TNPG: Truly Delectable Sleeping Duckies
Roster: Anna Fang, Aleksandra Shifrina, Samson Wu, Ravindra Mangar
SoftDev
P04
2023-05-3
Time spent: 6 hrs
Target Ship Date: 2023-05-29

McMapping Disappointment

Abstract:

The main page will display a zoomed-out map visualization of the United States (using javascript). When the user hovers over an individual state, the happiness ranking [provided via dataset] is shown as well as the minimum wage in that state (an aspect we believe is related to happiness). When the user clicks on the state, they will be ~~shown all McDonald's locations within the state and subsequently~~ state stats(the status of the ice cream machines, the brokenness level of McDonald's locations, happiness, the total number of McDonald's locations, and the ratio between broken and working ice cream machines). ~~Using the Med location grabber API, the user can enter an address. Nearby McDonalds, their Merating (via Yelp API) and their ice cream machine status will be shown.~~ We will be using the OpenStreetMap API to interactively display all mcDonald's locations and their ice cream machine status.

~~If we have time (and energy), we aspire to create a single-thread rant forum so our classmates can complain about the fact that the ice cream machine at the Chambers Street McDonalds NEVER works :-)~~ Our new stretch goal is to make a search bar for users to find McDonalds locations via address search.

There will be a login system associated with both parts of the site, but it will be especially relevant for the forum bit.

Program Components:

- HTML
    - The main page (landing) of the website will be the (US) Maps visualization. We will have an accounts option page (registration page) to distinguish between different users, and a single-thread forum page for the rants comments concerns (confessions?) relating to Mcdonald's ice cream. We will also have a conclusions page and an interactive maps page.
- Flask

        - This should not be any much different than previous projects. Flask will be a medium for linking web pages together, along with pushing data gathered from ~~McDonalds~~ OpenStreetMap API, ~~YELP API Wrappers~~ and SQLite3 Logins.
            - Adds to databases based on corresponding post requests
            - Uses render_templates to display any necessary pages
- SQLite3
    - Stores logins
    - Stores forum comments
- Javascript
    - Interactiveness of our website (animations, hovering popups for each state, etc).
- APIs
    - OpenStreetMap
        - Fetches geodata to return the street layout of a specific area
    - ~~Yelp~~
        - ~~Gets ratings of the specific McDonald's locations~~
    - ~~McDonalds Location Grabber~~
        - ~~Allows us to query nearby McDonald's locations~~
- Datasets
    - McBroken
    - State Happiness
    - States Minimum Wages

Bootstrap or Foundation?

- Bootstrap
    - Custom Buttons and Text Boxes, along with a navigation bar, will use Bootstrap designs.
    - Mainly chosen due to bootstrap being better suited for responsive design, which is what we're personally aiming to do.

Component Map:

