

Goal: make a 2 player battleship game with Java sockets

Requirements: Create a server which will manage the state of the board for both players

- Game will automatically start when the 2nd client connects
- Game will ask for x,y coordinates to place 3 ships for each player
- Ship sizes will be 2, 3, 4
- Size of the map will be 10x10
- To place horizontally: client will input "0,1 3,1"
- Vertically: "0,1 0,4"
- Server will send an error to clients if input is trying to place ships diagonally
- Clients will be able to input their ships at their own rate
- Server will start the game when the 3 ships are placed on both sides
- Server will keep track of points which are already bombed in order to keep track of ships taken out + letting clients know they are trying to bomb a spot already chosen
- Server responses:
 - When a player wins
 - Server will let both clients know if there is a hit or miss on every turn
 - Server will let both clients know when a ship is sunk
 - Server will also let the client know when it is their turn
 - Server will also let the clients know when the game is over

Create a client which can connect to the server

Client will be able to send input for placing ships

Then client will be able to send 2d coordinate points on their turn to bomb

Pair programming allowed

Files to submit: BattleshipServer.java BattleshipClient.java (Separate class files may be created and submitted, you do not have to embed every class into each java file)

Extra credit:

Multiple rooms feature added:

- When the client first connects, the server will ask what room the client wants to join
- Rooms can be designated by any number supported by int
- When 2 clients connect to the same room, the game starts and follows the rest of the requirements as the main homework assignment