Detail Design: configureGamePieces

Function configureGamePieces()

IF the starting game piece is X

The next piece is X

ELSE

The next piece is O

Detail Design: Who Solved Board

Function WhoSolvedBoard(theBoard)

FOR row < 5

FOR col < 5

IF row <2 or col <2

testCell = the cell being check

testGamePiece = the game piece that is in the cell

IF testGamePiece exists

FOR k < 10

IF there is a game piece in the next cell AND is the same as testGamePiece

IF there is a game piece two cells away AND is the same as testGamePiece

IF there is a game piece three cells away AND is the same as testGamePiece

RETURN the game piece in testGamePiece

END FOR

END FOR

RETURN none

Detailed Design: GameState

FUNTION GameState()

SWITCH the current game state

CASE current game state is None

BREAK

CASE current game state is Runround

IF there is only 1 player

IF (the player1 is human AND is not their turn) OR (the AI is the other player AND it’s the AI turn)

It’s the AI turn

IF there is a change in turns

There is no change in turns

P1Flag is the opposite

Set testSolved to whatever WhoSolvedBoard returns

IF testSolved does not equal game piece none

The current game state changes to a Victory

ELSE IF testSolved equals game piece none AND all cells are filled

The current game state changes to Draw

ELSE

IF the next piece is X

Next piece is O

ELSE

Next piece is X

BREAK

CASE current game state is Victory

IF is not the 1st player turn AND there are two human players

Display Player 1 Wins!

ELSE IF is the 1st player turn AND there are two human players

Display Player 2 Wins!

ELSE IF is not the 1st player turn AND there is only 1 human player

Display Player 1 Wins!

ELSE

Display Computer Wins!

BREAK

FUNCTION PlacePiece(theCell)

Drop piece equals the next piece

Create a gameobject called returnable

IF drop piece equal X

Returnable gets a X from the array that holds the Xs

Array of X index increases by 1

ELSE

Returnable gets an O from the array that holds the Os

Array of O index increases by 1

There is now a change in turns

RETURN returnable