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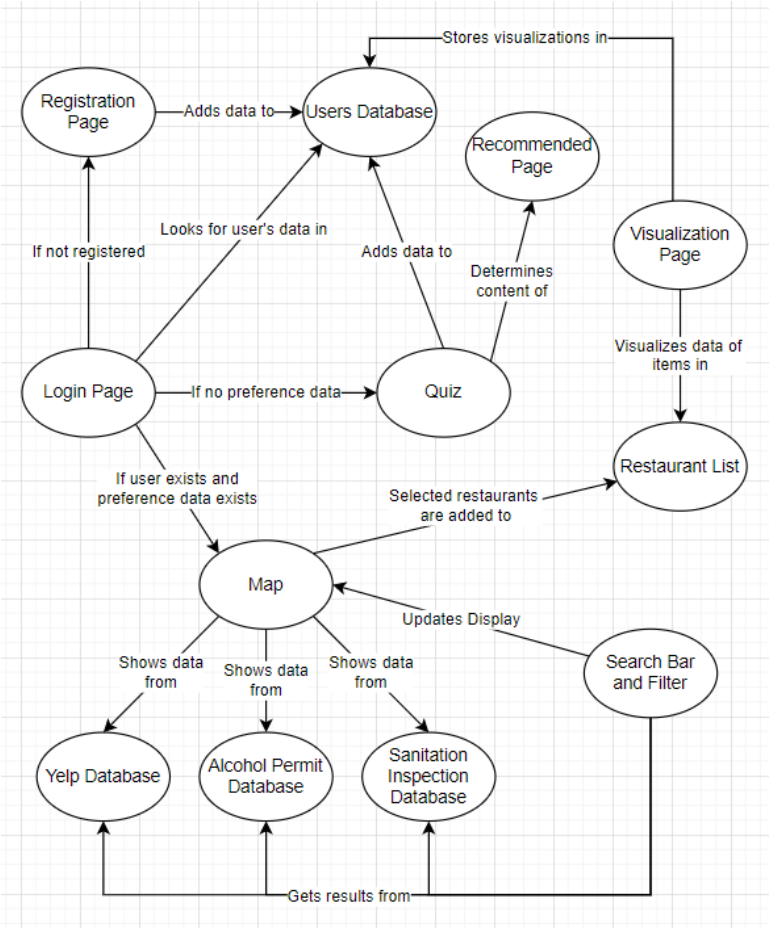
SoftDev
Period 7
2023-05-03
Target Ship date: 2023-05-24
NYC Restaurant Data Visualizer

Program Components:

- templates/
  - login.html, register.html
    - Allows users to login and register
  - preferencesQuiz.html
    - Allows users to list preferences, so we can later provide personalized recommendations (using forms)
  - dashboard.html
    - Map with filters like food category, takeout/delivery, parking, location, sanitation grade, location, etc.
    - Search bar to search restaurants by name or address
    - Data about restaurants in map radius
      - Graphical representations of food categories etc.
  - myRestaurants.html
    - Displays saved restaurants and visited restaurants (allows users to review them)
  - pastVisualizations.html
    - A page to store saved visualizations (snapshots of filtered data from dashboard) so it can be compared to other visualizations
  - recommendations.html
    - Recommended page to show a list of restaurants based on restaurants the user has previously visited and given good reviews to which also includes brief descriptions of the restaurants like a star rating, seating availability, food category, and dietary restrictions
- __init__.py
  - Runs app
- users.py
  - Deals with user data
- restaurants.py
  - Deals with restaurant data
- users.db
- restaurants.db
- style.css
- script.js

