Week 1 Milestone

1. Link to Github Repo: https://github.com/Crazyduderik/sfsu-csc-667-fall-2024-roberts-term-project-battleshippers
2. Link to Github Project: https://github.com/users/Crazyduderik/projects/1

3. A brief description of what was accomplished

During this milestone our group designed the complete wireframe of the project. We planned out and sketched all the pages of our game, the User Interface, the buttons, and general logic of how we are going to implement such as using a 2-d matrix to keep track of the ships location. We also came up with the functionality that we want to implement for example, real time messages between the two players, making it a turn-based game, the various ships the game provides and their sizes. We came up with the structure of how users will have access to the game, meaning all users must create an account to play, they have the ability to change their profile avatar, receive real time updates if they hit a ship or if their ship was hit. We organized it so after the game ends, you get the game status and the option to go back to the lobby or start a new game. Besides the layout and the functionalities of the game, our team also planned the tech stack, where we would use Node, Express (for our http request/response), Typescript rather than js, Postgre for our db, and obviously HTML and CSS.

Specifications

1. Features and Game Functionality

   Login and Registration
   - User can create an account with username and password
   - Allow users to login with their credential
   - Display user account info

   Grid Setup
   - 10 x 10 game board
   - 5 ships varying size ; Carrier, Battleship, Destroyer, Submarine, Patrol boat

   Ship Placement
   - Players will be able to place their ships on their board any position that is possible before the game begins
   - Make sure the placements of the ships don't overlap or out of bound

   Real time communication
   - Messages

- Turn based
- Communicate whether it their turn or waiting for opponent
- Display game messages
- Timer for each players turn

Gameplay handling

- Track players hits and misses
- Provide whether it was a hit or miss
- Provide feedback on when a ship has been sunk

Victory/Loss end game

- Game end when a players ships have all been destroyed
- Display loser/winner on players screen depending on result
- Give option to play again or return to lobby

