UnitedPurpleNPCs: Henry Bach, Jeffery Tang, David Deng, Shafiul Haque
SoftDev Period 8
P1 – Creepy Website
2022-12-04
Time Spent: 3.1 hours
Target Ship Date: 2023-01-05

Current Plan:

- User Feature:
    - Log in/log out features, and creating user profiles
    - Login page
        - Spaces to input username and password
        - Submit button to lead to home page
        - Register button to lead to sign up page
    - Sign up page
        - Spaces to input username and password
        - Create button to create account
        - Back button to return to login page
- Getting the information:
    - Use **IPStack API** to get the location of the user and get IP (user consent does not matter, we will get it either way)
    - Use **WorldTimeAPI** to get time of user using their location
    - Get air quality of location to somewhat calm them down since their IP just got taken
    - Use either weatherbit or weatherAPI to get the weather in that location
- Submit Button:
    - Use **LoveCalculatorAPI** or other program that takes some inputs and outputs some other type of information (gives us a percentage)
- Output:
    - Similar results feature (User can see other users with results that line up)
    - Use the percentages to display the possibilities of many things (chance you'll find love today, chance you're existence upon this planet that I write this from will end today, etc.)
    - Keeps those results and specifics in db to share as necessary (store most recent)

Possible Stretch Goals:

- DM them their results over Discord through a bot created using DiscordAPI
- Link discord with your account login created through our websites

List of Program Components:

- Templates

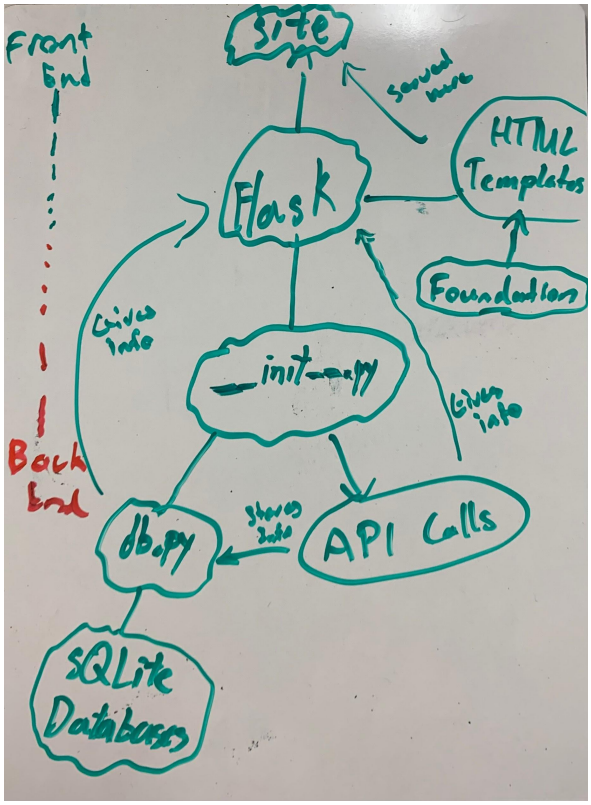
- Use **Foundation** as a Front End Framework to format pages (explanation as to why provided later)
- Serves as a foundation for front-end to display the website (__init__.py)
- Database data displays in certain sections of the html
- index.html
    - The landing/main page (When logged in)
    - The path that the flask would go through is /
    - We plan to have a design of our team logo on the top of the page
    - There would be a logout button at the top to return to home page, a profile button to see your results if you have them, and a calculate results button if you haven't done so already
- main.html
    - The landing/main page (When not logged in)
    - The path that the flask would go through is /
    - We plan to have a design of our team logo on the top of the page
    - There will be a login and sign up button
- login.html
    - The login page
    - The path that flask would go through is /login
    - If a user is already logged in, then this page would automatically redirect to the main page
    - There are signup and go back home buttons for navigations
- signup.html
    - The signup page
    - The path that flask would go through is /signup
    - A user who isn't registered already would signup here
    - There are login and go back home buttons for navigations
- results.html
    - The results page
    - The path that flask would go through is /results
    - A user who has clicked the calculate results button would be able to see their results
    - You can navigate back to the main homepage to try to get new results, or see comparison amongst other users
- similar.html
    - The similar page
    - The path that flask would go through is /similar
    - A user can see which statistics from their
    - You can navigate back to the main homepage to try to get new results, or go back to see your own results

- Flask App
    - Helps display the html files through paths for certain linkages
    - SQLite database functions references in order to add/delete data in the database
    - __init__.py
        - routes to connect to HTML files
    - db.py
        - Log in and out
        - Grab data from API and retrieve and set database information
- SQLite Database
    - Displays information in the html templates
    - Functions are used in the flask app to add/delete data in the database
    - discobandit.db
        - Log in and out
        - Store data from APIs (so we can find users with similar results)

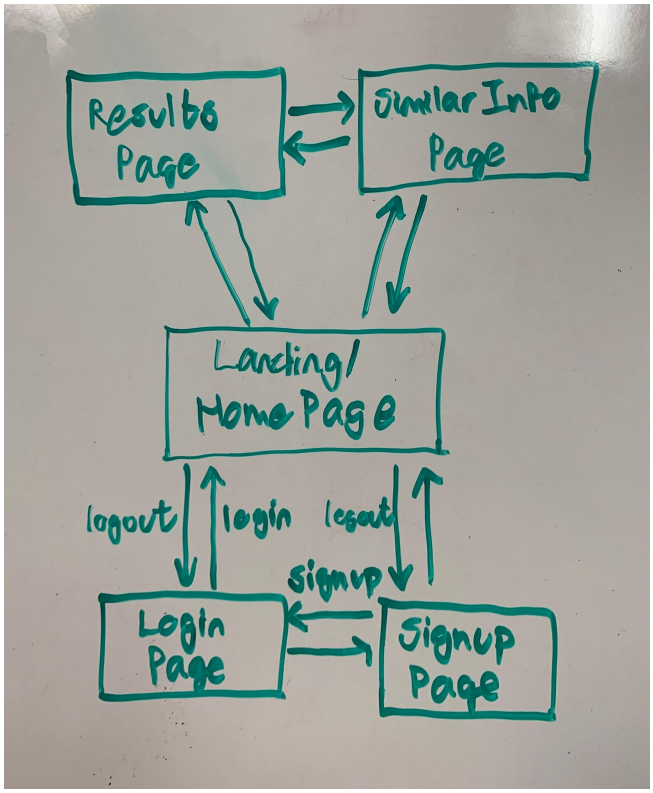
Database Structure:

- Table with usernames (must be unique!) and passwords
- Data from IpStack API (city, zip code), WorldTime API (time), WeatherAPI (weather), and LoveCalculator API (percentage)

Component Map:



Site Map:



Tasks:

- create the database and functions required for the app
- create html templates to display information and linking redirects from one page to another
- create the python app file in order to have the app running
- import the API data successfully, and use it in order to display data
- Maybe read from database and display previous results ~~leak other people's information~~ on the website as a possible frontend feature since right now, we only have a single form that will take their Discord username and their IP (I think we can get it even if they don't enter it so…) as website content.

General Focuses (per member):

- Jeffery (sqlite)
- Shafiul (html)
- David (api/flask)
- Henry (api/flask)

APIs: IPStack API, WorldTimeAPI, LoveCalculatorAPI, DiscordAPI (possibly)
Front-End Framework: Foundation

- the do it yourself style offers more unique and custom designs for websites
- more freedom on components such as grids and cells, which we will make use of

Inside notes:

- Make sure apis work