

Tic Tac Toe Use Case Description

Use Case 1: Start game

Iteration: 1

Primary Actor: Player

Goal in Context: To start a new tic tac toe game.

Preconditions:

- Player has accessed an online multiplayer game platform
- Tic tac toe is available to play

Trigger: Player selects the option to start the game.

Scenario:

1. The player selects “start game”.
2. The system prepares the Tic Tac Toe game board.
3. Each player is assigned an “X” or an “O” randomly.
4. The game shows the starting player to begin the game

Post Conditions: The game board is ready, and the first player can make a move.

Exceptions: The system fails to load the game.

Priority: High priority

When Available: Always available

Frequency of Use: Used once every game session

Channel to Actor: The user interface, using a mouse and/or a keyboard

Secondary Actors: None

Channel to Secondary Actors: N/A

Open Issues: N/A

Use Case 2: Make a move

Iteration: 1

Primary Actor: Player

Goal in Context: To place the player's mark (X or O) in the selected cell in the game board.

Preconditions:

- The Game has started.
- It is the player's turn to a move

Trigger: There are still empty slots and the player clicks on an empty slot in the game board.

Scenario:

1. The player selects an empty slot on the game board.
2. The system places the player's mark on the selected slot.
3. The system updates the game board and switches turns to the other player.

Post Conditions:

- The selected slot is updated with the player's mark.
- The system is prepared for the next player's move.

Exceptions: The selects a non-empty slot, and the system denies the move.

Priority: High priority

When Available: Always available during a game

Frequency of Use: Used multiple times a game

Channel to Actor: The user interface, using a mouse and/or keyboard

Secondary Actors: None

Channel to Secondary Actors: N/A

Open Issues: N/A

Use Case 3: Check if a player won the game

Iteration: 1

Primary Actor: Game system

Goal in Context: To check if a player has won the game by achieving three of the same mark in a row, column or diagonal.

Preconditions:

- The player has completed their turn
- There are at least 5 moves made on the game board.

Trigger: A player has completed their turn.

Scenario:

1.

Post Conditions:

Exceptions:

Priority:

When Available:

Frequency of Use:

Channel to Actor:

Secondary Actors:

Channel to Secondary Actors:

Open Issues: N/A

Use Case 4: Check if the game is a draw

Iteration:

Primary Actor:

Goal in Context:

Preconditions:

Trigger:

Scenario:

1.

Post Conditions:

Exceptions:

Priority:

When Available:

Frequency of Use:

Channel to Actor:

Secondary Actors:

Channel to Secondary Actors:

Open Issues:

Use Case 5: End game

Iteration:

Primary Actor:

Goal in Context:

Preconditions:

Trigger:

Scenario:

1.

Post Conditions:

Exceptions:

Priority:

When Available:

Frequency of Use:

Channel to Actor:

Secondary Actors:

Channel to Secondary Actors:

Open Issues: