

EECS 581 Battleship Documentation

Team 30

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Our Project

We have created a terminal-based, two-player Battleship game using Python. The functionality of the game was split up into various classes:

- Board:
 - Create opponent view of board, create player view of board, error checks for ship placement, attack ships, and determine defeat
- Game
 - Run the game using methods and members from other classes and user input
- Ship
 - Set the orientation and positioning of ships
- Player
 - Set player's opponent, place fleet, place ships, and taking turns.

User input is primarily handled by entering numbers to make selections in the game. The game progresses as follows:

- Welcome and prompted for fleet type (how many ships each player would like in their fleet)
- Players place the ships in their fleets
 - Select the orientation of ships
 - Select the position of ships
 - Re-place ships if needed
- Game begins
 - Players choose locations to attack on the opponent's board. The players' views of their own and their opponent's board will change as the game progresses:
 - `_` denotes an empty spot on the board
 - `S` denotes a ship on the board
 - `X` denotes a hit ship on the board
 - `0` denotes a missed attack
- Players will alternate turns until there is a winner
- The winning player will be printed and the program will terminate

How to Run Our Project

Clone the repository on your machine and run the `main.py` file using Python in a terminal or Powershell.