**TIC TAC TOE APPLICATION/PROJECT**

INTRODUCTION: You probably already know how to play Tic-Tac-Toe. It's a really simple game, right? That's what most people think. But if you really wrap your brain around it, you'll discover that Tic-Tac-Toe isn't quite as simple as you think!

Tic-Tac -Toe (along with a lot of other games) involves looking ahead and trying to figure out what the person playing against you might do next.

SUMMARY: TIC TAC TOE is a game in which two players alternately put Xs and Os in compartments of a figure formed by two vertical lines crossing two horizontal lines and each tries to get a row of three Xs or three Os before the opponent does.

**RULES FOR TIC-TAC-TOE**

**1.** The game is played on a grid that's 3 squares by 3 squares.

**2.** You are **X**, your friend (or the computer in this case) is **O**. Players take turns putting their marks in empty squares.

**3.** The first player to get 3 of her marks in a row (up, down, across, or diagonally) is the winner.

**4.** When all 9 squares are full, the game is over. If no player has 3 marks in a row, the game ends in a tie.

**HOW CAN I WIN AT TIC-TAC-TOE?**

To beat the computer (or at least tie), you need to make use of a little bit of strategy. Strategy means figuring out what you need to do to win.

Part of your strategy is trying to figure out how to get three **X**s in a row. The other part is trying to figure out how to stop the computer from getting three **O**s in a row.

After you put an **X** in a square, you start looking ahead. Where's the best place for your next **X**? You look at the empty squares and decide which ones are good choices—which ones might let you make three **X**s in a row.

You also have to watch where the computer puts its **O**. That could change what you do next. If the computer gets two **O**s in a row, you *have* to put your next **X** in the last empty square in that row, or the computer will win. You are forced to play in a particular square or lose the game.

If you always pay attention and look ahead, you'll never lose a game of Tic-Tac-Toe. You may not win, but at least you'll tie.

**MINIMUM SYSTEM REQUIREMENT**

Operating System: MS windows XP or Vista

Language: C#

Processor: Intel Pentium IV

RAM: 512MB

Hard Disk/Drive: 5GB

**RECOMMENDED SYSTEM REQUIREMENT**

Operating System: MS windows 7 or Higher

Language: C#

Processor: Intel Core i3 or Higher

RAM: 1GB or Higher

Hard Disk/Drive: 10GB or Higher

**SOFTWARE/TECHNOLOGY USED**

Language: C#

Software: Visual Studio 2019

Interface: Windows Form App

**GUI OVERVIEW**

A screenshot of a video game

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