

2.2 Exercise #2.2: Tic-Tac-Toe

I have written this tutorial in an informal tone to suit the audience. The audience can be anyone able to read this tutorial and wanting to play the game of Tic-Tac-Toe.

I did play a few rounds of Tic-Tac-Toe to come up with the examples for this tutorial.

How to Play Tic-Tac-Toe

This document is for anyone who wants to know what Tic-Tac-Toe is and how to play it.

Tic-Tac-Toe is a simple two-player game. To play, you just need a paper, a pencil or two, and another player. The game is played on a 3x3 grid of nine boxes that looks like the '#' character.

The following figure shows an empty Tic-Tac-Toe grid.

You and the other player take turns drawing your chosen marks, either noughts (O) or crosses (X), in the empty boxes. The game continues until one of the following occurs:

- **Win** – One of you gets your mark in three consecutive boxes, horizontally, vertically, or diagonally. This means a win for that player!

The following figure shows an example, in which the player paying with crosses (X) has won the game.

X	O	X
	X	O
O		X

- **Tie** – No box is empty and none of you has your mark in three consecutive boxes. This is a tie!

The following figure shows an example of a tie.

X	O	X
O	O	X
O	X	O

Steps to play

To play tic-tac-toe, follow these steps:

1. On a paper, draw the empty grid shown above.
2. You and the other player select your respective marks from the noughts (O) and crosses (X).
3. Draw your mark in any empty box of the grid.
4. Let the other player draw their mark in another empty box of the grid.
5. Repeat the steps 3 and 4 until a win or a tie occurs.

TIP: Start the game with your mark in the box at the grid's center for a better chance of the win.