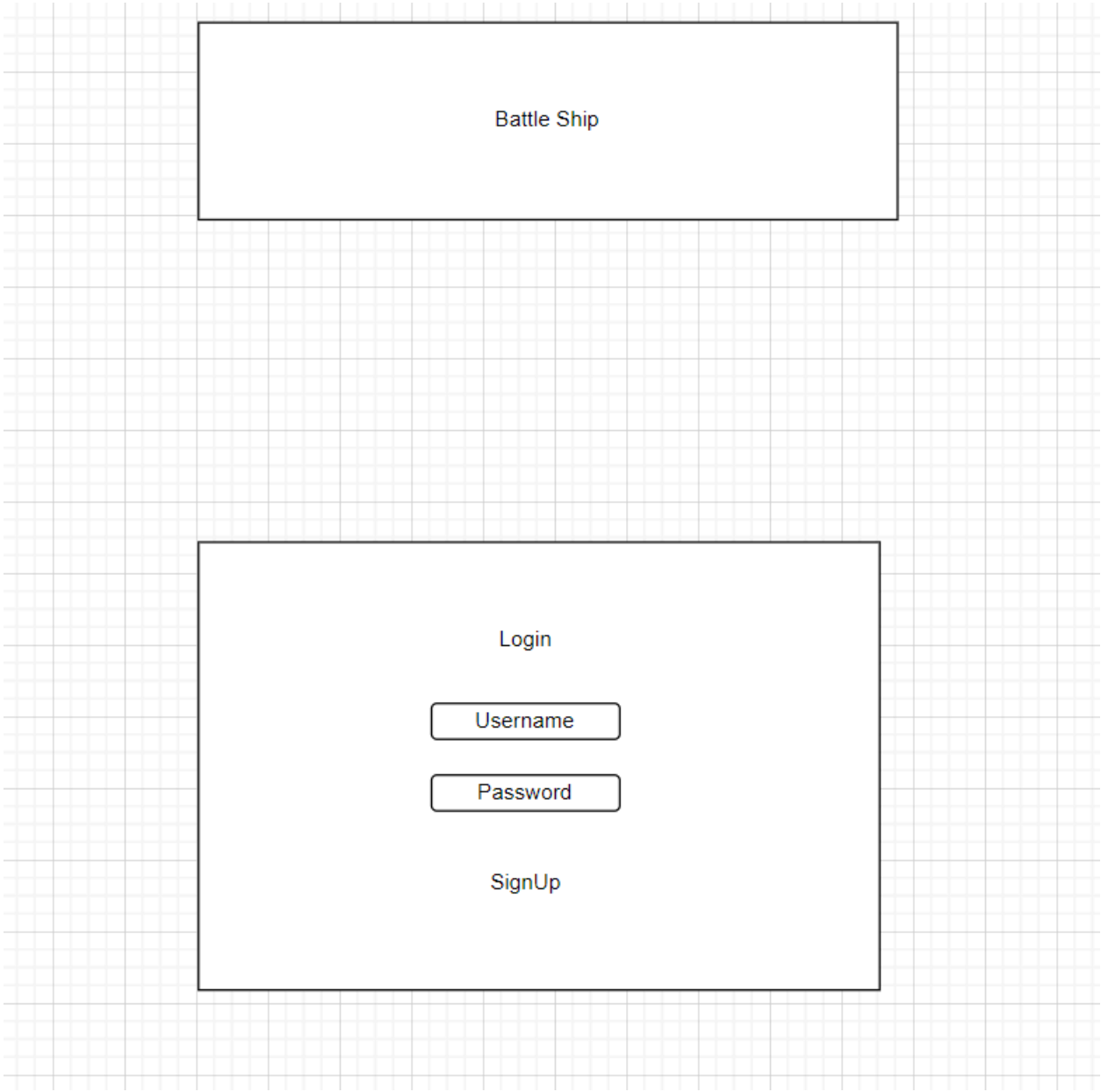
2. Technologies

- Node.js
- Express.js
- Postgre
- Render
- Html
- Css
- TypeScript

