

Use Case: Open the game

Step	User's Action	System's Response
1		The system displays two text-field for players to enter their names and two buttons for players to select one of the styles of the board.
2	Players enter their names and click one of the buttons	
3		The system displays the style selected by the user

Variation #1

1.1 In Step 3, if the player wants to go back and change the style of the board, exit the game and continue to Step 1 again

Use Case: E[X]it

Step	User's Action	System's Response
1	The player clicks [X] to exit to terminate the game	
2		The system terminates the game

Use Case: The game starts

Step	User's Action	System's Response
1	Player1 selects a square on the board	
2		The system checks if the board is in winning state
3	Player2 selects another square on the board	
4		The system checks if the board is in winning state

5	Each player alternates their moves until one of the players has drawn a row of 3 Xs or Os whether horizontally, vertically or diagonally	
6		The board is in winning state, so the system disables all squares and announces the winner
7	Player1 or Player2 wins the game	
8		The system terminates the game

Variation #1:

1.1 After Step 5, if the board is not in winning state even after each player has drawn a row of 3 Xs and Os, the system will display the message “Game Over”.

Use Case: Undo the state

Step	User’s Action	System’s Response
1	The player selects a square on the board	
2	Player undoes what he/she has just selected	
3		The system checks whether the player has clicked the Undo button 3 times per turn and checks whether the player tries to make multiple undo in a row. If no, the system will support the undo functionality and the state will go back to its previous state.
4	The player makes another choice and selects the new square in a row after clicking the Undo button	

Variation #1:

1.1 In Step 3, the system checks whether the player has clicked the undo button 3 times per turn. If yes, the system will not allow this player to undo and the next player will have to take his/her turn.

Variation #2:

2.1 In Step 3, if the player tries to make multiple undo in a row, the system will not allow it.