

Gitae Park, Vivian Graeber (PM), Samson Wu, Matthew Yee (GASM)

SoftDev

2023-06-13

Target Ship Date: 2023-06-13

Smack.io

Abstract:

Our idea is to create a .io style multiplayer 2D top-view fighting game. The game is opened through the browser, and features open lobbies of 5 that can be joined and left freely. Each player controls a circle which represents them in the game, with the objective of eliminating other players by knocking them off the edges of the map. Each player is equipped with a stick/some kind of weapon that they use to hit other players off the map. Combat will be knockback-based, with no health bars or damage values existing in the game. The game features no progression system or accounts.

1. Program Components

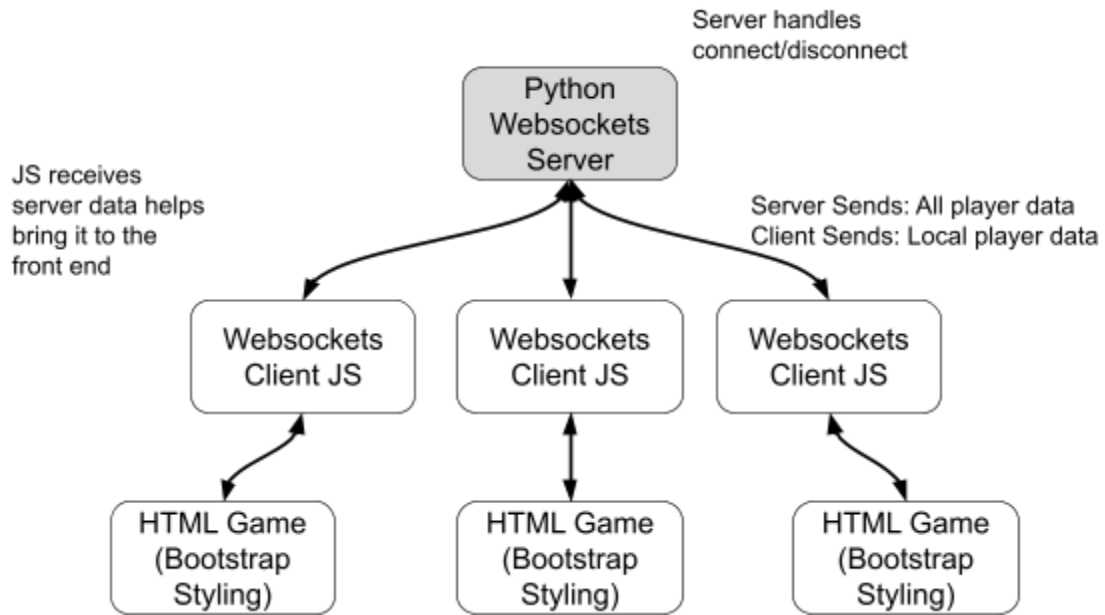
1) Game Page

- Menu on top of the ongoing game in the background
 - Allows users to enter an optional username
 - Allows users to switch servers
 - ~~Allows users to choose a class/skins (stretch goal)~~
 - Play button makes user join the game
- Display's user's own avatar and avatars of other players in real time
- Features a leaderboard and a killfeed for the lobby
- Has a popup that appears when a user is knocked off the map that shows the high score they achieved before death
- Not zoomable

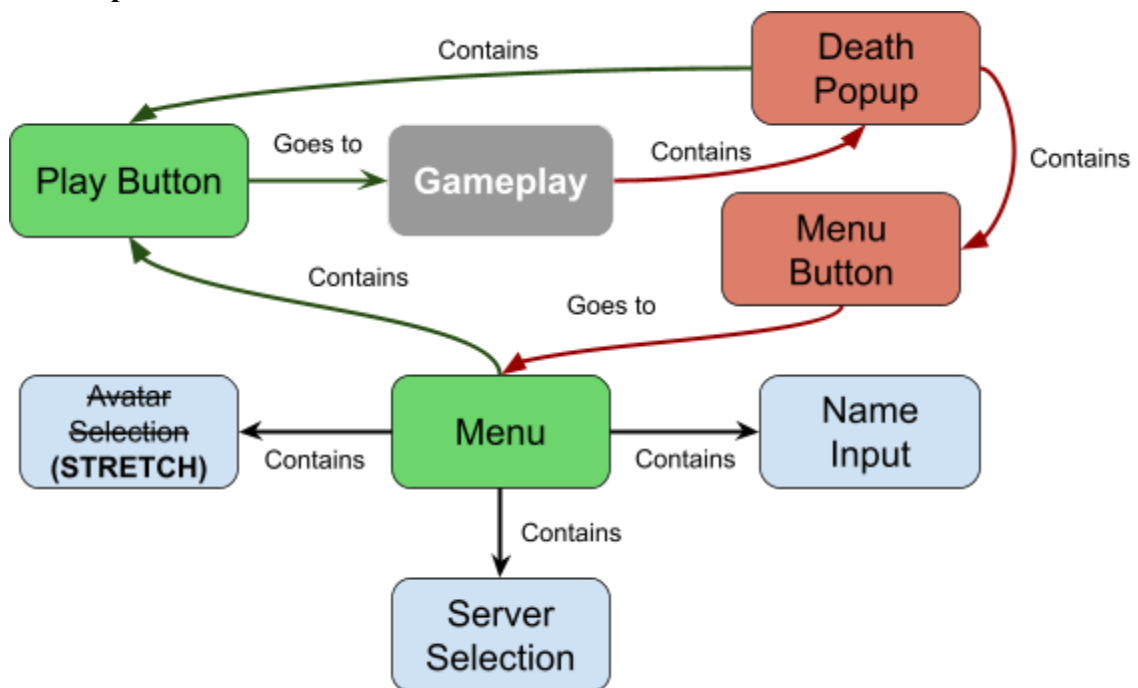
2) Python Server(s)