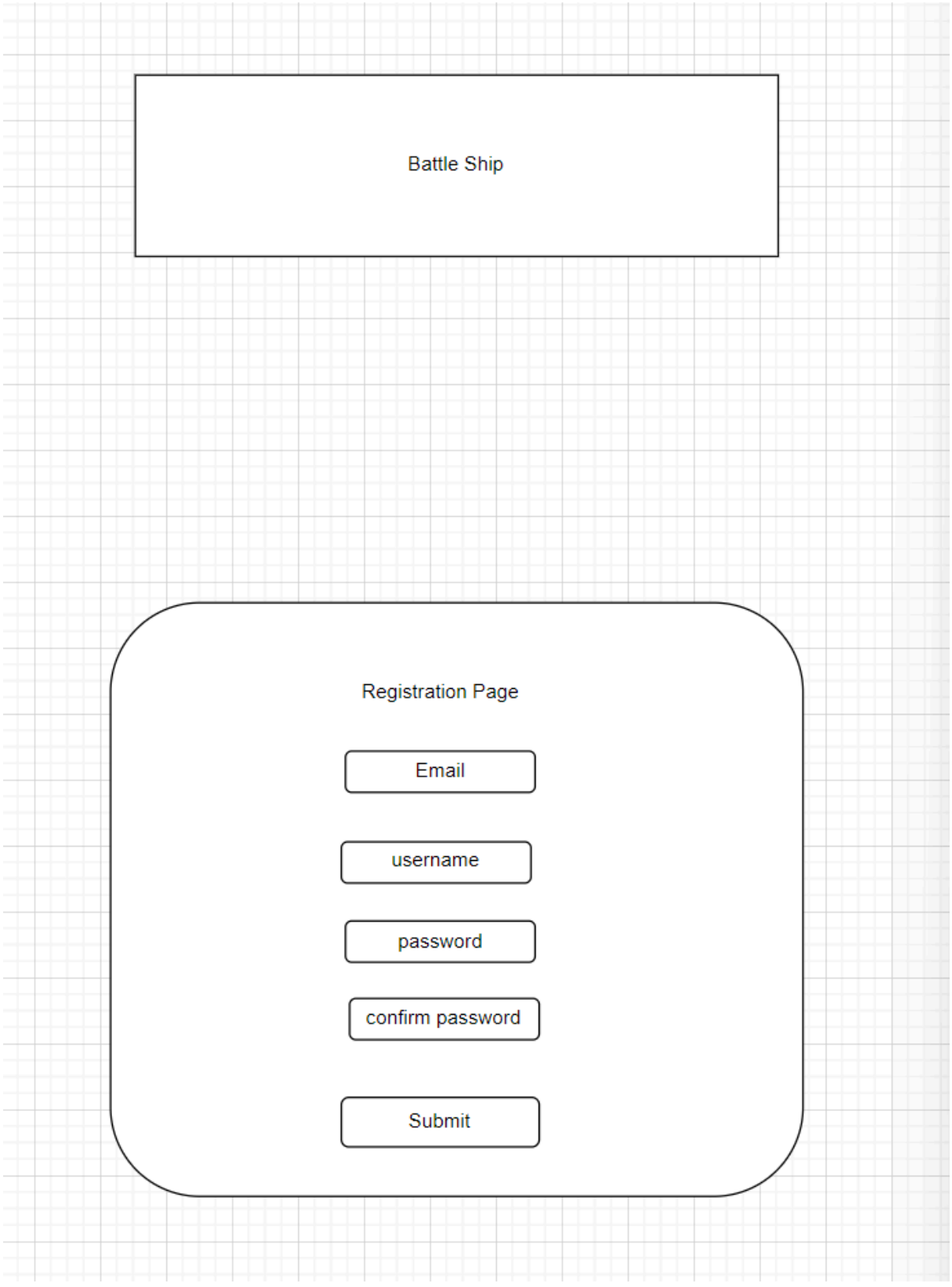
3. Wire Frames

https://drive.google.com/file/d/1LmXt6BWTYWTgljUu7z3deYzZfGkhQ3u9/view?usp=share_link

