

Bilgewater Brigadiers: Kevin Cao (Pipi), Andy Lin (Sam), Austin Ngan (Gerald), Shadman (Ducky)  
SoftDev  
P02  
2021-03-01

**Description:** Making a game akin to Hasbro's BATTLESHIP, a game that uses the classic rules for Battleship and adds some twists to the game, using differently shaped ships, maps and abilities.

### Components and Purpose:

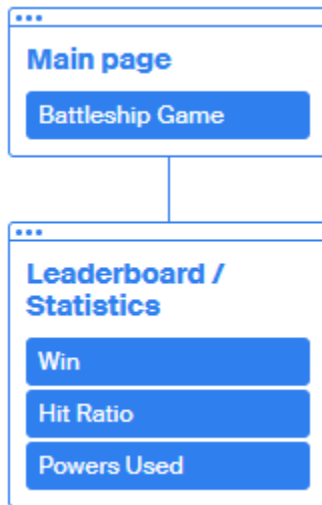
- Two game boards that switch after each turn (if local client), after each turn there should be a ready screen, so there isn't any tomfoolery going on
- Leaderboard
- In game currency in order to purchase different weapon type
- Allow players to set
- Possible features:
  - Multiple different maps for players to use
  - ~~Online gameplay~~
  - ~~Chat between players~~
- Flask
  - Display HTML Page
  - Data is pulled from the database in order to populate each webpage
- JavaScript:
  - Detect clicks & confirms move
  - Canvas to display board
  - Updating board
  - Animations (hit, explosions)
    - Add when other elements are finished
- SQL Database:
  - Keeps track of statistics of each player → Leaderboard

### Database Organization:

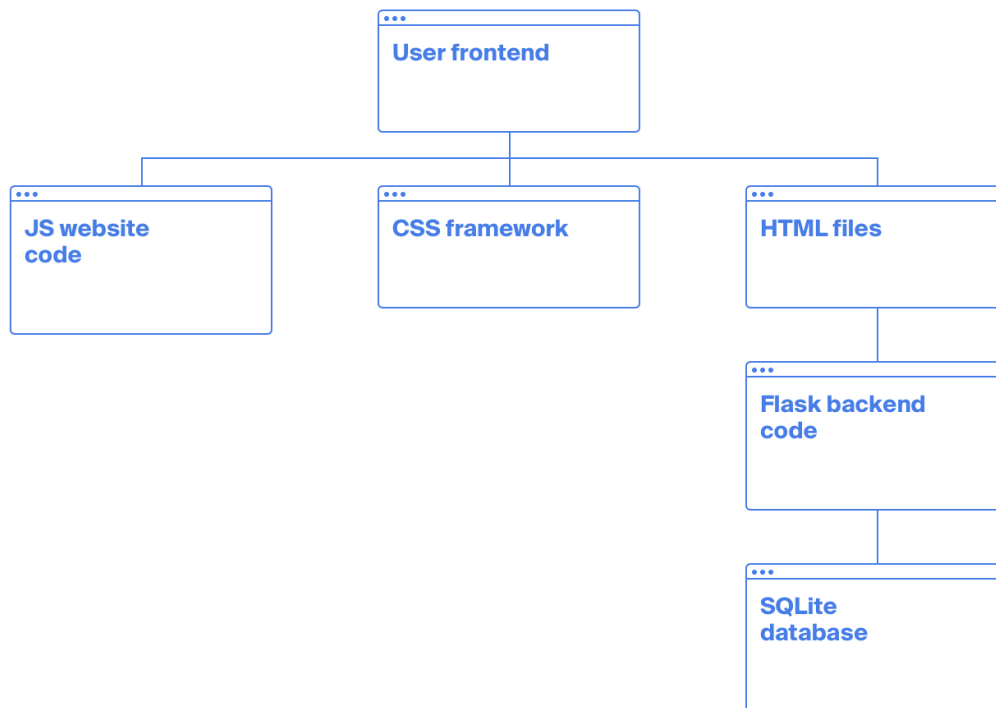
- Ask both players for username at start of the game
- leaderboard separated by game mode for wins

Username	Win ratio	Hit ratio	Powers used	Games Played	Games Won
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## Site Map:



## Component map:



### Division of Tasks:

Kevin: Project Manager & VM(Digital Ocean Droplet) & Frontend (registering clicks/UI)

Andy: Frontend (board management)/ digital ocean debugger

Austin: Backend (Leaderboard DB, connection between frontend and backend)

Shadman: Frontend (registering hits, changing maps, abilities)

### Stages:

- ☐ Initial functioning Battleship game (10x10 board, 5 wide, 4 wide, two 3 wides, and a 2 wide)
- ☐ Leaderboard/statistics
- ☐ Different maps with tetromino shaped ships
- ☐ Abilities, separated into two different game modes

### Guiding Questions/Ideas:

- 2 different modes (one w/ and one w/o powers)
- How are we going to implement online play?
- Use canvas as Battleship board
- Abilities: radar (scans a certain chosen radius of the other player's board), bomb (hits a certain radius/area of the board), airstrike (hits x amount of random spaces on the board), mine
- Energy system for each player (this serves as an in game currency)
- Extra maps later on

Target Date: 03-28-22 (March 28th, 2022)