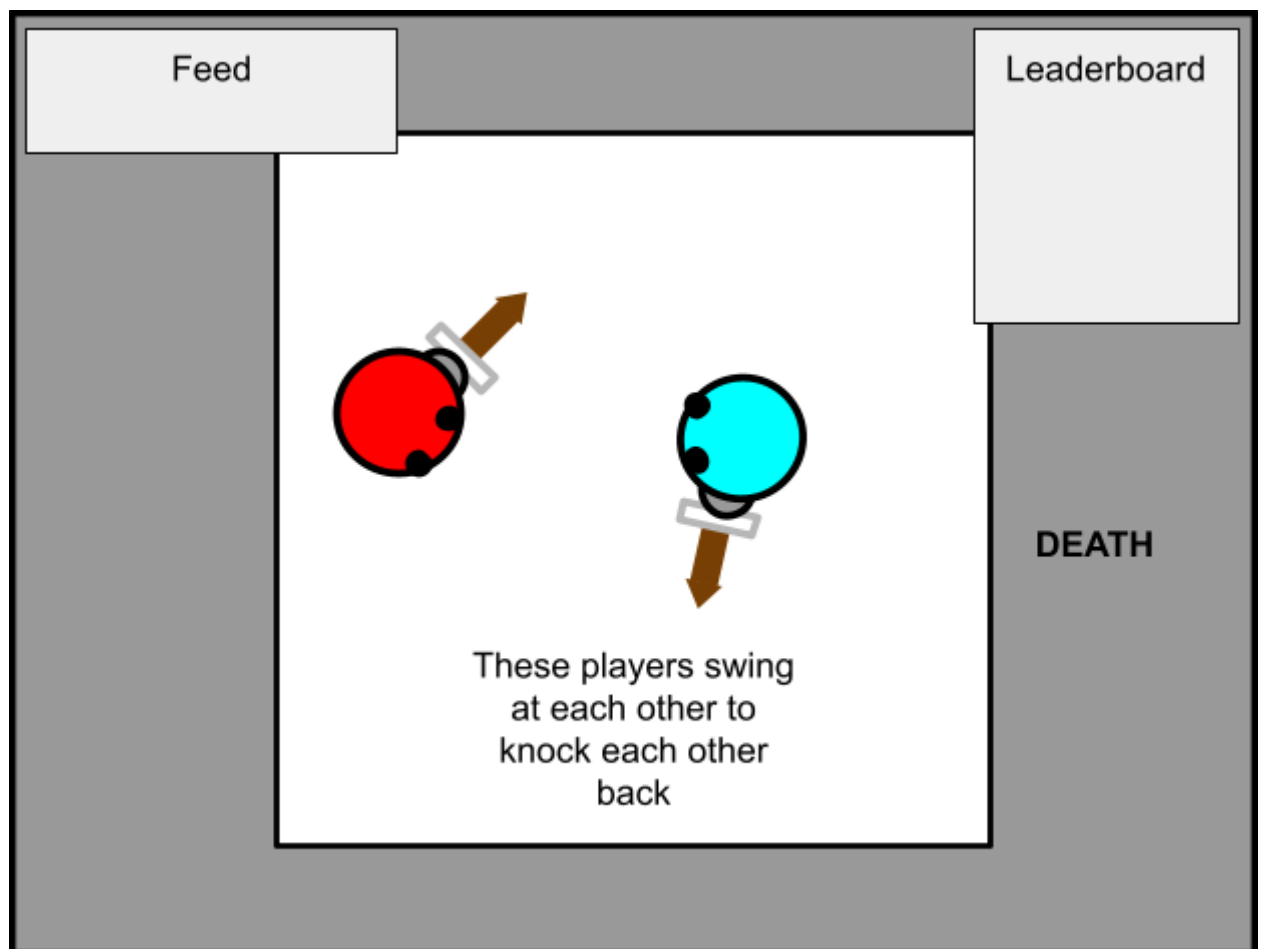
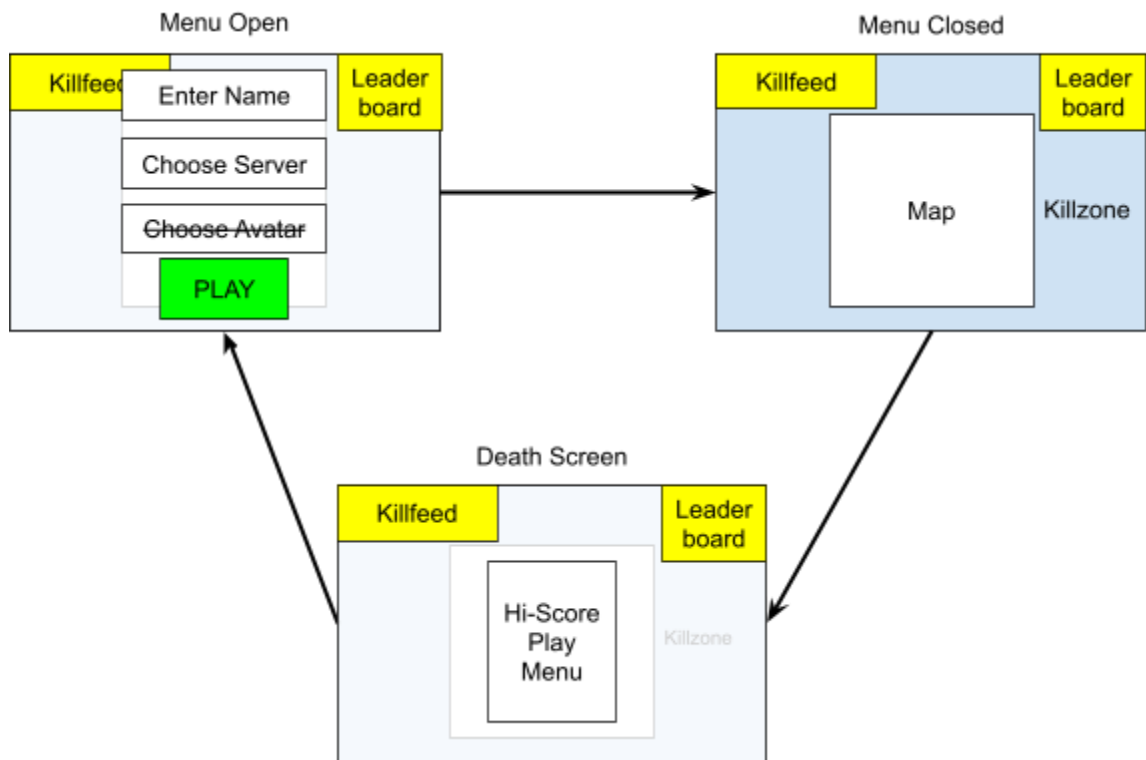
- Powered by websockets library
- Handles when players join/leave
- Collects data about all players and sends all the data at every client

