

VIAQom -- Vincent Chi, Isaac Jon, Ahnaf Kazi, Qian Zhou

Title: Brick Breaking out of High School

Framework: Bootstrap.

Experience from bootstrap vs foundation lab was unanimously bootstrap favorable.

Roles:

Vincent Chi - Frontend development. Will assist with game development if necessary.

Isaac Jon - Database, game development if necessary

Ahnaf Kazi - Game development.

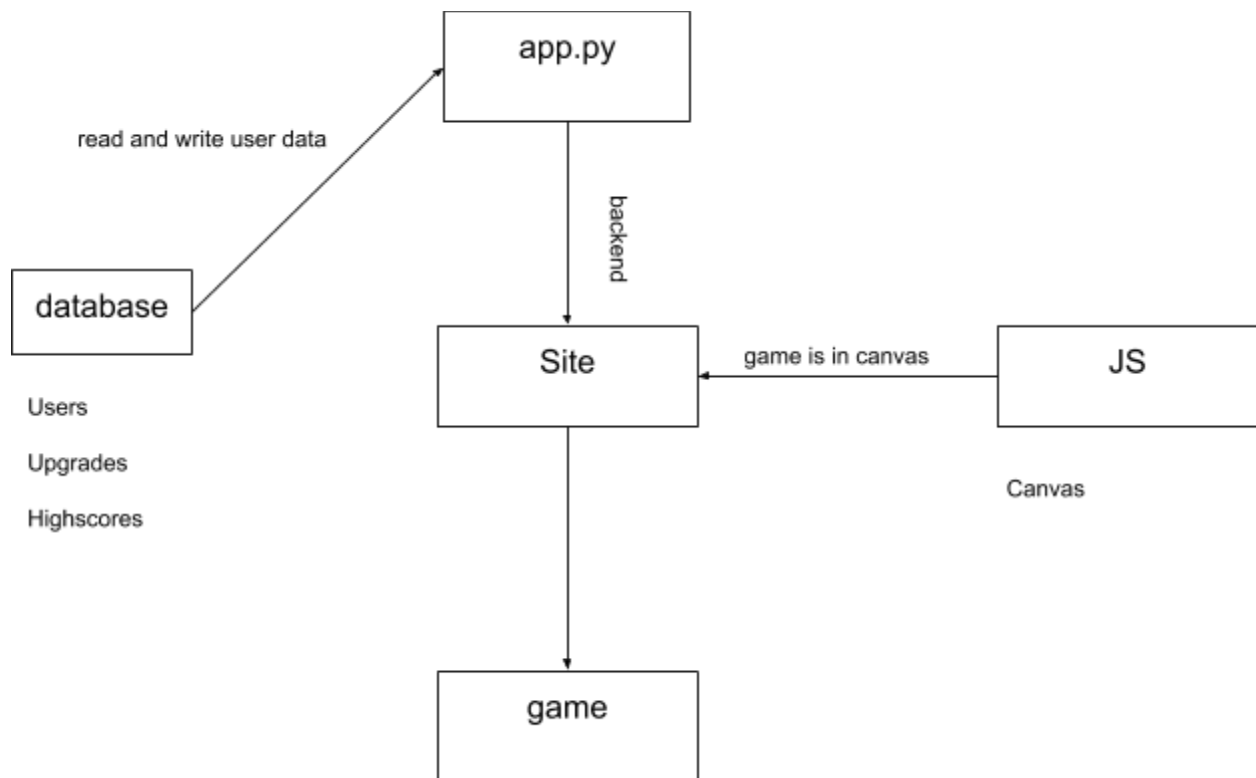
Qian Zhou - PM, misc

Overview:

We will be implementing brick breaker.

- Keep track of users high scores
- Have a money system which lets users purchase upgrades, perhaps:
  - More balls; balls with special properties
  - greater/more powerful balls
  - More lives
- Suggested: microtransactions between users
- Levels description:
  - Bricks will fall faster as score of user increases
  - Perhaps different types of bricks, some harder to break
  - Bad balls?

