**Tic Tac Toe game: Aads Coursework**

Introduction  
  
The task I have been instructed to do is make a tic tac toe game in C. The features required are as follows:

1. A working tic tac toe game.
2. Undo and redo functionality (optional)
3. Replay functionality (optional)
4. Variable board size (optional)

Design

A majority of my design was done using structs and arrays, none of my features were complex enough that I required to use any of the data structures discussed in the labs, although they would probably be more efficient and less time consuming to implement than what crude systems I am using

Enhancements

If I had more time I would add variable board size and an undo and redo functionality, and maybe make my code more efficient via use of data structures.

Critical Evaluation

I could improve loads of things about my code, the code quality is probably not as good as it could be, and there is probably redundant code. The code used to make the board could just be a 2d array, but I did not think of that at the time of creation. Another improvement could be the use of a queue for storing replays instead of an array, as that would be more modular and more efficient and readable

Personal Evaluation

The challenges I faced were mostly re-learning C from last year, most of the coding itself was straightforward with the help of demonstrators. The method that I used to overcome my problems was to just put code down and see if It worked, if not, fix it. Planning was not a concern as the project was small enough that I could complete it through trial and error and learning from mistakes. I did not see the need to use the data structures as the project was not big enough to be worth the effort, but had it been bigger and if I was given more time I would have implemented some of them, notably a queue for replays and 2 stacks for undo and redo.