

# Use Cases

Three main use cases have been identified. These three main use cases also include some sub use cases.

There are two actors in the game: a human player and a computer player. The human can start a game, take a turn, and quit the game. The computer can only take a turn.

## 1.) Start Game

<b>Summary:</b>	Application user wants to start the game. This use case includes the select players use case.
<b>Priority:</b>	Essential
<b>Use Frequency:</b>	Always
<b>Main Success Scenario:</b>	1.) Player launches application 2.) Player configures each opponent, selecting the strategy they will use. 3.) Player presses "Play Now!" and the game launches with a valid configuration.
<b>Alternative Scenario Extensions:</b>	None

## 2.) Take Turn (Player or computer)

<b>Summary:</b>	Player takes a turn
<b>Priority:</b>	Essential
<b>Use Frequency:</b>	Always
<b>Main Success Scenario:</b>	1.) Player presses "Roll Die" 2.) Player selects one of the pawns to move. Computer player selects the pawn based on their strategy. 3.) A valid move is made.
<b>Alternative Scenario Extensions:</b>	1.) If Player selects "Options", then Player change settings and confirm changes made. 2.) If Player presses the "Restart" button, the system asks player for confirmation. The player presses "Yes" and the game restarts.

### 3.) Quit

<b>Summary:</b>	Player quits the game
<b>Priority:</b>	Expected
<b>Use Frequency:</b>	Sometimes
<b>Main Success Scenario:</b>	1.) Player presses the 'Quit' button 2.) The game prompts the user to quit 3.) Player is redirected to the player setup screen
<b>Alternative Scenario Extensions:</b>	If the player is upset they may quit by other means; a "Rage Quit," includes killing the process or powering off the computer in frustration.

## Sub Use cases

### 1.) Move Pawn

<b>Summary:</b>	Move Pawn
<b>Priority:</b>	Essential
<b>Use Frequency:</b>	Always
<b>Main Success Scenario:</b>	1.) Pawn is move initiated in response to input from a player or computer. 2.) Pawn moves to correct square, following rules of the game.
<b>Alternative Scenario Extensions:</b>	1.) Occupied square contains another players pawn. The Move Pawn and kick extension is then executed. The kicked pawn is returned to its home squares.

## 2.) Roll Die

<b>Summary:</b>	Roll Dice
<b>Priority:</b>	Essential
<b>Use Frequency:</b>	Always
<b>Main Success Scenario:</b>	1.) Dice is rolled by player or computer 2.) A valid dice roll is returned 1-6
<b>Alternative Scenario Extensions:</b>	None

## 3.) Setup Players

<b>Summary:</b>	Setup Players
<b>Priority:</b>	Essential
<b>Use Frequency:</b>	Always
<b>Main Success Scenario:</b>	1.) Player configures game before it starts 2.) Selects each of the four players strategies; these could include human or ai strategies. 3.) A valid strategy is selected for each player
<b>Alternative Scenario Extensions:</b>	User uses defaults and does not use configuration options.