

Battleship

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I, Marco Miralles, do hereby certify that I have derived no assistance for this project or examination from any sources whatever, whether oral, written, or in print.

5/2/2022
CS 2

DisplayBoard (Done)
Input Validation for ship placement (Done)
Input Validation for attack coordinate (Done)
Displays hit/miss (Done)
Displays name of ship that has been sunk (Done)
Displays winner (Done)
Properly updates player board and enemy board (Done)
Alternates views for two players (Done)
Boards are properly updated as the game is played (Done)
Documentation (Done)
Computer plays intelligently (Done)
Menu to select between playing against the computer or another player (Done)
Separate files (Done)

No sections are missing

I would like to add a better interface or online multiplayer but I do not yet understand frameworks/sockets well enough to do that

The only references I used were the pages posted by the professor detailing the required functions and the website provided that described one way you could go about doing the intelligent AI

(<http://www.datagenetics.com/blog/december32011/index.html>)

I also had to look up some stuff about clearing the cin

I learned about member functions and classes and multi-file projects
Implementing the intelligent AI definitely took the longest and is the part I am the most proud of as I did the first rough version in about a day. If I were to do it again I would do it in a language that has an easy GUI library so I could make it interactive.

Something that could be tested is if the AI can solve many different types of boards or not. The AI could be supplied with weird boards to see if it gets stuck and can't find where to shoot at.

When I was working on my code I had an issue with the AI and I had to look at how the AI was coming up with the probability map so I added a function to output the probability of a board state.