random number between 1-6.
3. User/s decide which path they take
4. System keeps track of the path and moves the piece along it.  
**[Alt2: Barricade in path]**  
**[Alt3: Land on final space]**
5. System moves the piece.
6. System changes users turn. **[Return to step 1]**

### Alternative Flow:

#### **Alt 1: Computers turn.**

1. System generates a random number without interaction of the button.
2. System will decide its own path.
3. System will proceed with step 4.

#### **Alt 2: Barricade in path.**

1. User must roll exact amount to land on the barricade.

2. User must change the location of the barricade to an open location.
3. System moves the barricade to desired location.
4. System moves the piece to the correct location.

**Alt 3: Land on final space.**

1. User must roll exact amount to land on the final space.
2. System moves the piece to the final space.
3. System declares "User" the winner.
4. System stops game from being played until new game.

Exception:

4.a: There is a barricade in the path, and you roll higher: The use case moves to step 6.

Special Requirements:

An OS that can run jar files including the required JDK.

Open Issues:

Barricades should be made so they cannot be placed on a space including a player or another barricade.