

### **Project Description:**

A two-player game that resembles the Guess Who board game, where players ask questions and use the process of elimination to try and figure out who the other player's assigned person is. The first person to do so is the winner. Users can play with each other using separate servers that are running at the same time and interact through them.

### **Game Mechanics:**

1. Two users will be presented with the same board of 24 people. Each player is assigned a different person for which the other player has to guess (ex: Player I must guess Player II's person).
2. Player I and Player II will take turns asking each other any yes or no questions that can help them guess who their person is.
3. During their turn, the player can cross off options that do not fit the description of their mystery person or choose who they think it is for a chance to win.
4. The player can guess instead of asking a question during their turn. If they guess incorrectly, the next player goes. The game ends when one of the players guesses the other's character.

### **Program Components:**

- Jinja2
  - Create a layout for web pages the user will interact with
  - Renders templates to populate the website with some user-specific information.
- Bootstrap:
  - Builds a responsive website with CSS and JS templates that makes designing the website easy
- Flask
  - Uses Jinja2 and HTML templates to create the web pages that the user will see and interact with
  - Pulls data from the database in order to populate user's profile information
  - Will get username and passwords from the front end when a user logs in or registers
  - Will create sessions for each user when they are logged in
- SQL Database
  - Keeps track of login user information
  - (possibly) Questions and answers stored in datatables to be sent through sockets

- Javascript
  - Create the clickable board of different people using arrays
  - Buttons for choosing the action that the user wants to take (“guess who” or “eliminate”)
  - Buttons for answering the yes or no questions
- Web Sockets
  - Establishes connection between two computers
  - Send string/data from database through the socket and add it into the other site’s database (sending questions and answers to each player)
  - <https://piazza.com/class/kv0wqn7faux3ye?cid=337>
  - <https://ywu20.github.io/>
  - <https://www.geeksforgeeks.org/socket-programming-python/>
- Features
  - If it’s not the user’s turn, they don’t have access to some feature
  - Board (containing pictures and names)
  - Chatbox
  - What happens when more than two people are in the same queue?

### Database Organization:

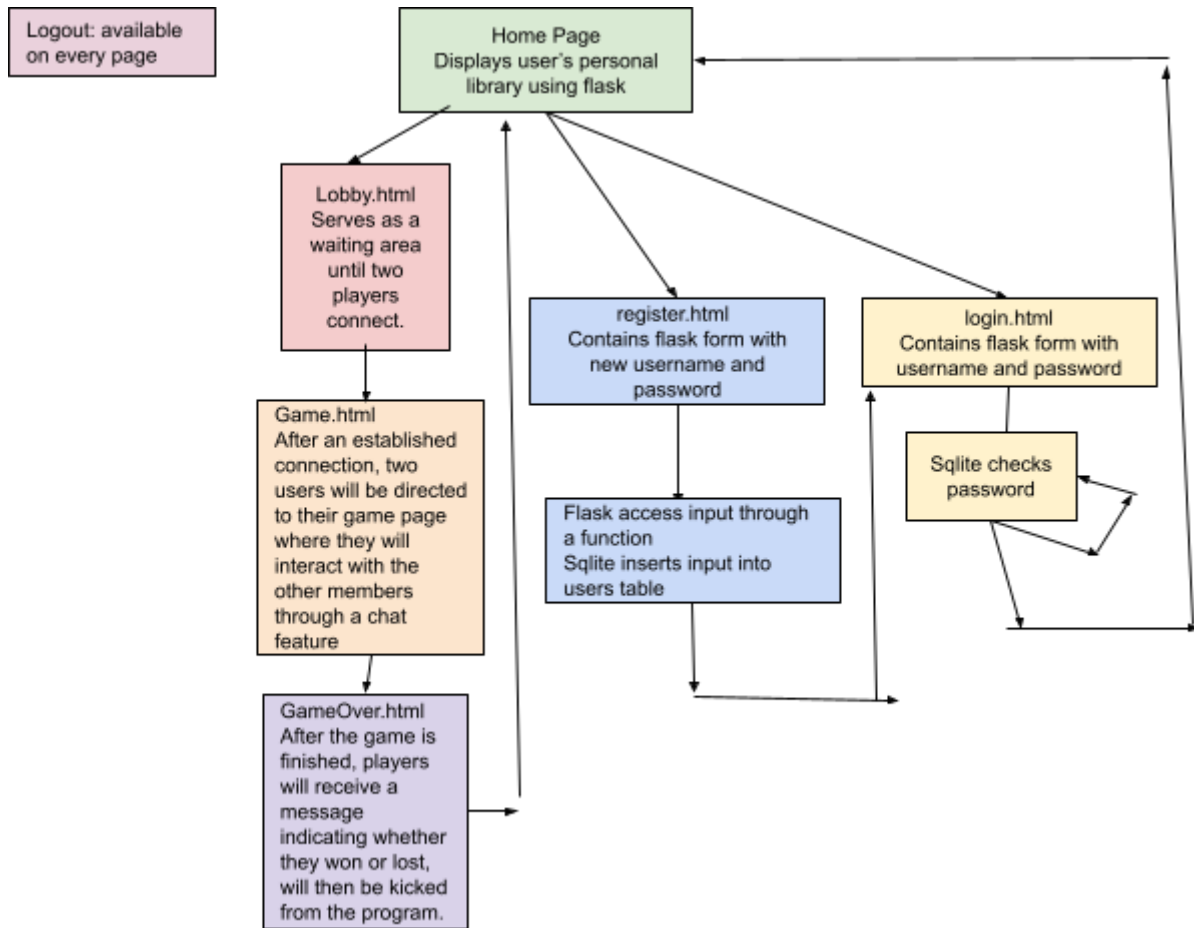
Users:

