

Programming Assignment 1

Course: COMP 2131

Programming Assignment-1

Weight: 100 marks = 8% of final grade

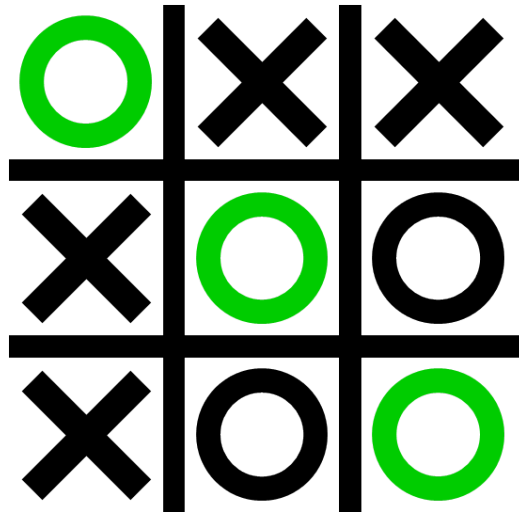
Getting started in C

1. Introduction

The purpose of this assignment is to get familiar with C Language, use functions and array, and learn how to design a simple game with a friendly user interface using C Language.

2. Instructions

You can use nano or any other editor to write your C code.



3. Steps:

In this assignment, you will create a simple *Tic Tac Toe* game designed for one player (against the computer). You will need to create arrays and functions to complete this program.

1. The first screen should ask the user for his name, print a welcome message, and displays an empty 3x3 Tic-Tac-Toe board. Then, the program should ask the user to put the coordinates of his move.

```
File Edit View Search Terminal Help
[comp2130@(none) c_lang]$ ./game

*****
Tic Tac Toe
COMP 2130 -Fall 2014
You will be playing against the computer
*****

What is your name?

John

Hello John ... Let's have fun !!! You = X | Computer = O

  |  |  |
--|--|--
  |  |  |
--|--|--
  |  |  |
Enter X,Y coordinates for your move: |
```

- Once the user enters the coordinates, the program should respond accordingly with a print of the user's move and the computer's move. This should go on until a winning pattern is found.

```

File Edit View Search Terminal Help
---|---|---
---|---|---
Enter X,Y coordinates for your move: 1,2
0 | X |
---|---|---
---|---|---
Enter X,Y coordinates for your move: 2,2
0 | X | 0
---|---|---
   | X |
---|---|---
Enter X,Y coordinates for your move: 3,2

*****
You won!
*****

0 | X | 0
---|---|---
   | X |
---|---|---
   | X |
[comp2130@(none) c_lang]$

```

After you complete the program, **copy the code from UNIX environment to Notepad in windows and upload the 'C' file to the Open Learning Faculty Member.**

Marks Distribution

| Steps | Completed Up to | Marks |
|-------|---|-------|
| I | Game Board designed | 25 |
| II | User Inputs taken and marked on the board | 25 |
| III | Validate the inputs i.e. no two inputs at same place and no input outside the range | 20 |
| IV | Check the winner/loser and complete the game | 30 |
| Total | | 100 |