2. Component Map



3. Site Map





4. Front-End Framework

We chose Bootstrap because we prefer it as it is slightly more simpler than Foundation. Our front end framework only serves to make our UI pretty.

5. Task Breakdown

Matthew Yee

- ☒ ~~Add basic physics~~
 - ☒ ~~Acceleration/velocity based movement system~~
 - ☒ ~~Pressing WASD keys accelerates the player in a certain direction~~
 - ☒ ~~Max velocity in any given direction~~
- ☒ ~~Add the stick (weapon)~~
 - ☒ ~~Add the controls for the stick~~
 - ☒ ~~Add collision for the stick~~
 - ☒ ~~Add force for stick~~

Vivian Graeber

- ☒ ~~Work on score~~
 - ☒ ~~Kill goes to the last player to touch the deceased; if nobody did it goes to no one~~
- ☒ ~~Work on killfeed~~
 - ☒ ~~Real-time updates of when someone gets pushed off the map~~
 - ☒ ~~Detect whether someone is killed, suicides, or leaves the game~~
- ☒ ~~If we are able, add the display of the avatar on the leaderboard and killfeed~~

Gita Park

- ☒ ~~Design frontend of site~~
 - ☒ ~~Rounded UI edges~~
 - ☒ ~~Appealing UI padding~~

Samson Wu

- ☒ ~~Comment current code~~
- ☒ ~~Debugging~~
 - ☒ ~~Fix server having trouble recognizing when a player leaves~~
 - ☒ ~~Fix when people with faster monitors move faster~~
 - ☒ ~~Fix false successful connection~~
- ☒ ~~Handle lobbies~~
 - ☒ ~~Add lobby player cap~~
 - ☒ ~~Create a popup telling the player to wait if the lobbies are full~~