

Use Case: Playing Multiplier Tic Tac Toe

Primary Actor:

- Tic Tac Toe player one and player two

Goal:

- The goal of each player is to win the game by placing their selected symbol side by side three times either in a row, column or diagonally.

Precondition

- Each player must log into their accounts for the online board game platform.
- To play the game in multiple players must have access to wi-fi.
- In order to run the game, the player must select Tic Tac Toe in the board games menu.

Trigger:

- Once the game has begun running the player selects start and joins an online session with another online player.

Scenario:

1. Player one selects X or O, the symbol that remains unselected gets assigned to player two.
2. Player one selects any empty cell inside of the three-by-three grid.
3. The game places player one's symbol inside of the selected cell.
4. The display changes to show that it's player two's turn
5. Player two selects an empty cell
6. The game places player two's symbol inside of the selected cell.
7. Steps 2 – 6 repeats until either a player wins the game or until all the cells get filled.

8.If a player wins the display changes to show the winner and each player can choose to exit the game, rematch or choice to play another match with someone else.

Exceptions:

1.All cells become occupied: The game ends in a draw and each player can choose to rematch or exit the game.

2.Player selects a cell when it's not their turn: The grid does not change but the player is alerted through a pop up that it's not their turn

3.A player exits their game before the game ends: **The remaining player is connected to a new match**

4.A player has not interacted with the game for more than two minutes: The inactive player is kicked out of the match and the active player wins the game.

5.Player has a weak or non-existent internet connection: A pop-up window alerts the player of the issue, after which the player is not allowed to join the online game until they have a strong enough connection.

Priority:

- Essential: required to the test basic functionality of the platform.

When available:

- End of second project iteration.

Frequency of use:

- Frequent.

Channel to actor:

- Trackpad, mouse and keyboard used by player.

Secondary Actor:

- Dev team responsible for creating and maintaining the online board game platform.

Channel to secondary actor:

- Technical support: Email

Open issues:

- Should we implement an offline version of the game.
- For the offline version are we going to incorporate different difficulty levels.
- Should we provide the option for players to play on different grid sizes.