

FinshedWorkingVersion

February 18, 2018

1 Tic Tac Toe

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In [ ]: board = [[" ", " ", " "], [" ", " ", " "], [" ", " ", " "]]
        def drawBoard(board):
            for i in range(3):
                print(" | ".join(str(x) for x in board[i]))
                if i<2:
                    print("-----")

        drawBoard(board)
```

2 My Code

3 Finished Working Version 3

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In [ ]: def drawboard(board):
        print ("\n")
        for i in range(3):
            print (" | ".join(str(x) for x in board[i])) # to place the characters within
            if i<2:
                print("-----") # to create the tic tac toe template

        def Winner(board):

            for i in range(3):
                horizontal = set(board[i])
                if len(horizontal)==1 and board[i][2]!=0:
                    return board[i][2] # to check if there is three in a row

            for j in range(3):
                vertical = set([board[0][j], board[1][j], board[2][j]])
                if len(vertical)==1 and board[1][j]!=0:
                    return vertical[1][j] # to check if there is three in a column
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diag1 = set([board[0][0], board[1][1], board[2][2]])
diag2 = set([board[0][2], board[1][1], board[2][0]])
if len(diag1)==1 or len(diag2)==1 and board[1][1]!=0:
    return board[1][1] # to check if there is three in a diagonal

return "No One"

if __name__=="__main__":

    Continue='yes' # to allow the player to stop or continue the game
    count_x=0
    count_o=0

    while Continue!='no':
        board=[[" "," "," "], [" "," "," "], [" "," "," "]] #the empty spaces within the

        drawboard(board)

        count = 0
        chance = True

        while chance:
            spot = input("Enter the row,column in same format as given: ")

            spot = spot.split(",") # to split the string into to separate for the rows and

            horizontal = int(spot[0]) -1 # Converted into a integer for the character to
            vertical = int(spot[1]) -1

            if count%2==0:
                print ("\nPlayer 1 chance!")
                if board[horizontal][vertical]==" ":
                    board[horizontal][vertical] = 'X'
                else:
                    print ("Already Filled. Try Again!")
                    count-=1
                drawboard(board)
                # Gives the player 1 two tries before it switches to player 2

            else:
                print ("\nPlayer 2 chance!")
                if board[horizontal][vertical]==" ":
                    board[horizontal][vertical]='O'
                else:
                    print ("Already Filled. Try Again!")

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        count-=1
        drawboard(board)
        # Gives the player 2, two tries before it switches to player 1

count+=1

if " " in board[0] or " " in board[1] or " " in board[2]:
    chance = True
else:
    chance = False
    print ("Chances Over!")
    # Check if it is a tie when the spaces are filled

if Winner(board)=='X':
    print ("Winner is ",Winner(board))
    count_x+=1 # Checks how many rounds the player has won
    break
elif Winner(board)=='O':
    print ("Winner is ",Winner(board)) # Displays the winner
    count_o+=1
    break
else:
    print ("No winner yet! Carry on.")
    # There is not a winner yet the game continues

Continue=input("Do you want to play again (y/n): ") # PLayer can stop or continu

print ("Thank you for playing!")
print ("Score is... \nPlayer 1: %s \nPlayer 2: %s"%(count_x, count_o)) # Allows play

```