



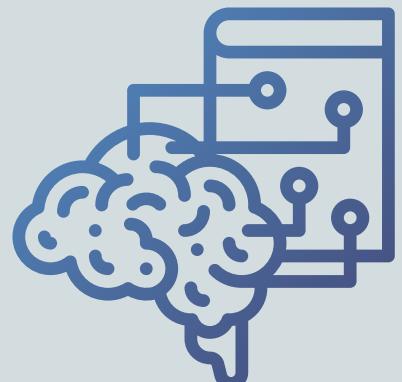
CSE REPORT

TIC TAC TOE



TABLE OF CONTENTS

- 01** INTRODUCTION
- 02** TIC TAC TOE USING C
- 03** FUNCTIONS USED
- 04** CODE
- 05** RULES TO PLAY GAME
- 06** OUTPUT



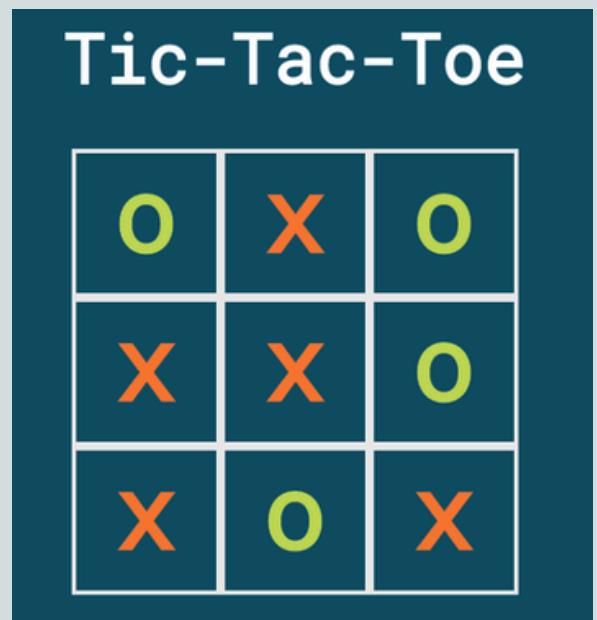
INTRODUCTION

TIC TAC TOE

We have probably played the Tic-Tac-Toe game to pass time during school hours. It's fun when you play with paper and pencil.

Here, we have a mini project in C Tic Tac Toe game – a simple console application without graphics, with the help of knowledge in C and some websites ,we made this game.

It is the same noughts and crosses or the Xs and Os, the other names for Tic-Tac-Toe, you've played with paper and pencil.



Tic Tac Toe Game

Development using C:

While making a Tic Tac Toe game using C language, it is important to make use of arrays. The Xs and Os are kept in different arrays, and they are passed between several functions in the code to keep track of how the game goes. With the code here you can play the game choosing either X or O against the computer.

This Tic Tac Toe C game is such that you will have to input a numerical character, from 1 to 9, to select a position for X or O into the space you want. For example: if you are playing with O and you input 2, the O will go to first row – second column. If you want to place O in third row – first column, you have to enter 7. And, it is similar for the other positions.

Functions Used:

We have divided this project into many functions, and below is a list of those functions. I have only described the function in brief and its use over there. Just go through the source code once, and easy to understand.

Functions used in Tic Tac Toe:

- **int checkForWin();**
- **void displayBoard();**
- **void markBoard(char mark);**
- **int main()**

- **int checkForWin()** - eligible criteria for winning or loosing.