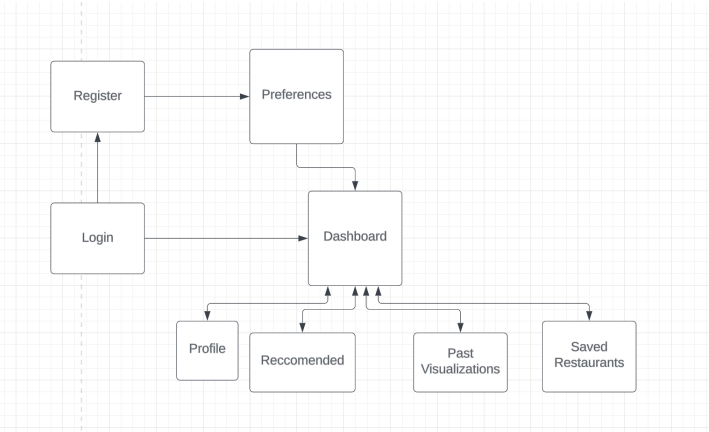
Component Map

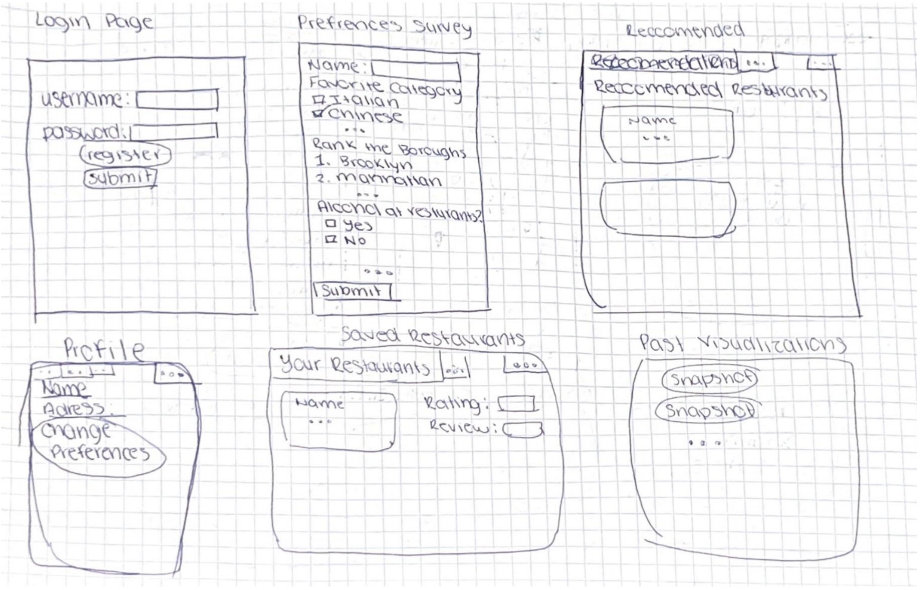


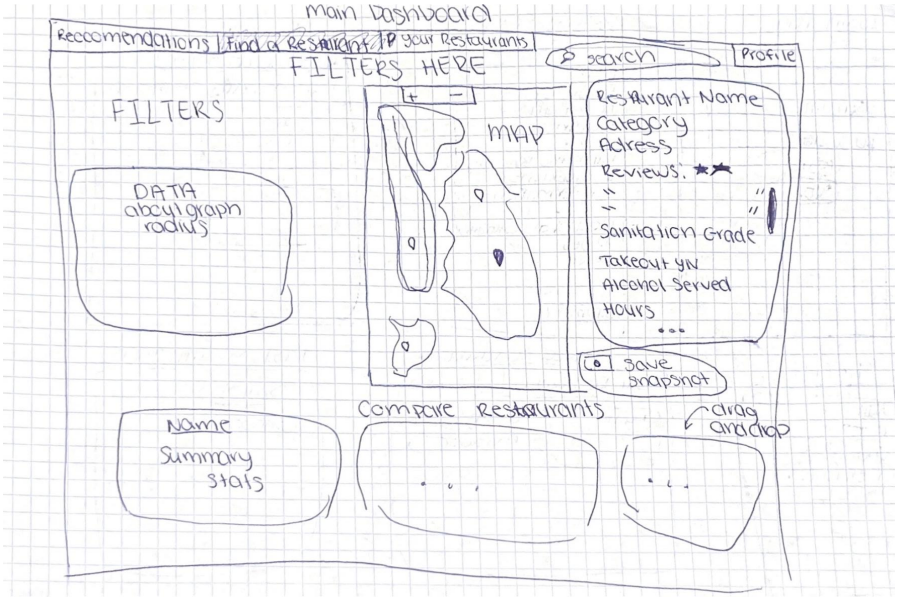
Relation Between Components

- Login and registration pages create accounts with their own lists and saved visualizations
- Quiz for what users like in restaurants + past reviews → section for recommended restaurants
- Allows users to save restaurants they've been to and write reviews
- Display yelp reviews + sentiment of review
- Map displays filterable information about all restaurants in view
- In the map, users can select a set of restaurants to save to a list for data visualization later. Users can also choose a location and select all restaurants in a radius around that location
- Search bar takes users to a specific restaurant on the map
- Users can take a list they've created and visualize the data, then save that visualization to the users database

Site Map


Register
Preferences
Login
Dashboard
Profile
Reccomended
Past Visualizations
Saved Restaurants


Login Page
username:
password:
register
submit
Prefrences Survey
Name:
Favorite category
Italian
Chinese
Rank the Boroughs
1. Brooklyn
2. Manhattan
Alcohol at restaurants?
Yes
No
Submit
Reccomended
Reccomended Restaurants
Name
Profile
Name
Adress
Change Preferences
Saved Restaurants
Your Restaurants
Name
Rating:
Review:
Past Visualizations
Snapshot
Snapshot


Main Dashboard
Reccomendations
Find a Restaurant
Your Restaurants
FILTERS HERE
search
Profile
FILTERS
DATA
abcyl graph
radius
MAP
Restaurant Name
Category
Adress
Reviews:
Sanitation Grade
Takeout y/n
Alcohol Served
Hours
save snapshot
Compare Restaurants
drag and drop
Name
Summary
stats

APIs

Embedded Google Maps API (subject to change)

