Project 4: Tic-Tac-Toe Using Python, students will create a Tic-Tac-Toe game. This project has two parts 1. Designing the game so that two users can play Tic-Tac-Toe against one another. 2. Creating a Tic-Tac-Toe checker which will check the board to see if `Xs` or `Os` have won the game. ## Overview [Tic-Tac-Toe](http://www.merriam-webster.com/dictionary/tic-tac-toe) is a game in which one player draws X's and another player draws O's inside a set of nine squares and each player tries to be the first to fill a row, column, or diagonal of squares with either X's or O's. We will be writing an interactive Tic-Tac-Toe program. At the end of each turn the computer will check to see if X's have won the game or if the O's have won the game. ### Behavior * The program will prompt the user to enter their name and their opponents name. * Whoever enters their name first will be playing as X's, and the other player will be O's. * The players will take turns inputting the row and column they would like to place their mark. * If that spot is already taken the program will ask for the spot again. * At the end of each player's turn the program will * check if that player has won. * print the updated game board. * If there are no more spots open and nobody has won the game, the program will print `Tie game!`. ### Implementation Details * Use variables to store the user names for personalized prompts. * Create a game board represented as a list of lists, size 3 by 3. ***Note: This is a change from our earlier implementations of Tic-Tac-Toe. Why do you think this might be better?*** * Check for a winner horizontally, vertically, and on both diagonals. * Cannot allow a user to overwrite a spot on the board.