FUNCTION TO RETURN GAME STATUS

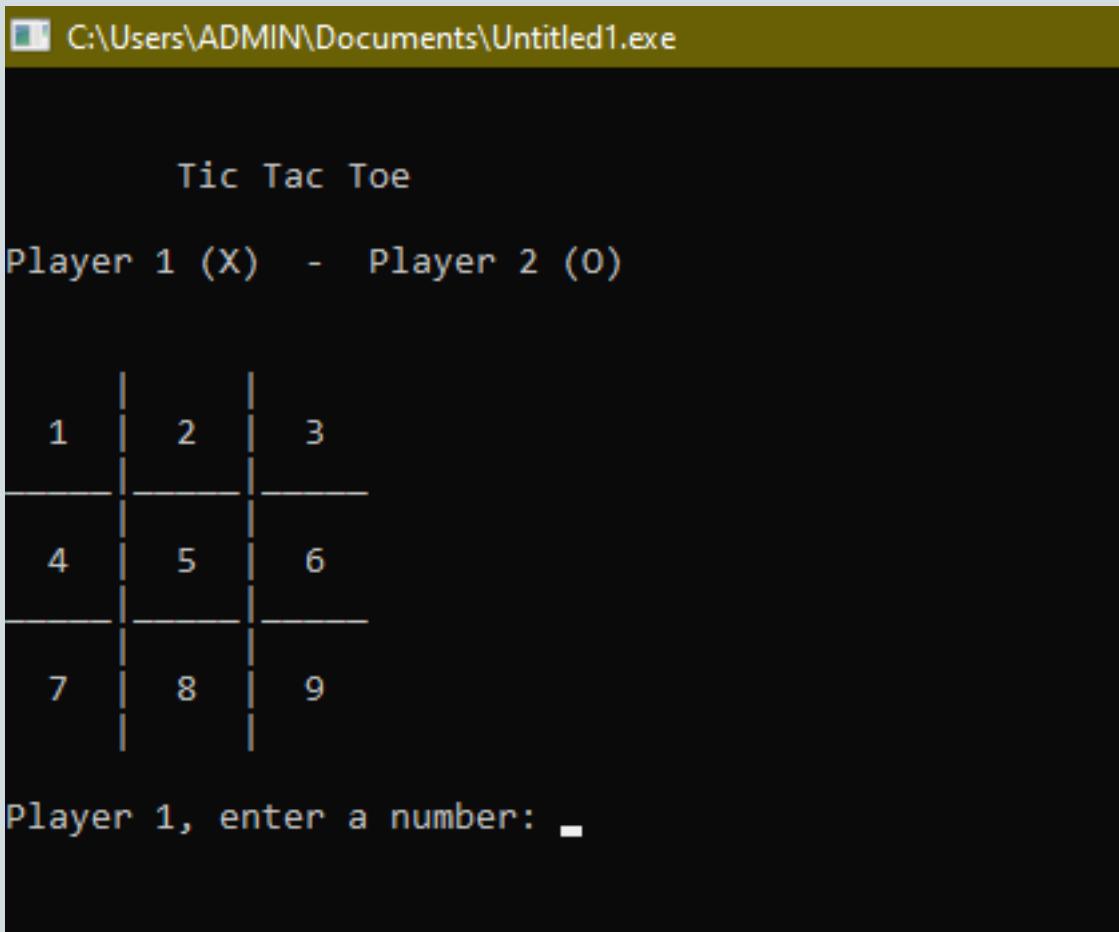
1. 1 for game is over with result.
2. -1 for game is in progress.
3. 0 game is over and no result

- **void displayBoard();** -- function used to display the tic tac toe board.
- **void markBoard(char mark);** -- replacing x and o in the desired places that the player wants.
- **int main()** -- function which is used to change the turn of the player in the game

OUTPUT

The compilation of the above code gives the following output:

In DEV C++



C:\Users\ADMIN\Documents\Untitled1.exe

Tic Tac Toe

Player 1 (X) - Player 2 (O)

1	2	3
4	5	6
7	8	9

Player 1, enter a number: -

As you can see, we get the game board of tic tac toe with the numbers printed on them.

RULES OF GAME:

- The game is to be played between two people
- One of the player chooses ‘O’ and the other ‘X’ to mark their respective cells.
- The game starts with one of the players and the game ends when one of the players has one whole row/ column/ diagonal filled with his/her respective character (‘O’ or ‘X’).
- If no one wins, then the game is said to be draw

Lets have a closer look at it!

If Player 1 chooses number 5,we can see an 'x'

```
Tic Tac Toe  
Player 1 (X) - Player 2 (0)  
  
 1 | 2 | 3  
---+---+  
 4 | X | 6  
---+---+  
 7 | 8 | 9  
  
Player 2, enter a number: ■
```

Next, if Player 2 chooses number 7,we can see an 'O'

```
Tic Tac Toe  
Player 1 (X) - Player 2 (0)  
  
 1 | 2 | 3  
---+---+  
 4 | X | 6  
---+---+  
 0 | 8 | 9  
  
Player 1, enter a number:
```

In this way, the game works!!

The background features a dark blue and black grid pattern. Overlaid on this are several glowing, translucent shapes: two large blue 'X' marks in the upper left and center, a large red and yellow 'X' in the lower left, and a large red and orange circle in the upper right. In the center, there is a large, white, textured area resembling a cloud or a burst of energy.

*Thank
You*