GeneralNonCooperative - Thomas Lee && Sajed Nahian && Damian Wasilewicz && Jeffrey Wu
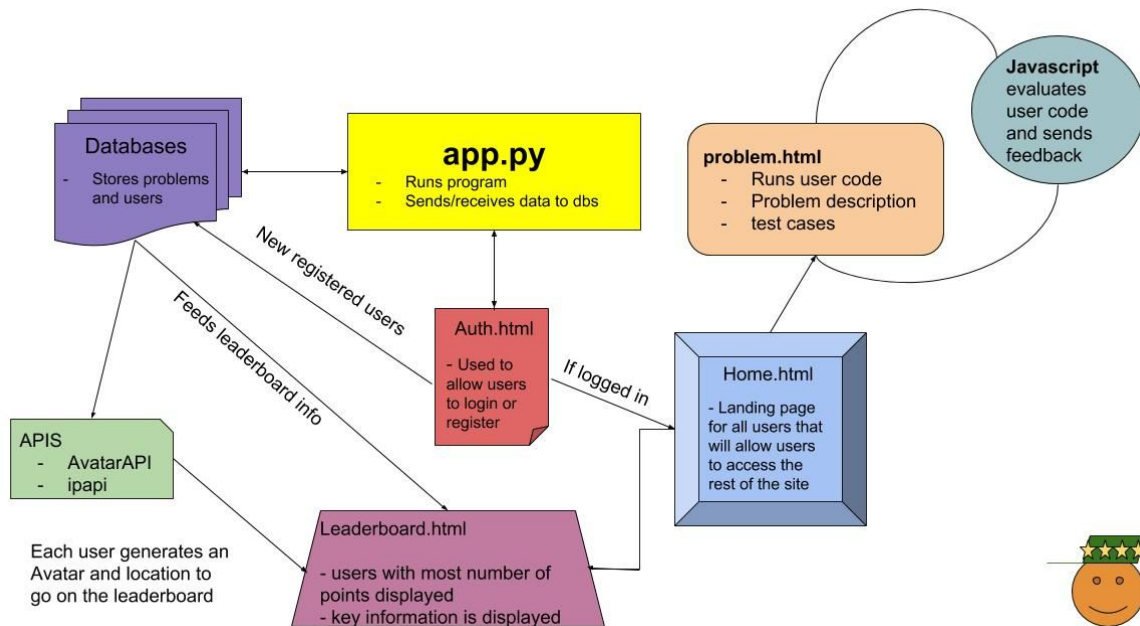SoftDev1 pd6
P #02: The End
2019 - 01 - 08

