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# Programming Fundamentals
Course Project Report

So for our final project, after a lot of consideration, we decided to work with a game of tic tac toe, we realised that this would actually help us learn a lot more about the language because it was an aspect that we hadn't quite experienced yet, developing a 2D game. Naturally we couldn't just make it work on lists, it would need a 2D interface as well, so we used Python libraries and modules such as pygame and [what was the other one?] we first came together to break down the process and divide the workload accordingly. We then came up with a basic flowchart of the process (which we'll attach down here). We used the flowchart break down the flow of the code, once the code was complete, we learnt how to add a UI, which required a certain number of adjustments to the code; the program, then went through a series of debugging and then finalized UI Adjustments and completed the project.

Libraries used:

- pygame

- time

Functions in the source code:

- playerX_move

- playerO_move

- player_sprite_display

- darkmode

- test

- computer_move

- check_win

- check_draw

- flip_turn

- game_logic
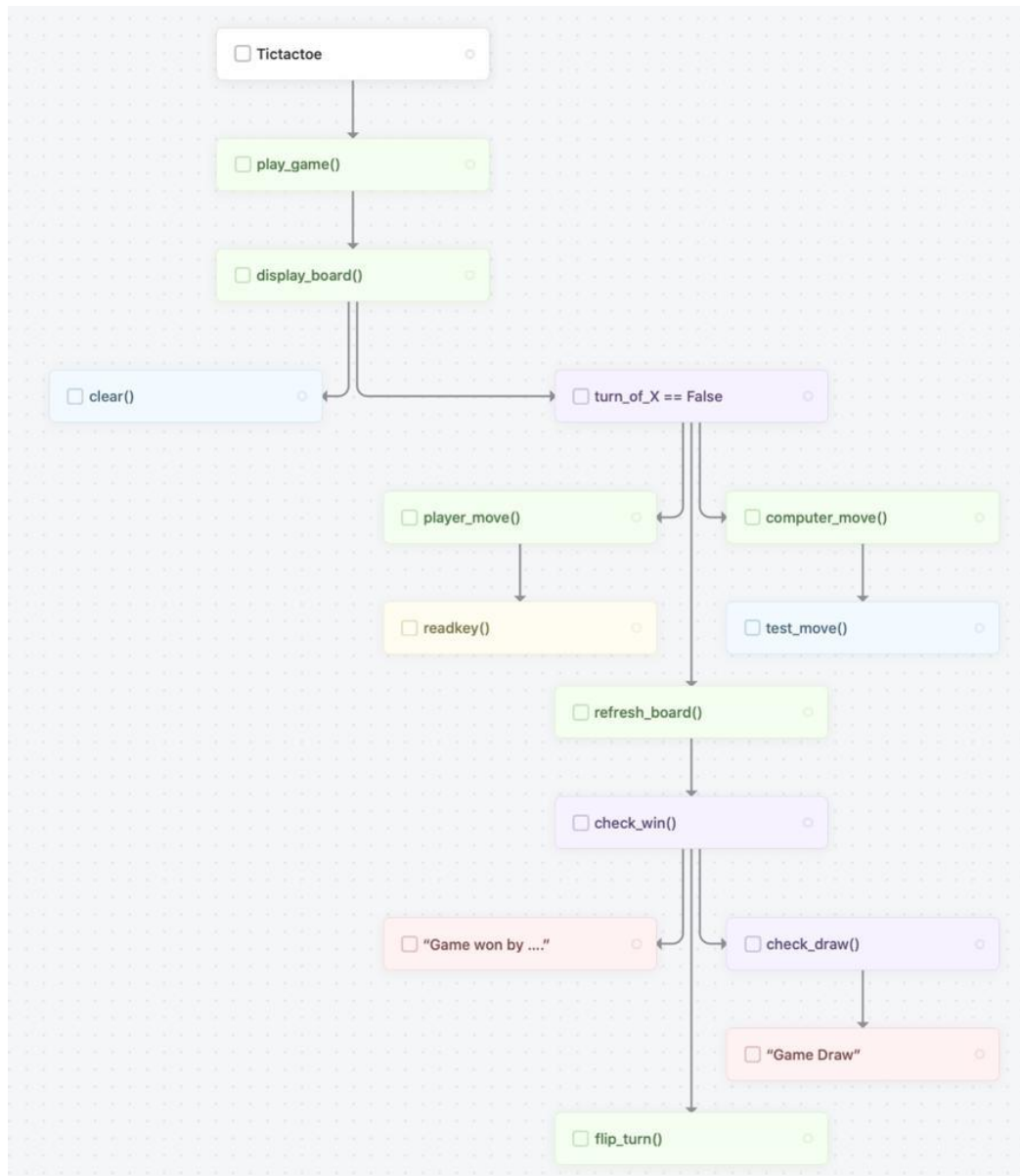
Attached is a flowchart of the program:

For the demo, we have the following screenshots of the executable file.

TicTokToe

TikTok Toe

PVC

PVP

EXIT

GAME WON BY : X

PLAYER(X) US AT(0)

PLAYER(X) US AT(0)

GAME DRAW!!!

PLAYER(X) US AT(0)

GAME WON BY : 0

PLAYER(X) US AT(0)