

Project Documentation

System Overview:

Team 9 will be implementing Project 1 – Battleship – using C++ in a command line interface application. Using the object-oriented design paradigm, we will be implementing a handful of classes for modularity. These will include an Executive, Game, Board, and Ship class.

Class Descriptions:

- Executive:
 - Handles all interaction with the user
 - Instantiates all other classes
 - Contains a play() method to start the game
 - Outputs when user wins and ends the game
- Game:
 - Handles all game logic
 - Including placing and destroying ships, firing, and player
 - Considers bad user input (out of range, incorrect types, etc)
 - Contains boolean to track if game is over or not
- Board:
 - Contains structure of the board as well as current status based on user input
 - This includes displaying ship placement, spacing of coordinates, and updating ship icons when hit and/or sunk
 - Must be 10x10 with coordinates (A-J) and (1-10)
- Ship:
 - Simple class that keeps track of size, type, hits, and sunk status

Responsibilities:

- Executive: Aidan
- Game: Eric
- Board: Duy
- Ship: Landen