

GROUP: 11

Github user names:

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Central concepts:

-Function that prints the board

1 2 3

1 | X | O | - |

Dash is empty, x is player, o is cpu

-Set up the board (empty)

Board is a 2d array (7 cols x 6 rows)

-Who goes first

Coin toss

-ask for player piece (X or O)

-Process playermove

Pass col

-Process cpu move

Places a piece on the board

-Win lose draw (relative to the player)

Win

4 Xs vertically, horizontally, diagonally

Lose

4 Os vertically, horizontally, diagonally

Draw

Neither 4 Xs or 4 Os and board is full

Implementation:

Void setupBoard()

// sets up the board for a new game

// player can choose custom char (X or O)

Void printBoard()

// displays the game board NICELY

// print out with coord grid labels

```
Int checkBoard(char player)
    // checks the board for a win loss or draw
    Return -1 for loss
    Return 0 for draw
    Return 1 for win

Void playerMove(char player)
    // takes in user input
    // verify input, within scope and col not full
    // call fillBoard with it

Void cpuMove(char player)
    // randomly places a piece in a randomly chosen col
    // verifies if random is okay, else tries again
    // if time
    // if cpu has 3 in a row, go for the winning move

Void fillBoard(int col, char input);
    // places piece on board on col
    // uses 'gravity' to determine where in col
```