Assignment #1
Tic Tac Toe

The assignment is to design and implement the game of Tic Tac Toe (in Java). The game should allow for two players to play each other. You can choose which of the two players begins. The players should continue to take turns until there is a winner or until there is a stalemate. The game should be played in terminal mode, there should NOT be a graphical component to this game.

The program should begin with a welcome message indicating the purpose of the program. To begin the game, the program should display the initial (empty) board. It should then prompt each player to enter the space they would like to move to. If the space is free, the move should be accepted else, the move should be rejected and they should be prompted to enter another space. The program should display the updated board with each accepted move. When appropriate, the program should check the board for a winner. If the program finds a winner it should congratulate the winner. In summary the program should:

- maintain the configuration of the board as the game goes on
- prompt the users to enter their moves in alternate turns
- display the newly updated board
- check for a winner and declare the player that won if one is found
- If all squares on the board have been occupied without a winner, the program should announce a stalemate.

Following is an example run:

Welcome to … and other appropriate input/output information

```
+--+--+--+
|  |  |  |
+--+--+--+
|  |  |  |
+--+--+--+
|  |  |  |
+--+--+--+
```

Player O Enter your move: 1,1

```
+--+--+--+
|O |  |  |
+--+--+--+
|  |  |  |
+--+--+--+
|  |  |  |
+--+--+--+
```

Player X Enter your move: 2,2

```
+--+--+--+
|O |  |  |
+--+--+--+
|  |X |  |
+--+--+--+
|  |  |  |
+--+--+--+
```

Player O Enter your Move: 1,2

Organization, proper style and use of Objet Oriented principles are the objective of this assignment!

```
+--+--+--+
|O |O |  |
+--+--+--+
|  |X |  |
+--+--+--+
|  |  |  |
+--+--+--+
```

Player X Enter your move:1,3

```
+--+--+--+
|O |O |X |
+--+--+--+
|  |X |  |
+--+--+--+
|  |  |  |
+--+--+--+
```

```
Etc….
```

NOTE: Alternatively, you can make your program friendlier by numbering each empty square and allowing the user to name the square using that number instead of entering of the row number and col number of the square. The following is an appropriate naming scheme:

```
+--+--+--+
|1 |2 |3 |
+--+--+--+
|4 |5 |6 |
+--+--+--+
|7 |8 |9 |
+--+--+--+
```

At the end of each game have the program prompt (the players) if they want to play another game. If they enter in the affirmative i.e. (y/Y)es the program should continue and play another game of tic tac toe, else the program should politely exit.

Your program should keep track of the number of times that each player wins and print out summary results when they no longer want to play the game.

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