Test Notes

Test decisions made and why we made them.

1. Blackbox testing:

The reason why we made testing in blackbox is to hide what is going on to give a clearer explanation on how the A.I reacts and how the human shoots on an empty grid.

2. Showing each possible markers

By showing each possible marker (hit, miss, ship, empty) we can conclude that firing at an appropriate coordinate will produce the correct result. This will verify that our shoot function is updating the grid correctly.

3. Showing the ship has been sunk

By showing that a ship has been sunk, we can conclude that the isSunk function is working correctly.

4. User or computer has won

When the user or computer wins, we have to show that one of the grid's ships have all been sunk. Once this happens, the game will terminate and the appropriate game logic will be successful.

5. Showing the A.I plays like a standard human being

What we wanted to accomplish with the A.I is to have it play very similarly to a human being. In this case, the A.I will shoot accordingly down the ship until the ship has sunk. When the ship has sunk, the A.I will switch targets meaning we know that it is successful.

6. Trying to break the code

One of the few issues that we had while programming the game was having out of bound errors. What we did to verify that we are not getting out of bound errors is by placing ships towards the edge of the grid and having the CPU shoot at it. If the A.I is able to shoot at all the ships on the edges without failure, we know that the proper boundary conditions have worked.