CodingGeneral

Program Components
- Login/Sign Up Page
  - Users are greeted a login page and non-registered users may login
- About Page
  - Simple page that displays our mission statement and a general overview of the site/how it works.
- Problems Page
  - Provides a list of Easy/Medium/Difficult problems. The progress within the problems is sequential meaning users must complete a problem before being able to do the one after.
- Leaderboard Page
  - A list of all registered users sorted by their points (points are earned by completing problems) and their country/username
- Creating Problems Page
  - Admins are the only users with access to this page which allows them to upload problems (problem description, test cases, solution) and categorize their difficulty (Easy/Medium/Hard). If the solution code provided doesn't pass the test cases, problem is not posted.
  - Admins must be added manually into the database to prevent normal users from gaining entry.
- Problem Page
  - After a user selects a specific problem from the Problems Page, they are brought to this page where a description of the problem and JavaScript text editor is available. There is a button where users can check their code with the visible and hidden test cases (the hidden test cases are to discourage users from submitting hard coded solutions).
- EXTRAS:
  - Shop Page
    - With the points that the user gets from completing problems, they are able to buy different confettis (confetti is displayed when a user successfully completes a problem)
  - Save Functionality
    - Add a 'Save' button to the Problem Page which allows users to save their code to work on later.
  - Give Up Button
    - Add a button on the Problem Page that allows users to get access to the solution
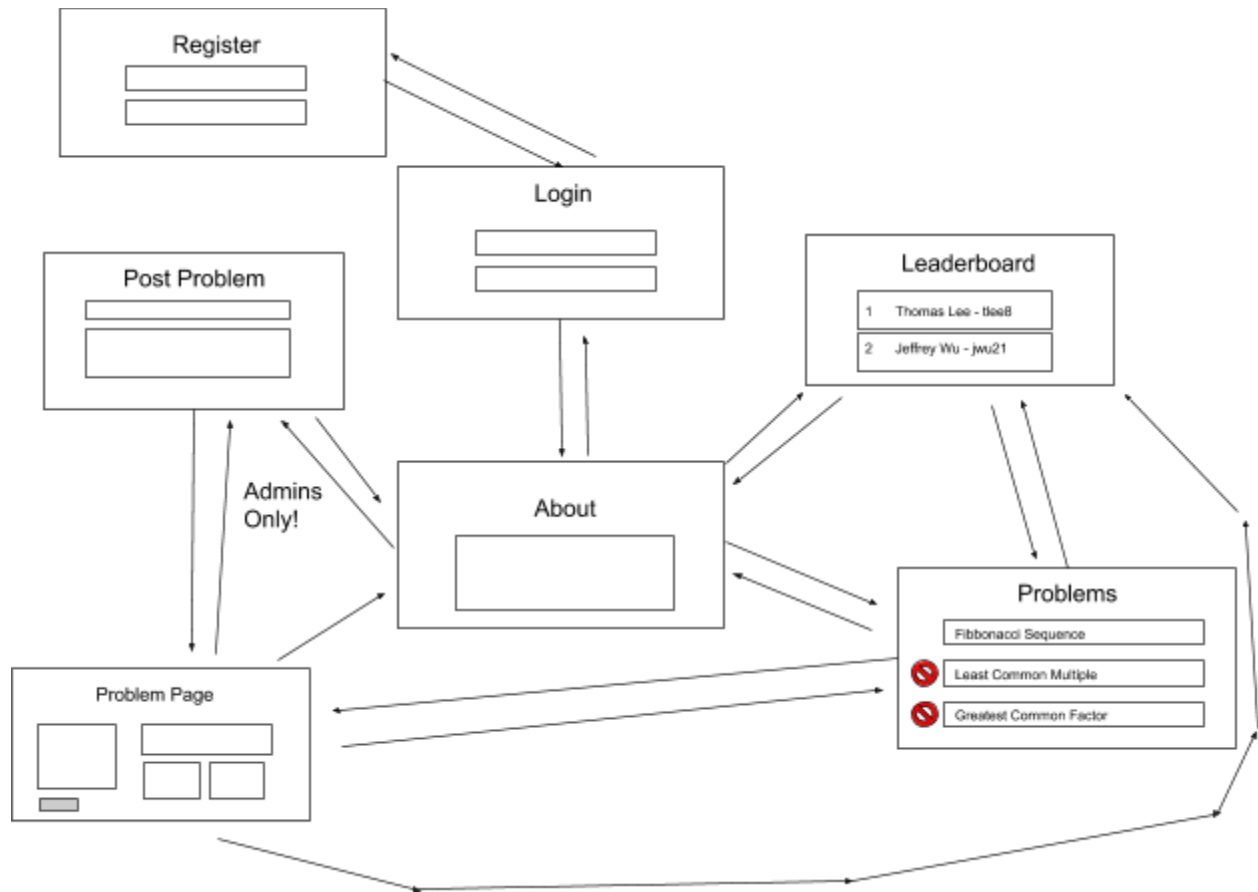
Relation of Components

Database Schema

Questions	
ID	NUM
Name	TEXT
Description	TEXT
Test Cases	JSON DICTIONARY
Solution	TEXT
Point Value	NUM

Users	
ID	NUM
Username	TEXT
Password	TEXT
Points/Score	NUM
Questions Solved	TEXT dictionary
Country	TEXT

Site Map

Register

Login

Post Problem

Leaderboard

| 1 | Thomas Lee - tlee8 |
| 2 | Jeffrey Wu - jwu21 |

Admins
Only!

About

Problem Page

Problems

Fibbonacci Sequence

Least Common Multiple

Greatest Common Factor

Task Breakdown

Jeffrey -- Project b0ss; assist with backend ; use js to add to frontend
Dame -- Database management + API integration
Tom -- Front-end, HTML + Jinja2
Sanjay -- Backend + JavaScript (the parts associated with backend)