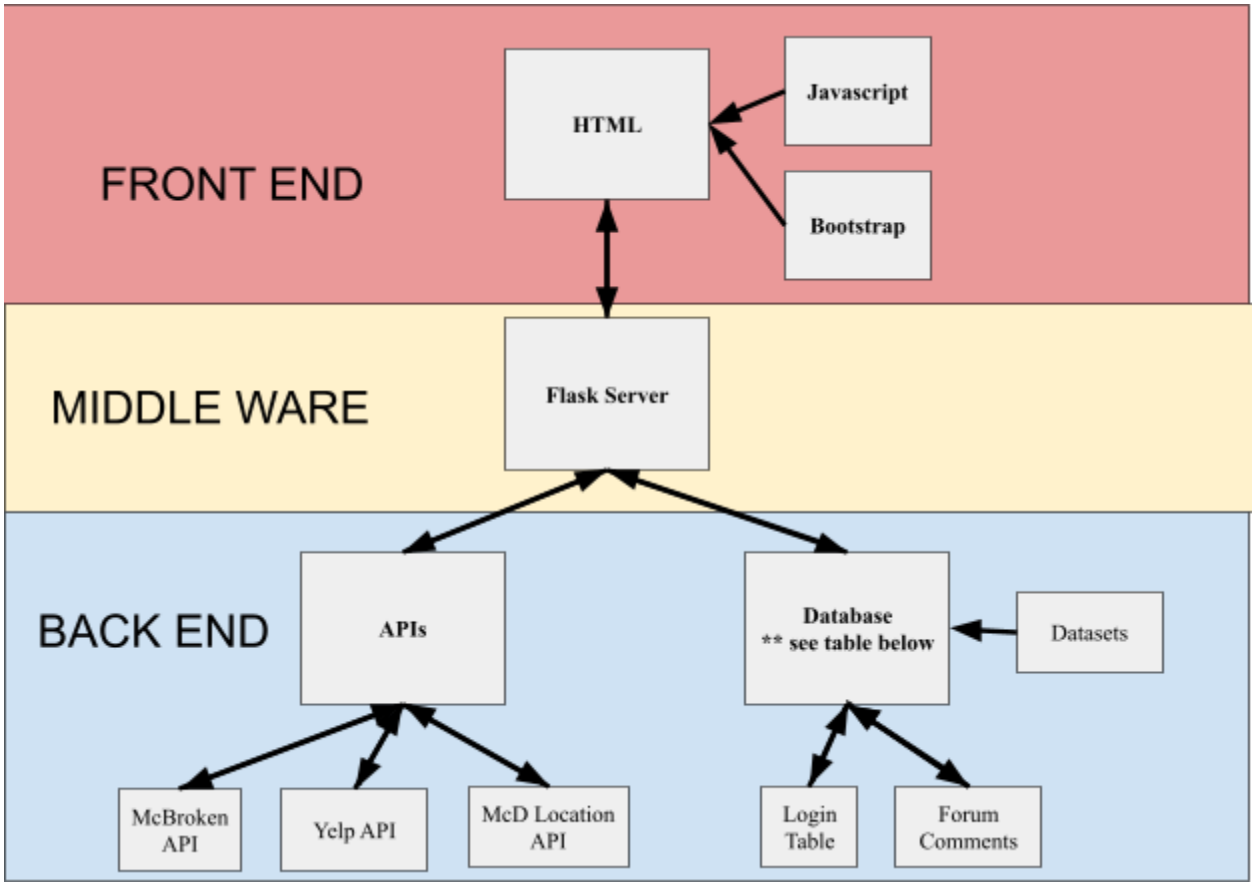


Table Organization:

Users

Username	Password	UserID

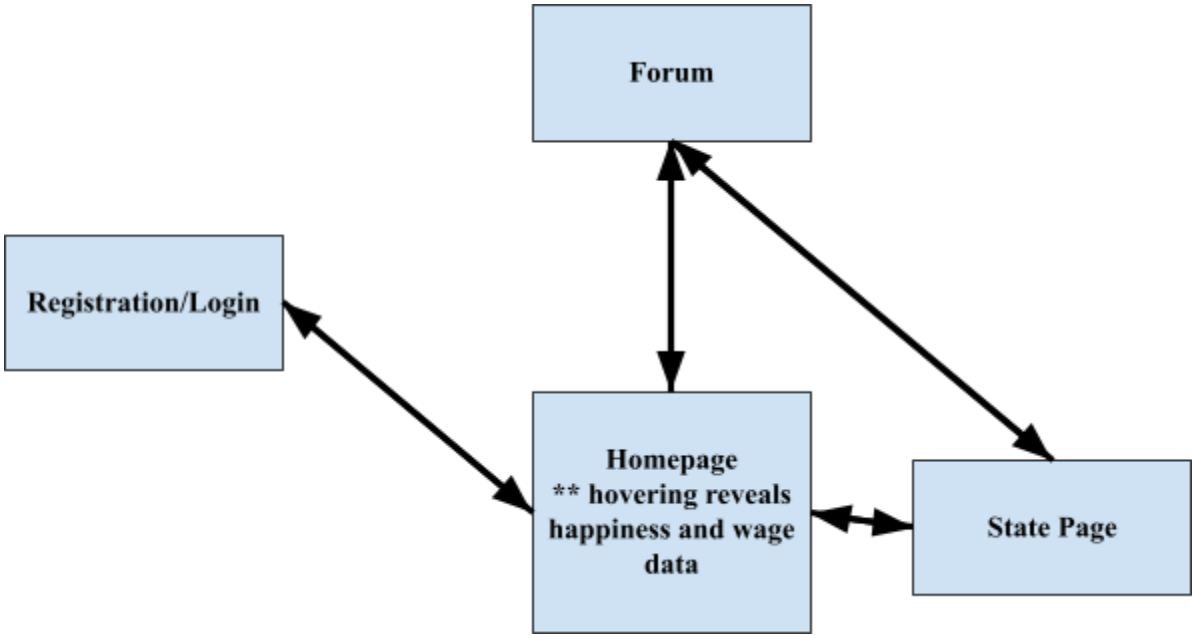
Forum

Username	Forum Post #	Parent #	Forum Post Text	Date

State Stats

State	State Short	Happiness	Minimum Wage

Site Map:



- HTML registration form
    - links to and stores information in a database table containing all user info (username and password as text)
    - Connects to homepage
- Homepage
    - Maps visualization using JS ~~and APIs~~
    - Hovering reveals state happiness, minimum wage data~~, and visualization (but not exact location) of each store~~
    - Connects to every other page
- Loaded pages for each state
    - includes all relevant ~~information~~ data points (~~Mcdonalds locations, Yelp rating, machine status~~) and a button to return to the Homepage
    - Can also access forum through this page
- Forum Page (stretch goal)
    - Acts like a community blog site. Includes a textbox for the user to enter new text and a button to return to the Homepage or state page **see abstract.
    - Links to a database storing post number, post text, and the username of the user who entered the text.
- Conclusions Page
    - Graphs (line and scattergrams) comparing the relationship between each data element
    - Our conclusions based on the data collected
- Interactive page
    - Using the OpenStreetMaps API, we will create an interactive map for users to find McDonald's locations and identify their ice cream machine status.

Task Distribution:

- Anna Fang:
    - Front end
        - JS, CSS, HTML
- Aleksandra Shifrina:
    - Front end
        - JS, CSS, HTML
- Samson Wu:
    - Back end
        - Flask, Database, APIs
- Ravindra Mangar:
    - Back end
        - Flask, Database, APIs