Cure My Boredom by Squash
P01: ArRESTed Development
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TARGET SHIP DATE: 2025-12-23

Program Components:

A. Flask App (Python)
    a. data.py
        - Connects to SQLite3 database and creates this table:
            - **Userdata** (stores personal info and score in trivia for competition purposes)
    b. __init__.py
        - Routes:
            - **/register** adds a username and password to the **users** table. Checks if username is unique, stores username in session then redirects to **/home**
            - **/login** checks if username is in **users** table and if password matches. If so, stores username in session then redirects to **/home**
            - **/home** displays user's stats and paths to unboredom activities
                - **/jokes** uses JokeAPI Generator to entertain user with jokes
                - **/trivia** uses Open Trivia API to entertain users with a fun trivia game
                - **/activities** uses Bored API to entertain user with some memes
            - **/leaderboard** displays user's stats and displays stats of top 10 users
            - **/logout** takes username out of session and redirects to /login

B. Templates
    - Consistent navbar on all pages that redirects to different pages with a logout button
    - **/login** & **/register** (form input boxes, handles authentication)
    - **/home** (user stats, buttons towards following three)

- **/jokes**
- **/trivia**
- **/activities**
- **/leaderboard**
- **/keyerror** (rendered when calling from an API results in a url error)

C. Database (SQLite3) (stored in data.db)

- **userdata** table stores all usernames and matching passwords plus stats of users

D. RESTful API's

These APIs were chosen because each part is connected to a "fun" feature: trivia questions, random jokes, and activities (we assume that the user is already bored when visiting).

- Open Trivia API (no sign-up needed; generated based on request & the user could decide the difficulty, question type, number of questions, and category)
- JokeAPI (no sign-up needed; flag categories to avoid inappropriate questions)
- Bored API (no sign-up needed; similar to Trivia API, can filter activities)

E. Frontend Frameworks

- Tailwind (buttons, filters, columns, background layering): Tailwind makes buttons, css fonts, wraps, and columns easy to categorize and style. Additionally, it allows you to leave a separate section specifically for aesthetics.

F. CSS as necessary

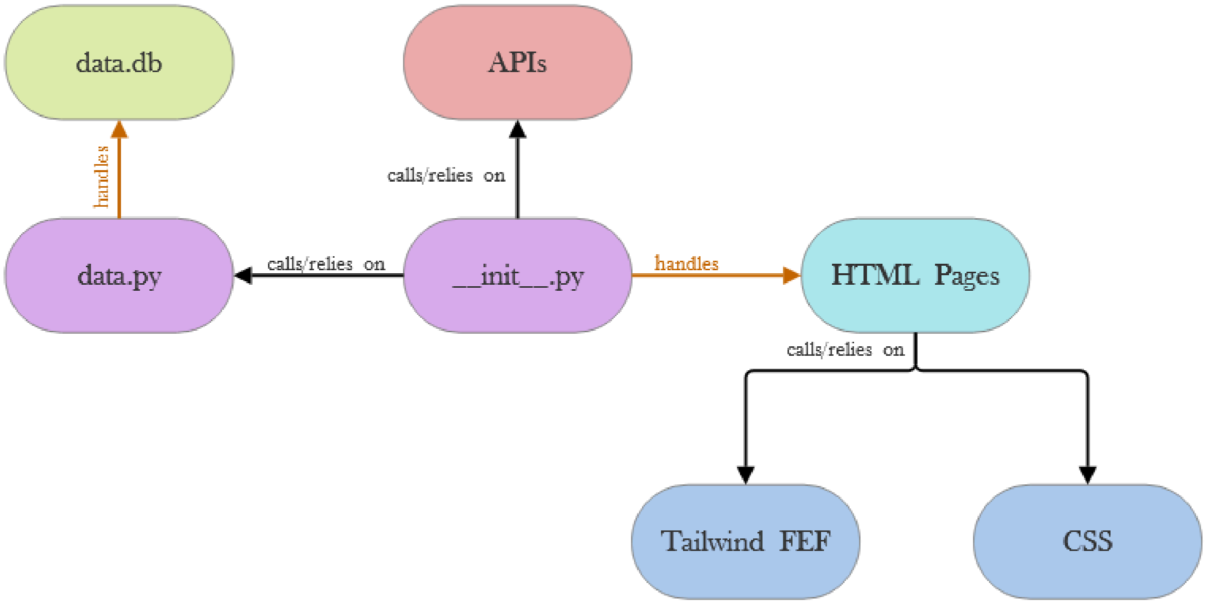
Database organization:

USERDATA

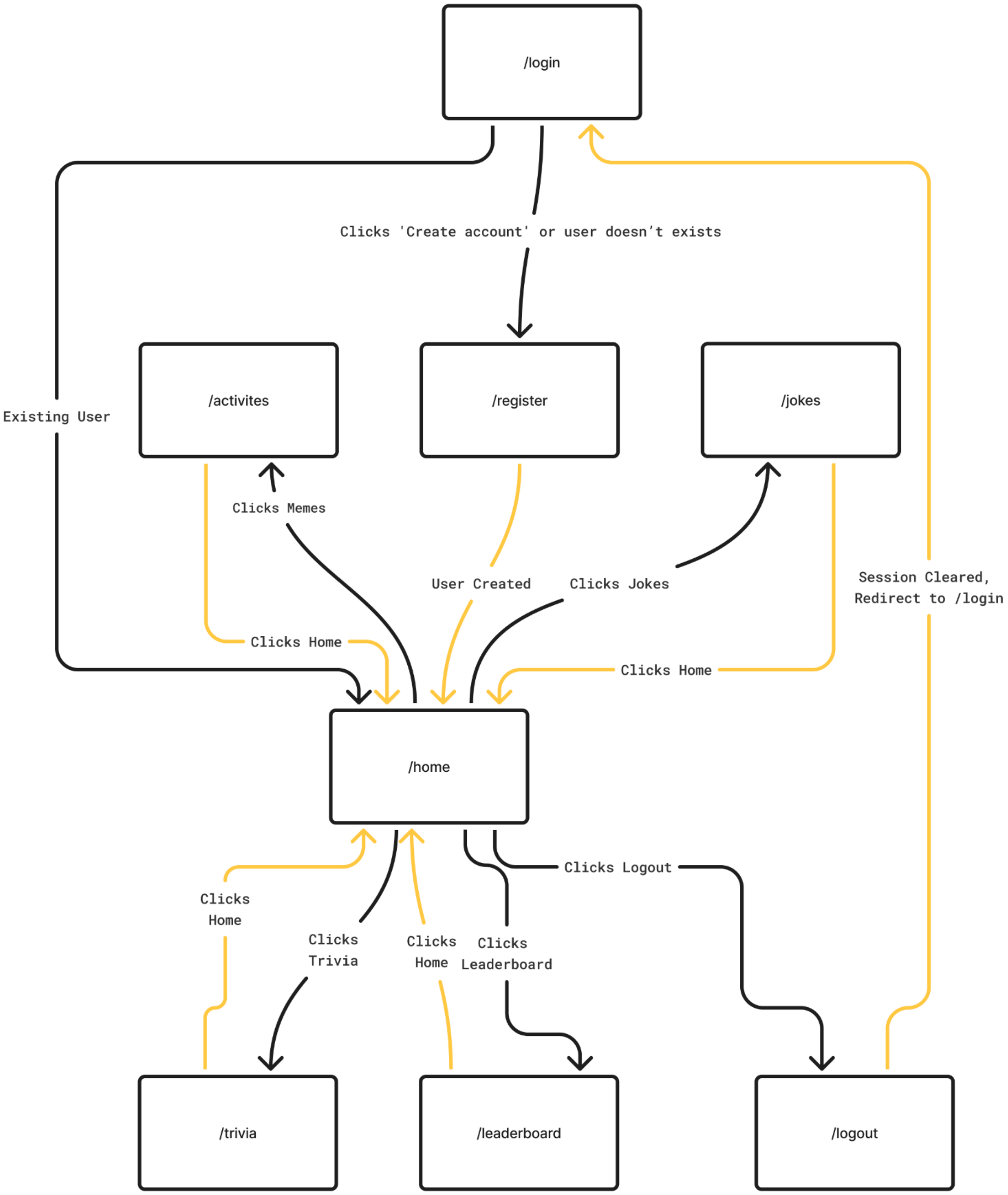
string	username	PK NOT NULL
string	password	NOT NULL
int	trivia_score	

Component Map:

SQUASH COMPONENT DIAGRAM



Site Map:


/login
Clicks 'Create account' or user doesn't exists
Existing User
/activites
/register
/jokes
Clicks Memes
User Created
Clicks Jokes
Session Cleared,
Redirect to /login
Clicks Home
Clicks Home
/home
Clicks
Home
Clicks
Trivia
Clicks
Home
Clicks
Leaderboard
Clicks Logout
/trivia
/leaderboard
/logout

DESIGN DOC WHO DOES WHAT

Task	**Devo(s)**
Program components & explanation	Jason Chan
Component map	Maya Berchin
DB Organization	Maya Berchin, Isabel Zheng
Site map	Aoanul Hoque
API section	Isabel Zheng
FEF section	Isabel Zheng
Task Breakdown	Everyone overseen by Jason

PROJECT WHO DOES WHAT

Task	**Devo(s)**
Handle middleware	Maya Berchin
Login page	Jason Chan
Register page	Jason Chan
Home page	Jason Chan
Jokes page	Isabel Zheng
Activities page	Maya Berchin
Trivia page	Aoanul Hoque
Leaderboard page	Aoanul Hoque
FEF and CSS implementation	Everyone overseen by Jason Chan & each page individually personalized (Maya: Activities; Trivia: Aoanul; Jokes: Isabel)