## Component Map

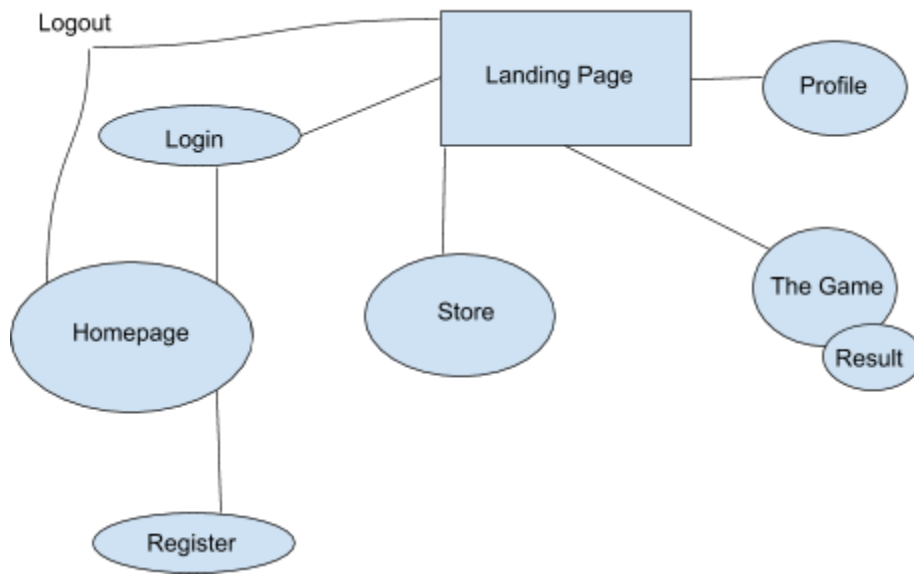


### Component List:

- Sqlite: database that will store user information, to be accessed via util/ folder functions
- App.py : runs the website
- Site (ignore uppercase):
  - Template.html (if needed)
  - Landing.html (shows leaderboard, and login)
  - Login.html (or could imbed it in a dropdown)
  - Register.html
  - Profile.html (???)
  - Home.html, shows personal scores, upgrades, coins, achievements, other features if possible, levels of game to choose from
  - Store.html, shows possible upgrades, coins, (perhaps auctions made by other users)
  - Game.html, has canvas, links to js, loads current game for user to play
    - Result.html: displays result of the game, sends score into database
- JS: manages functionality of the game
  - Manages canvas
  - Needs: upgrades of given user, level difficulty

- If multiple levels, may wish to store info in a csv or json
- Outputs result into result

## Site Map



## Database Schema

### USERS

username	TEXT
password	TEXT
displayname	TEXT
coins	INTEGER

### UPGRADES

username	TEXT
upgrade	TEXT
tier	INTEGER

### HIGHSCORES

username	TEXT
score	INTEGER

## Deadlines

### Phase 1: starting

Due Monday, May 13:

- Devlog review/upgrade
- Database creation, database registration (add to users) and login authentication features; addition and retrieval functions for upgrades and highscores.
  - create()
  - authenticate(user, pass)
  - register(user, pass)
  - etc.
- Homepage and login/register pages
  - Also Basic templates for other pages
- Start html with game in it (write out game.html, lead to js)

Due Wednesday, May 22:

- Basic functioning game
- Linking user database features with frontend
- Brainstorming upgrade features due Friday

---- APs should be over ----

Due Saturday May 24::

- Start Score, coins, upgrades, level, etc. features
- Functioning non-game features

### Phase 2: Game development

Due Tuesday, May 27:

- Each member submit implementation of at least one upgrade feature

Due June something:

- Review and integration of each others' features
- Thinking of Implementation of other potential features, start if possible