

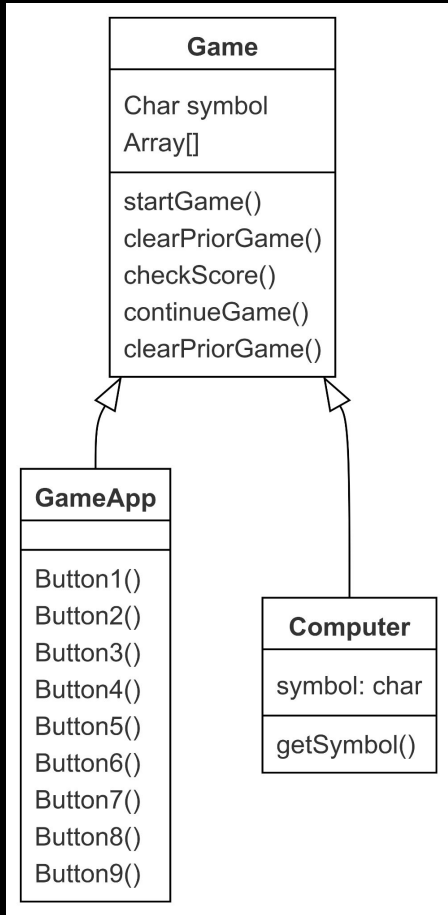
TIC-TAC-TOE APP

Ariel Cummings,
Trent Hoeffel,
Viswa Ponnusamy

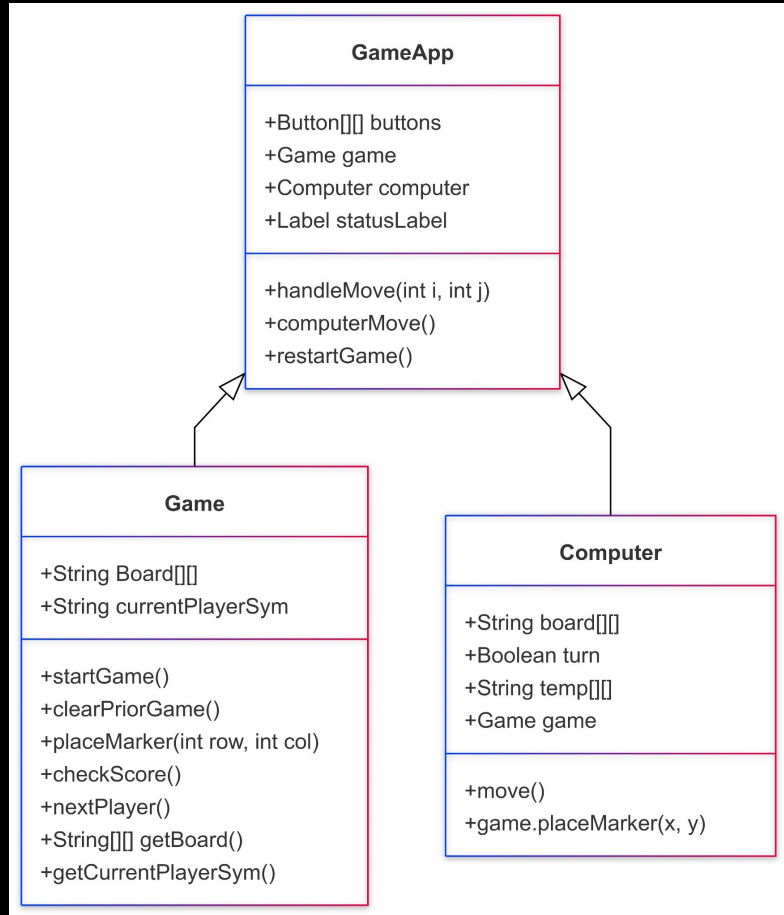
About

We developed a Tic Tac Toe game with an interactive graphical user interface to deliver the classic Tic Tac Toe experience. The game allows users to compete against a computer opponent, aiming to get three of their symbols in a row on a 3x3 grid. The first to align three symbols horizontally, vertically, or diagonally wins. This project is not only accessible for players of all ages, but also a great way for us to showcase our skills and put our learning into practice through a familiar game.

Initial Diagram



Final Diagram



Contribution Breakdown

Game Class

`startGame()` - initializes tic tac toe board and calls `clearPriorGame()`

`clearPriorGame()` - swaps all values of the board to null

`placeMarker()` - checks if a move is valid and returns bool

`checkScore()` - checks each row, column and diagonal for 3 in a row and returns a boolean

GameApp Class

Start() - contains all of the button initializers, VBox, gridPane, and scene.

handleMove() - calls placeMarker() to put down the move, checks if it was a winning move with checkScore(), and changes the turn with nextPlayer()

computerMove() - updates the board with the latest computer move

restartGame() - clears the board and returns to the starting state

Computer Class

`move()` - the board goes through checks for each possible type of scenario and edge cases and when a move is found, it calls on `placeMarker()` to confirm the move

Now, time for
demonstration!

THANK YOU!