# Tic-Tac-Toe Software Specification

## Overview

**Tic-tac-toe** (also known as **noughts and crosses** or **Xs and Os**) is a [paper-and-pencil game](https://en.wikipedia.org/wiki/Paper-and-pencil_game) for two players, *X* and *O*, who take turns marking the spaces in a 3×3 grid. The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row wins the game.

## Business Rules

The game can be played by two people or one against a machine.

Each player must switch taking turns, first X, then O.

Players must use the board given to them, they cannot add extra sides on to the board.

In order to win, the 3 letters must all connect in a straight line in one direction, up or down, left or right, or diagonally.

A draw occurs when all of the spaces on the game board have been filled by no player has won.