**USE CASE:** Player Chooses Square to Mark

**ACTORS:** Player 1, Player 2

**GOALS:** To fill a square with either an ‘X’ or an ‘O’, depending on which actor (player number) clicks

**PRECONDITIONS:** Game started (which occurs when webpage is opened)

**STEPS:**

|  |  |
| --- | --- |
| 1. Player selects a square to mark | 2a. (If square is empty) – square fills with ‘X’ or ‘O’, depending on player role  2b. (if square is full) – nothing occurs. Player may choose again. |
| 1. Repeat step 1 until a player wins, or both players tie. |  |

**USE CASE:** Player Chooses Square to Mark and Wins the Game (3-in-a-row)

**ACTORS:** Player 1, Player 2

**GOALS:** Player wins the game and is congratulated

**RELATED USE CASES:** Player Chooses Square to Mark

**PRECONDITIONS:** Player has two marks (of theirs) in a row, either diagonally, horizontally, or vertically

**STEPS:**

|  |  |
| --- | --- |
| 1. Player selects a square to mark | 1. Dialog box appears congratulating user for winning the game (3 marks in a horizontal, vertical, or diagonal row) |

**USE CASE:** Player Chooses Square to Mark and Ties the Game

**ACTORS:** Player 1, Player 2

**GOALS:** Final box is marked, and no winners are discovered

**RELATED USE CASES:** Player Chooses Square to Mark

**PRECONDITIONS:** All boxes minus one (n-1; n=9 currently) are ticked

**STEPS:**

|  |  |
| --- | --- |
| 1. Player selects a square to mark | 1. Dialog box appears informing both players that the result of the game is a draw. |