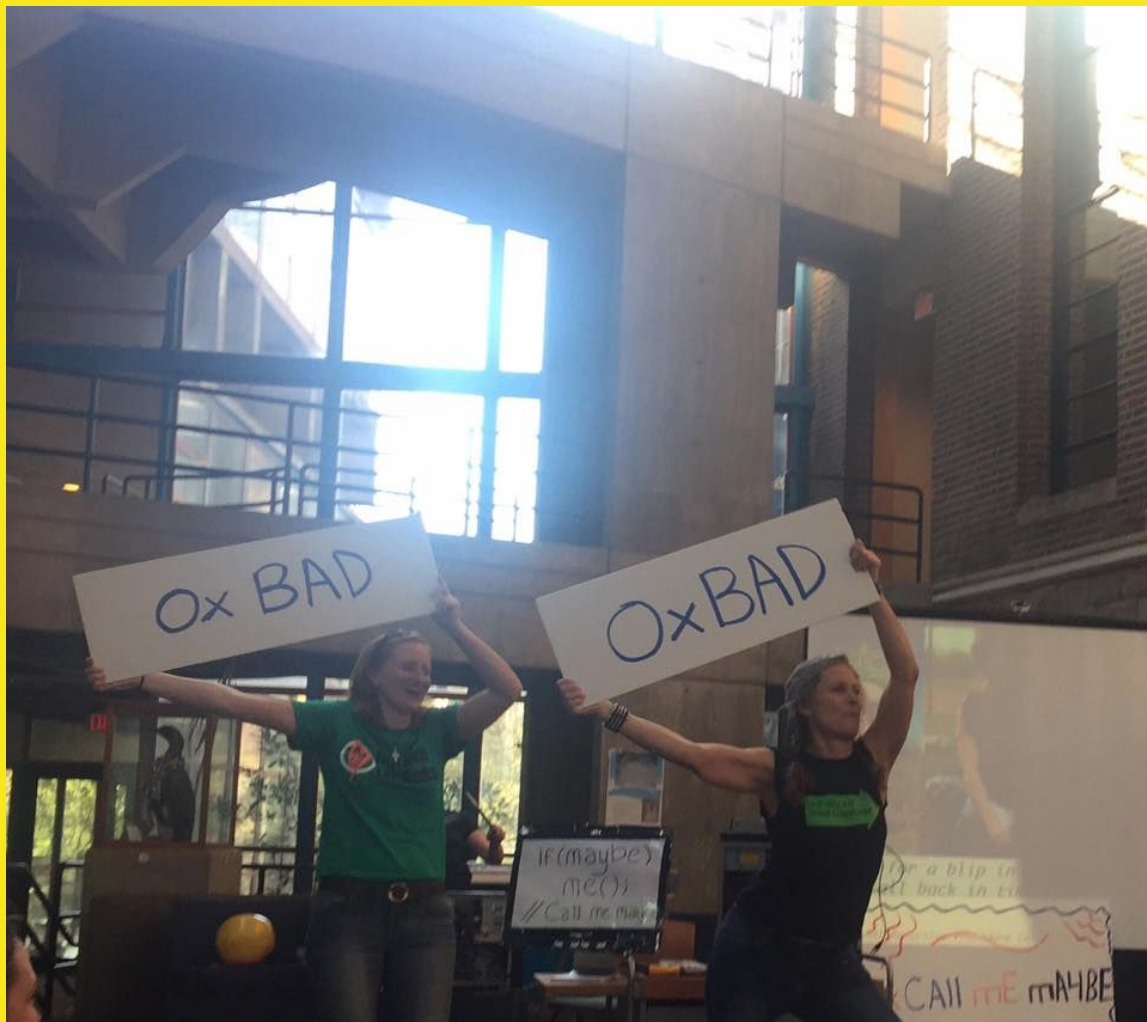




BATTLESHIP

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A stylized, handwritten signature in black ink, appearing to read "Gunn Chen".



**Great job
at lip
sync
Jean and
Ashley!!!**

Description



Game Idea

- We are playing Battleship!
- 2 player game: you versus the computer
- Goal: sink all 5 of your opponent's ships
- 3 step game
 - a. Set up: Place ships
 - b. Play: Fire missiles
 - c. Win (or lose)



*We are not responsible for any damages to your person or your possessions.
Fun not guaranteed.

Coding

i'm
suffering!

Data Structures Used:

- **Vector:**
 - To store the name of the ships and their index
- **Vector<LinkedList>:**
 - To store the locations of each ship
- **Hashtable:**
 - To store ships placed on the board and missiles shot
- **Tree:**
 - To help the computer make strategic decisions



Candid shot of Lauren Tso working on the code

Classes

- Ship.java
 - Object Ship with a name and coordinating length
- Grid.java
 - Object Grid to hold ships and mark missiles
- Play Battleship.java
 - Create and play game
- BattleshipGUI
 - Main display page of the game



Special behind the scenes footage of Kalau trying to implement this game



BATTLESHIP

For 2 Players – Human vs Computer

OBJECT OF THE GAME

Be the first to sink all 5 of your opponent's ships.

CONTENTS

5 ships white pegs red pegs
ocean grid target grid

PREPARE FOR BATTLE

Each player must place all of their ships on their ocean grid

Rules for placing ships:

- Ships may be placed horizontally or vertically, but not diagonally.
- Ships are not allowed to overlap in letters, numbers, or the edge of the grid.
- Position of the ships cannot be changed once the game has begun.

HOW TO PLAY

The human player will begin first. Then, the human and computer will alternate turns, calling out one shot per turn to try and hit each other's ships.

To begin each turn, a player must pick a location on their target grid.

It will either be a HIT or MISS depending on whether the chosen location is occupied by a ship on the opponent's ocean grid.

A HIT is recorded with a RED peg and a MISS is recorded with a WHITE peg.

Turns alternate with each shot called.

SINKING A SHIP

Once all the locations in any one ship are hit, it has been sunk. The name of the sunken ship is announced and is marked separately at the top of the game screen.

WINNING THE GAME

When a player sinks their opponent's entire fleet of five ships, they win the game! The player then has the option to play again or quit.

HOW TO PLAY SALVO

In Salvo mode, gameplay remains the same, but with one exception. Instead of firing one missile at a time, the player can fire the same number of missiles as the number of ships the opponent has remaining (i.e. the more ships sunk, the fewer shots you get).

A more challenging game can also be played where players do not disclose which ships are hit.

FIGURE 1
FIGURE 2
FIGURE 3
FIGURE 4
FIGURE 5
FIGURE 6





Welcome to Battleship!

	A	B	C	D	E	F	G	H	I	J
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										



99 little bugs in the code.
99 little bugs in the code.
Take one down, patch it around.
127 little bugs in the code...

Coordinate: A2

X

HIT

OK

Coordinate: C7

X

MISS

OK

Wow!

X

You sunk a
[shipName]

Cool

Congratulations!

X

You Won

Play Again

I'm Done

Sorry!

X

You Lost

Play Again

I'm Done

POTUS APPROVED!

Praise? Accolades? Awards?*



(^_^)

(^_^)

*Or questions?