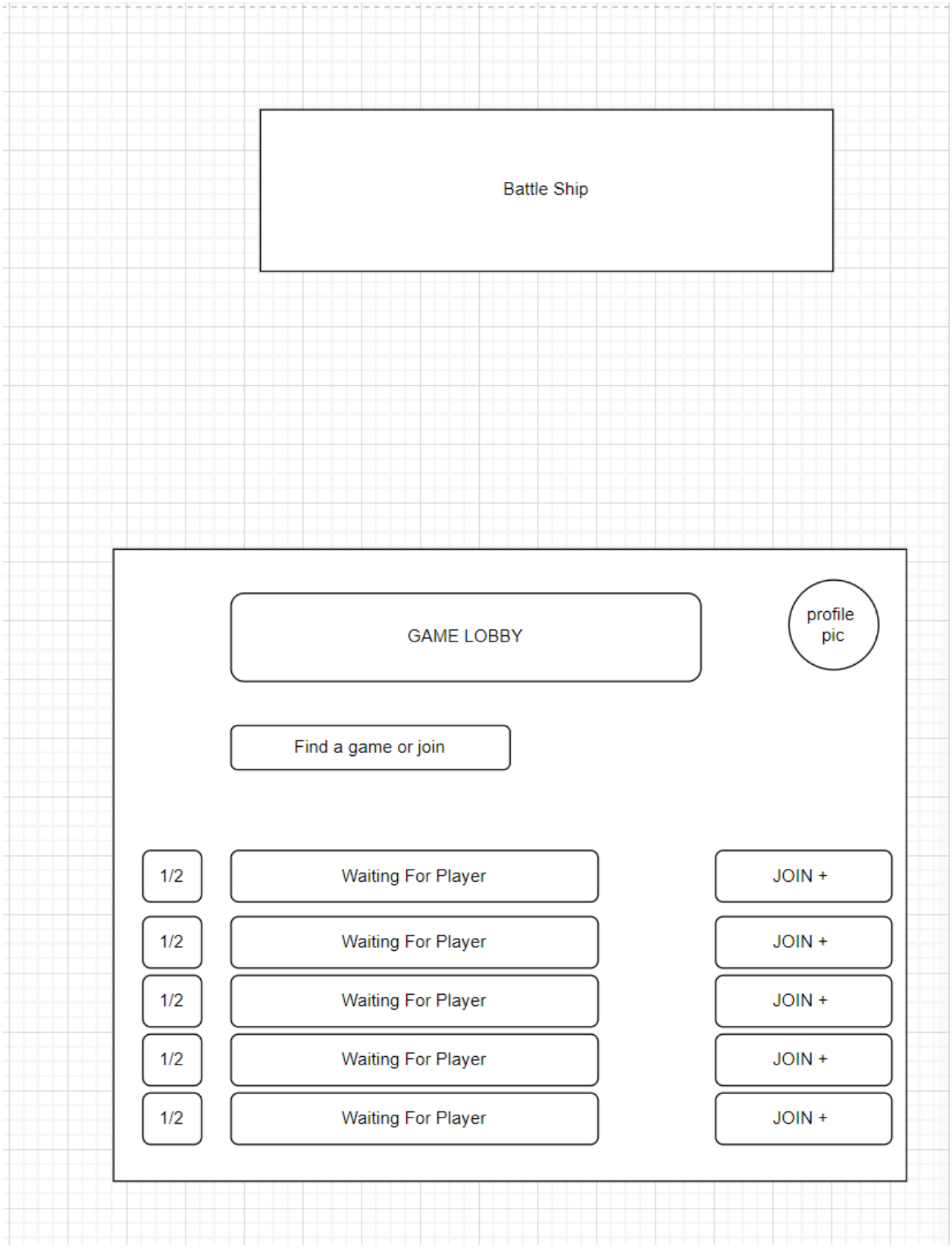
Main Page



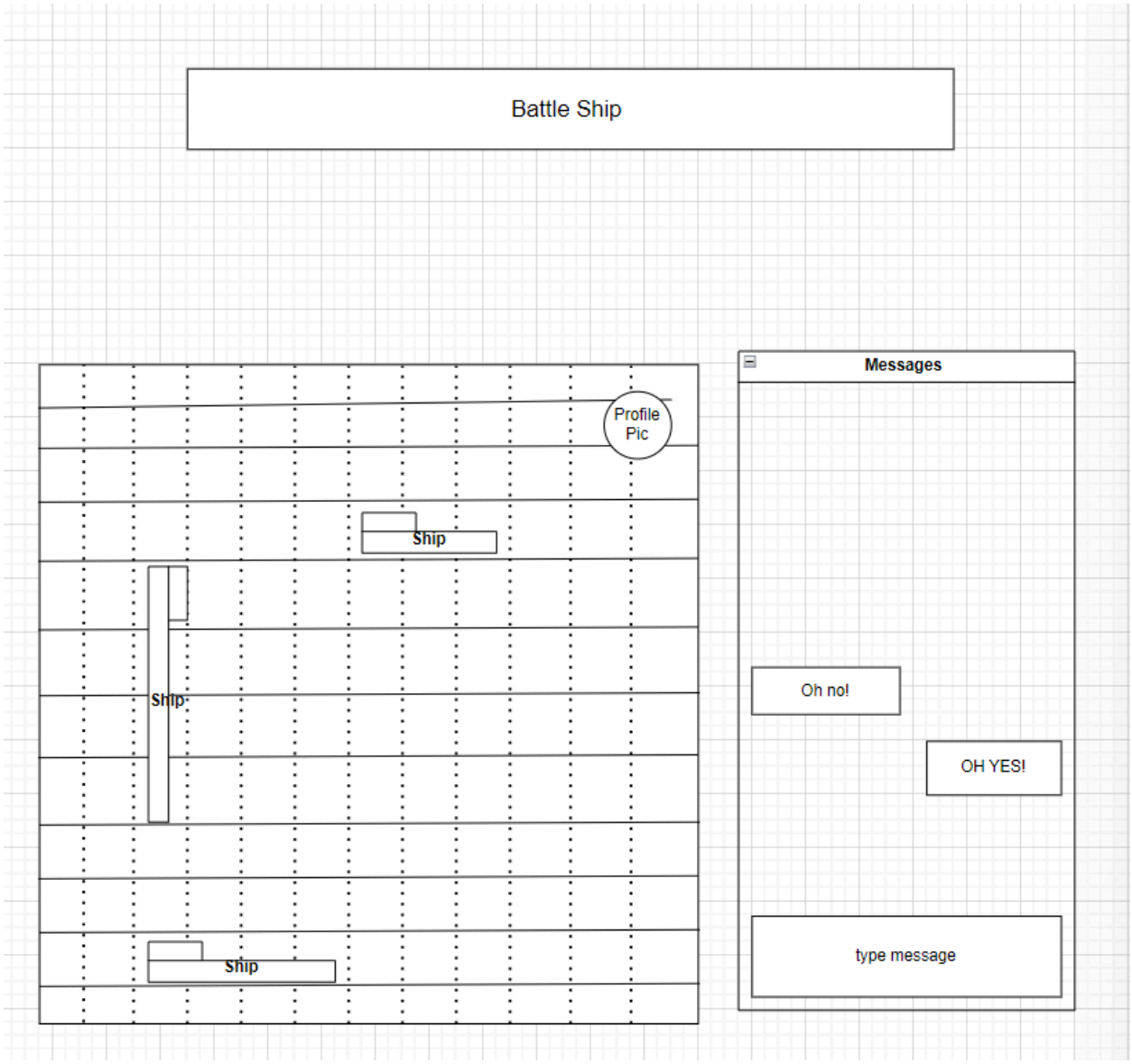
Registration



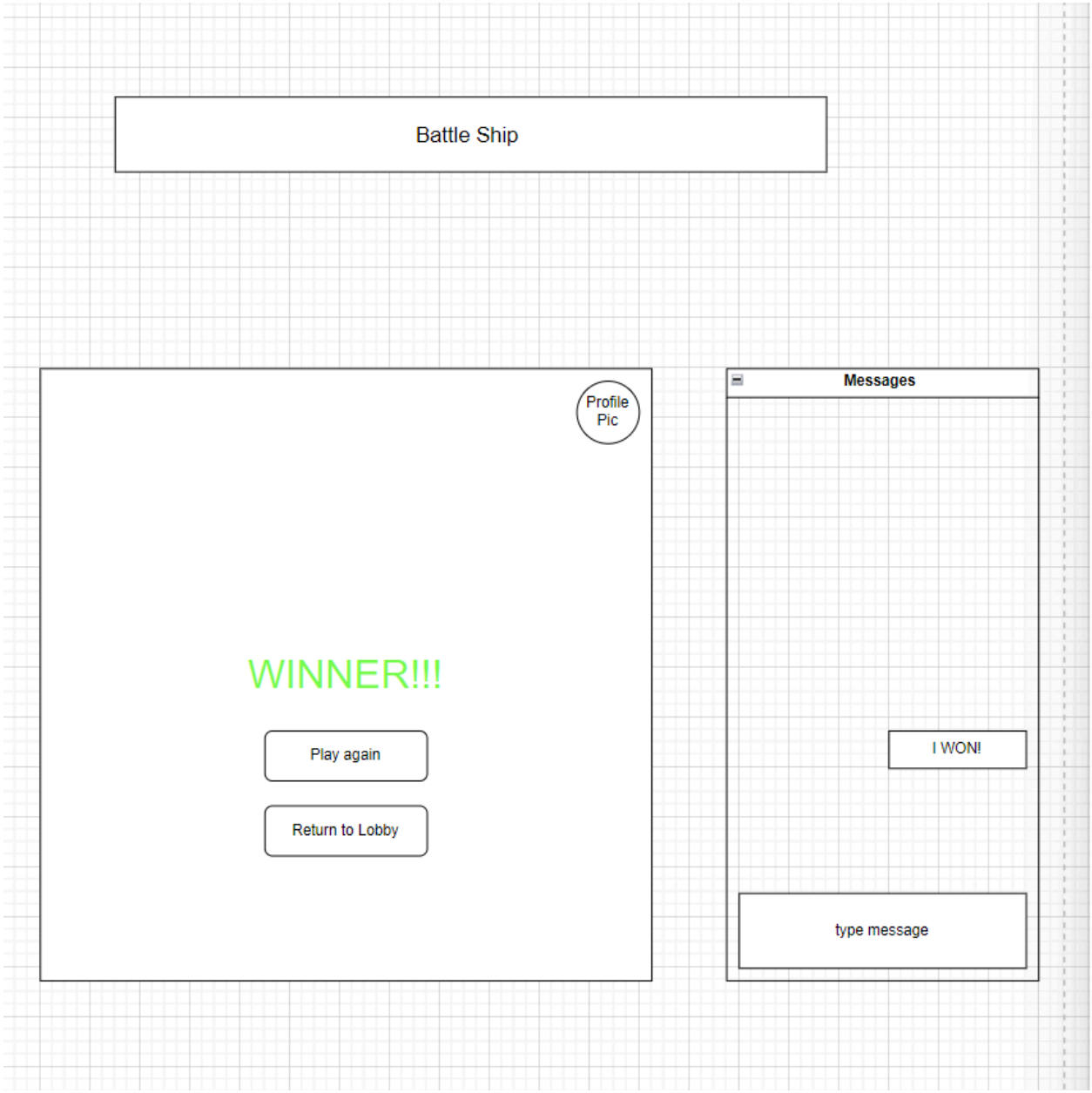
Game Lobby


Battle Ship
GAME LOBBY
profile pic
Find a game or join
1/2
Waiting For Player
JOIN +
1/2
Waiting For Player
JOIN +
1/2
Waiting For Player
JOIN +
1/2
Waiting For Player
JOIN +
1/2
Waiting For Player
JOIN +