id (integer primary key)	username (text)	password (text)	wins (int)	games (int)
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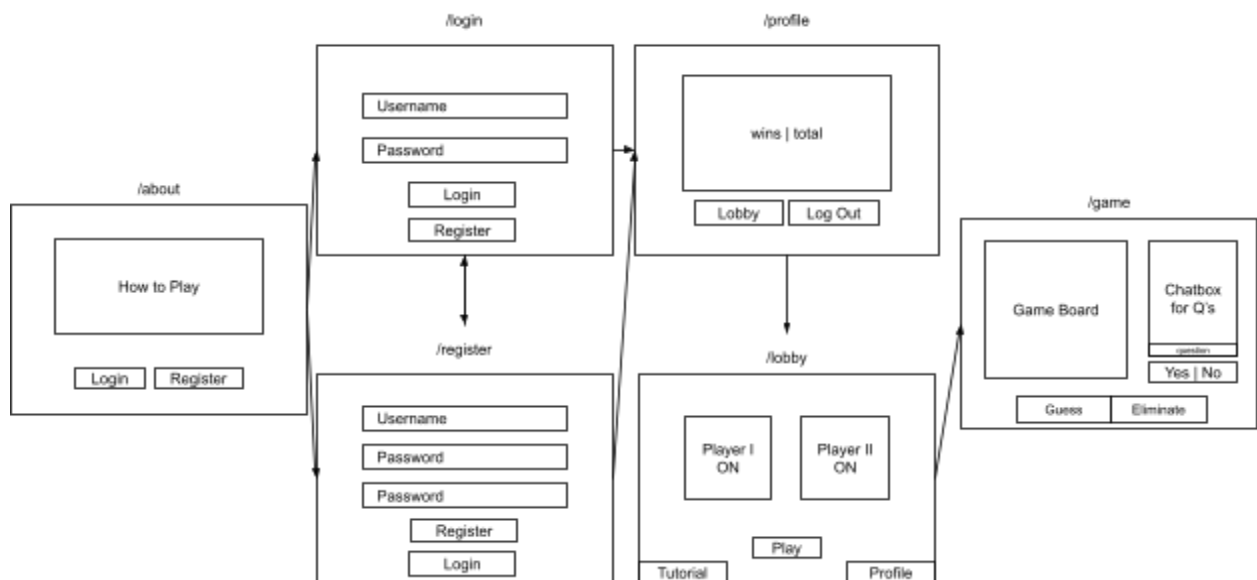
Chatbox (with questions that you can type yourself)

id (integer primary key)	questions (text)	answers (boolean)
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## Component Map:



## Site Map/Templates:



### **APIs Used:**

Used for different game modes if not the default one with pre-downloaded images

- [Celebrity API](#)
  - API which contains information about a celebrity and their images. To be used as data for people cards that players can guess from.
- [Superhero API](#)
  - API which contains information about various superheroes and their images.

### **Task Division:**

- ☐ Default board with downloaded images (Rachel)
- ☐ Establishing connection with sockets (Theo)
- ☐ Yes or no button to questions (Sadid)
- ☐ Questions to type in for players to interact with each other (Sadid)
- ☐ Buttons to either eliminate people or guess the person (Michelle)

### **Stretch Tasks**

- ☐ A chat box that allows you to talk with others
- ☐ Leaderboard
- ☐ Importing images and data for your own mystery people

**Target Ship Date:** June 8th, 2022