

# AI Battleship!!!

Due: April 5, 2020

**Instructions:** Create a server that can “intelligently” play Battleship. Modify your Battleship game to make moves received from your web server.

**Submission:** Zip all files and folders and submit via Blackboard

## Instructions:

Create server.js and aimoves.js files.

- Server.js
  - This should create a server at 127.0.0.1 and listen for connections on port 3000
  - Requests for moves should be passed on to the aimoves.js module
- aimoves.js (module)
  - This module is able to make intelligent moves to play battle ship
    - It should send a set of coordinates to the Battleship game
      - If it hits a vessel, it should try adjacent coordinates (N,S,E,W) until it hits the vessel again and try coordinates in the same direction until the vessel is sunk
        - If it misses, it should reverse direction until the vessel is sunk.

## Modify

Gameplay.html

- Remove the 3 AJAX buttons
- Add one AI button that uses AJAX to
  - Send data to your server about the last move made (hit, miss, sunk, game over)
  - Get the next set of coordinates from your server and makes the move

Listeners.js

- Add appropriate listeners in listeners.js using **jQuery** selectors

Models.js

- Modify models to track the output of the last move made so that information can be sent to your server so it can make an intelligent move.

## Notes:

- Comment your code
- Solutions should not duplicate moves (hence keep track of the moves you’ve made on the server)
- Solutions going sequentially (e.g. A1,A2,A3, A4) will have a significant amount of points deducted