

Exercise 12

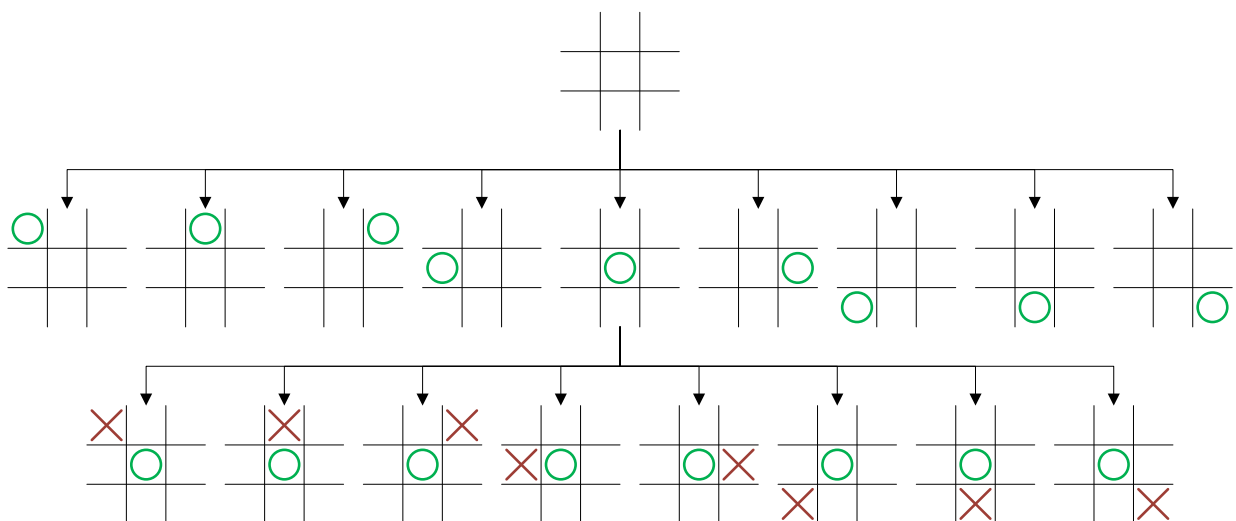
Goal:

Understand game tree

Tasks:

A game tree is a graphical representation of the game. We may consider a game tree is a directed graph whose nodes are positions in a game and whose edges are moves. The complete game tree for a game is the game tree starting at the initial position and containing all possible moves from each position.

“Tic-Tac-Toe” is a two-player game. In this game, **O** and **X** symbols are used to represent the two players respectively. For each turn, players will mark their symbol in a 3×3 grid. The player who succeeds in placing three respective marks in a horizontal, vertical or diagonal row wins the game.



CS 303L Data Structure and Algorithm Lab

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In this exercise, you need to build a game tree for “Tic-Tac-Toe”. The game tree will be used in the Programming Assignment 6 for computer to decide its movement.

You may refer to the following links to see a demonstration of the Tic-Tac-Toe.

<http://rintintin.colorado.edu/~epperson/Java/TicTacToe.html>