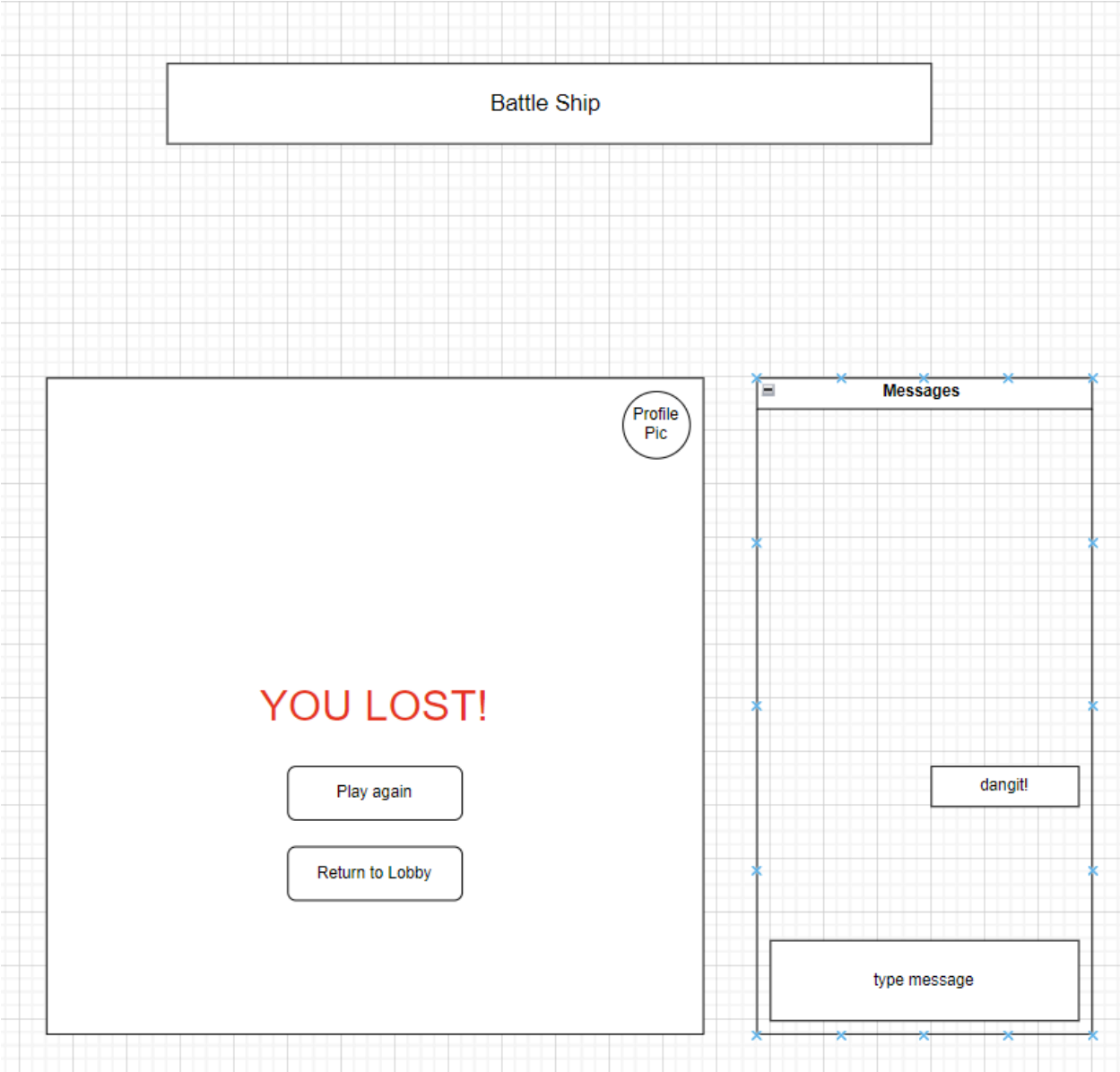
Player Screen In Game



Winning Screen



Losing Screen



Edit Account