Battleships Project Evaluation

Altogether I found this project the most challenging out of all the assignments i’ve done so far in this module in particular the optional extras. I have created a working game of battleships which can be played single player or against a computer and there is also the option to save or load a previous file.

I managed to create the initial grid and allow the user to input coordinates which will change the position from empty to hit which I found fairly easy. The first challenge I came across was placing random ships and validating on whether it is on the grid and not overlapping another ship. I needed to ask for help on this so I managed to fix the out of bounds error but there is still the occasional logical error where a ship is overlapping another ship and for some reason it isn’t moved to another position.

I then created methods which wrote and read from an external text file. I found this quite easy as I just took some code from previous assignments and adapted it to fit around the project. I am probably most proud of this as I didn’t struggle creating these methods even though I thought it would be quite hard.

For the optional extras I attempted a GUI which I struggled with as I didn’t know how to call the saveGame() method without changing most of the other methods to static which would involve more time and effort. I left the class in the project folder to show how much of this I attempted. I then tried to create a multiplayer option where you can play against a computer to try and destroy all of the ships in less amount of moves. Instead of creating an AI I made the computer randomly generate a grid on the board as an AI would have taken much more time.

If I had more time I would have had an option to play against another human player and i would have made a player parent class with a computer child class and human child class as this would have made it easier to modify. Altogether I found this assignment quite difficult but it was doable within the time scope given.