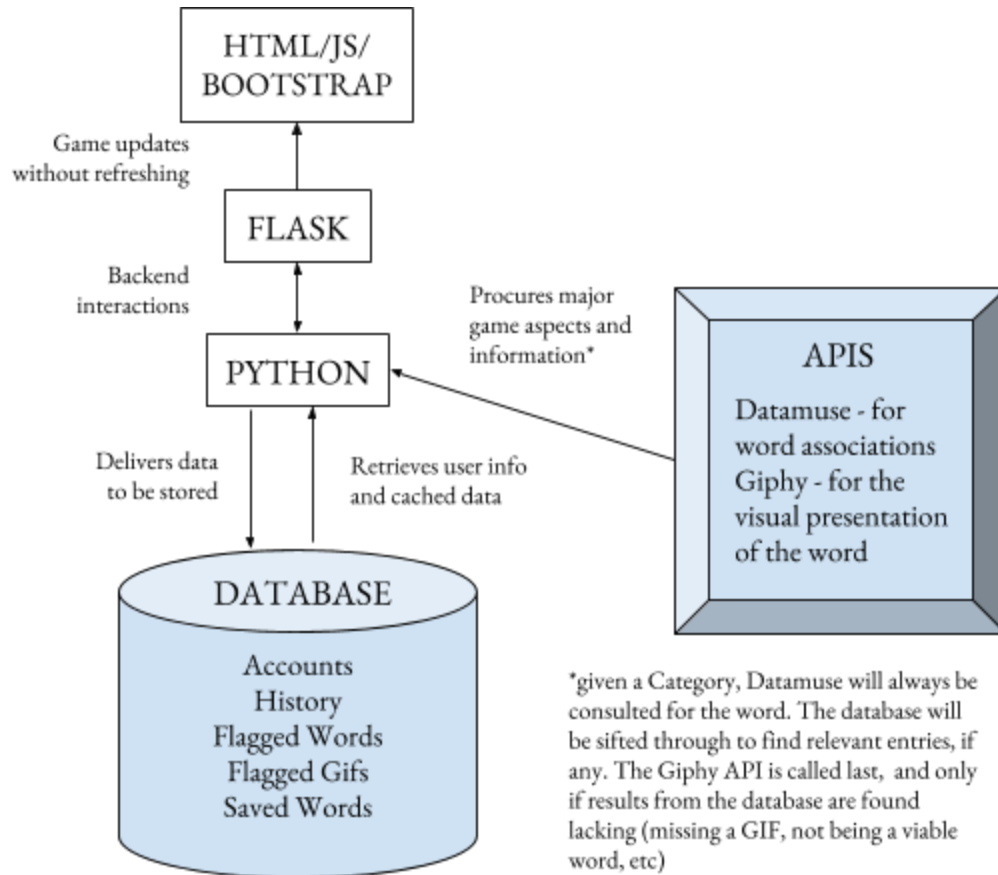# 4 GIFS 1 WORD

by Shaolin Dragons - Jasper Cheung (PM), Shannon Lau, Carol Pan, Helen Ye
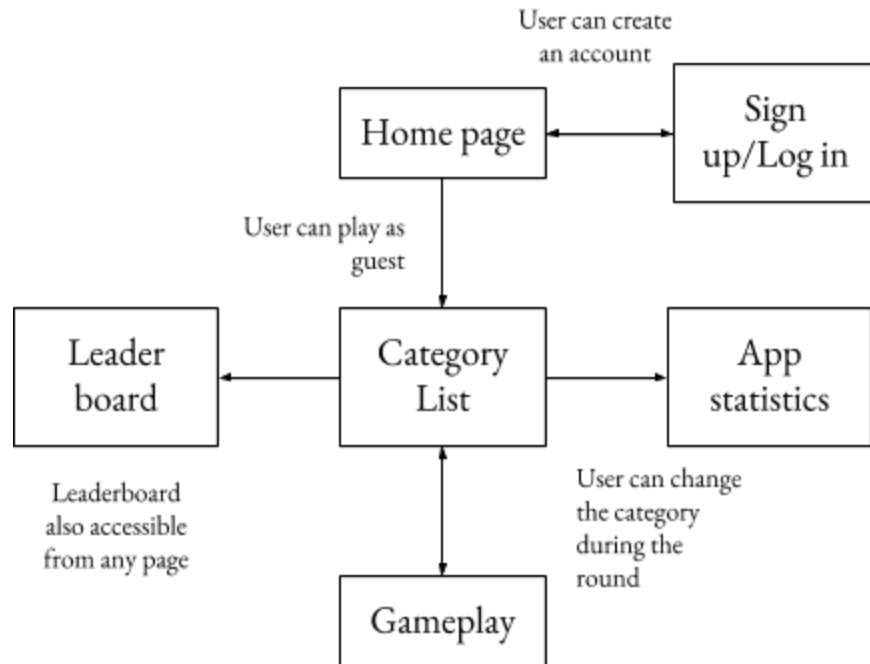
I.   Summary

4 GIFS 1 WORD is a game in which 4 GIFs will be displayed based on a word and the word must be guessed. We are using the Datamuse API to find hyponyms, words of more specific meaning than a general term, of specific hand-picked categories. Then, the words will be passed to the Giphy API to generate four GIFs of the word.

II.   Components

HTML/JS/BOOTSTRAP

Game updates without refreshing

FLASK

Backend interactions

PYTHON

Procures major game aspects and information*

APIS

Datamuse - for word associations
Giphy - for the visual presentation of the word

Delivers data to be stored

Retrieves user info and cached data

DATABASE

Accounts
History
Flagged Words
Flagged Gifs
Saved Words

*given a Category, Datamuse will always be consulted for the word. The database will be sifted through to find relevant entries, if any. The Giphy API is called last, and only if results from the database are found lacking (missing a GIF, not being a viable word, etc)

III.   Sitemap

IV.   Database Schema

Accounts - stores user accounts and their points
Username (Primary Key) | Hashed Password | # Points

GIF Flags - stores the problematic gifs
Category | Word | GIF URL

Word Flags - stores the problematic words
Category | Word

User History - stores a permanent record of all user's word history to ensure no redundancies
Username | Category | Word

Saved Words - stores word and corresponding gifs
Category | Word | GIF URL 1 | URL 2 | URL 3 | URL 4

V.   Roles

Jasper
1. Project Manager
2. Picking Suitable Categories
   a. Grabbing hyponyms from datamuse api and eye testing on Giphy API
3. Accounts

Shannon
1. Front end
   a. Create HTML pages. BOOTSTRAP
   b. Using Javascript to animate the game
      i.   Indicates when answer is incorrect or invalid letter is typed
   c. UI/UX

Carol
1. Database Interaction
   a. Creating accessor/mutator fxns for the data
   b. Update all the tables with user info or word info
2. Flagging
   a. Functionality to flag words that do not fit a given category

Helen
1. API Calls
   a. Using the datamuse api to grab list of hyponyms
   b. Query the giphy api with hyponyms to generate gifs
2. Flagging
   a. Functionality flag gifs that do not fit a given word