Capstone Project – Sprint 1

4x4 Tic-Tac-Toe

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Application Description

The function of this program will be to set up a game of 4x4 Tic-Tac-Toe. To begin I just want to set-up a single player game that will allow you to choose where you would like to place X’s and O’s in a turn based format, with a winner being declared after 4 X’s or O’s are placed in a row. I want to persist the game board as well as a running match total for both sides.

A WPF board will be created for the user to click where they want to place their letter, while a SQL database is used as the database. WVVM will likely be the design pattern.

I am planning on having a small table, via SQL to persist which buttons have been pressed and by whom. A box model with accompanying blank box, X box and O box will be implemented, as well as game logic.

User Stories

As a player, I want to press an empty box to insert either an X or an O so that the game has functionality.

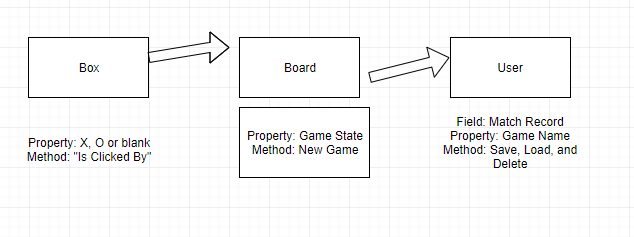
As a player, I want to see whose turn it is so that the game will be clearer, especially on loaded games.

As a player, I want to be able to save the game so that the game can be exited without losing my progress.

As a player, I want to see who won the game or if it was a tie so that the game feels playable.

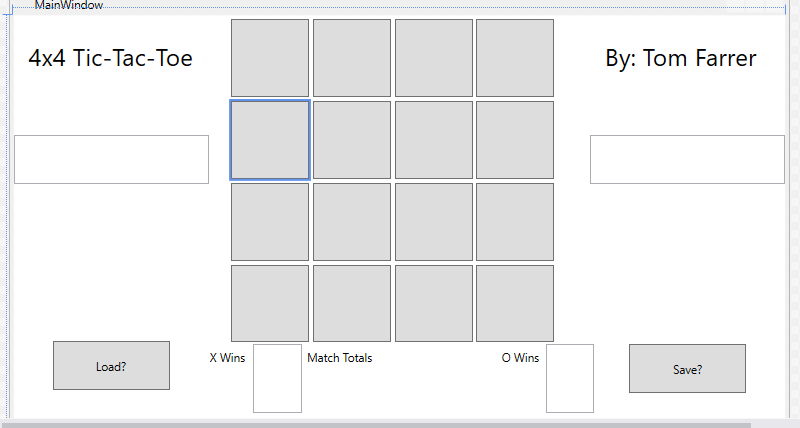
As a player, I want have a running total of match records so that a winner can be declared.

Entity Diagrams



Wireframe

The textboxes on the left and right will indicate whose turn it is or indicate when the end of the game has occurred, while a running tally of match records will be below the game board. Load will likely be where you start a new game or enter a previous game. Save should allow you to record your progress and the buttons on the board will determine where an X or O will be placed (depending on whose Turn it is).



Sprint Reflections

The purpose of this sprint was largely to give myself a firm idea of what I wanted to accomplish. Setting up the game board as well as understanding what still needs to be done were the large accomplishments of this sprint.

Playing with stack panels can still be difficult for me to work with, but thanks to the calculator, I had a good template of how to resolve any issues.

I am still not clear on how to get SQL to store my game progress, but I will leave myself open to trying out MongoDB, since we have a link on how to accomplish this.

I still struggle with conceptualizing what I want to build or how I want to create it, but I can take it one step at a time and not be afraid to do something now and change it later.