

Battleship Project Report

Team #41:

Leader: Harrison Hope

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What we accomplished:

The group has successfully collaborated and developed a Battleship game program with c++. This battleship game prints to screen and has an A.I. that will play against the player with multiple difficulties. We have successfully implemented several classes such as a ship class, a board class, a game class, and an A.I. class. The ship class holds the creation and parameters of the ships in the game. The board class holds the boards for the player's own board and the enemy field. The game class works to combine all the aspects of the game and run itself. Finally, the A.I. class hold all the abilities of enemy A.I of the game.

What problems we ran into:

Some issues that occurred while making the game was that it was kind of difficult to properly clear the screen after every turn and how to properly set the A.I difficulties. Another difficulty we came across was mismanagement of time. Some parts and classes would be a lot easier to implement if other certain classes were finished previously. This left certain people without work for some time.

What we would have liked to do:

We would have liked to add more features to the game to stray more from the traditional battleship style. Some features such as a GUI or giving certain ship's abilities and ranges. This would have made the game more immersive and would have made it more fun.

What we learned:

We learned how to properly structure a team environment and how to properly structure a large project by outlining the classes and functions via UML. We also learned how to regularly use GitHub and how to collaborate on it. These abilities are sure to come in handy later on in our careers as Software Engineers.