- https://developers.google.com/maps/documentation/embed/get-started

Database Structure

- USER TABLE
  - username TEXT
  - password TEXT
  - restaurants saved TEXT
  - restaurants visited TEXT
  - reviews TEXT
  - visualizations ?
  - Food category: [item0, item1] LIST
  - location TEXT
  - borough preference (ranked 1-5) DICT (like object)
  - alcohol preferences BOOL
  - preferred restaurant seating TEXT
  - dietary restrictions LIST
- RESTAURANTS TABLE
  - Restaurant name TEXT
  - Address TEXT
  - Takeout BOOL
  - Parking BOOL
  - Categories LIST
  - Hours DICT (like object)
  - Reviews DICT (like object)
    - Stars
    - Tag for tone
    - Date
    - Text
  - Alcohol BOOL
  - Sanitation inspection grades TEXT
  - Seating type TEXT
  - Dietary restrictions LIST
  - User reviews LIST

Databases Used

- Yelp Database - JSON: https://www.yelp.com/dataset/documentation/main
    - business.json
        - Name
        - Address
        - Takeout
        - Parking
        - Categories
        - Hours
    - review.json
        - Stars
        - Tag for tone
        - Date
        - Text
- Active and pending alcohol permits - JSON: https://sla.ny.gov/public-query
    - Active alcohol permits
        - Premise name
        - Method of operation
- Sanitation inspection grades: https://www.nyc.gov/site/doh/services/restaurant-grades.page

Front End Framework

Using JS and potentially Node.js to provide easy interactivity with the page for the user.

- JS: interaction with user
    - Event listeners
    - Events
    - Functions
- Node (if used)
    - Faster/more efficient updating of DOM
- Bootstrap

Tasks

- Front End Design (JS, Bootstrap) - Abid, Kevin
- Database Work - Jeffery, Elizabeth
- Flask - Kevin, Jeffery
- API - Elizabeth, Abid