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SUMMARY OF MVP

We propose an app that is oriented around health. We will incentivize completing tasks by assigning them a point breakdown as well as a leaderboard of top users. Once the user logs in, they will be able to access an online forum where they can exchange messages with each other. On the dashboard, there will also be interactive maps and charts where they can monitor calorie intake, sleeping schedules, and physical activity. Also, the app will contain sections for personalized health tips (like meal planning), track fitness activities, and reminders.

PROGRAM COMPONENTS

- __init__.py: app for website
- templates/
  - Config.html
    - Allows users to respond to questions about their user preferences (modes for app like light/dark) and health information (physical attributes)
  - Survey.html
    - Daily survey that asks about calorie intake, sleeping schedules, and physical activity
    - Can be updated as often as necessary
  - Login.html
    - App will require users to log in or register if they have not done so already
  - Register.html
    - Registration page
  - Error.html
    - Displays a custom error message
  - Home_page.html
    - Shows user dashboard, which will include interactive charts about calorie intake, sleeping schedule, and physical activity, as well as to-do list
    - Will include links to needed forms to update aforementioned charts
    - Receive personalized health tips/recommended fitness activities based off US Department of Health API
    - Access the online forum
  - To-do.html
    - Allows for quick and easy updates for reminders
    - Include option to send sms reminders for events through Fast2SMS API (Stretch Goal)
    - Checkboxes for events

- - ○ Forum.html
      - ■ Online forum to exchange messages
      - ■ Can also leave comments and reply to other users
    - ○ Ranking.html
      - ■ Show database results that are ordered from least to greatest in terms of user inputted data about their own progress on their goals
  - ● Setup_db.py (ran once)
    - ○ Functions that makes calls to each database to populate tables
    - ○ Functions that will get relevant information based off the user query
  - ● js/modules
    - ○ Charts.js
      - ■ Interactive charts for sleeping schedule, calorie intake, and physical activity

API:

Fast2SMS: Send text reminders https://www.fast2sms.com/
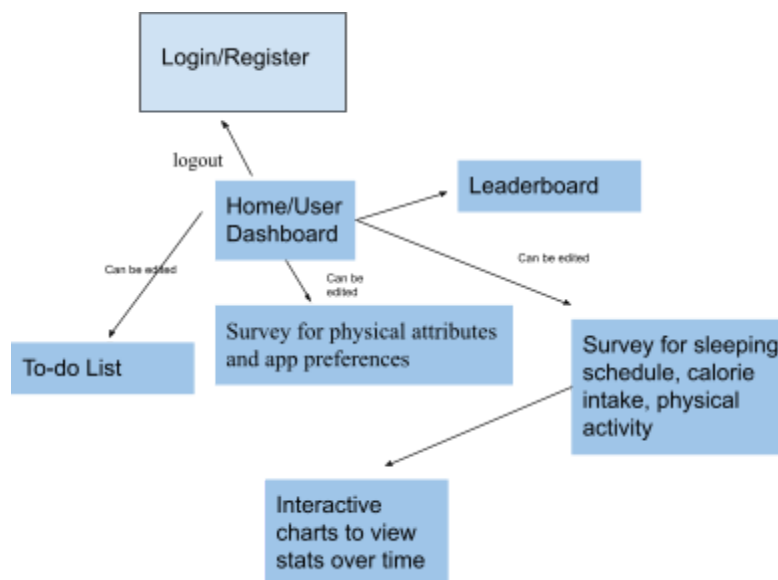
US Department of Health API: Return data on health advice for users based off physical attributes
https://health.gov/our-work/national-health-initiatives/health-literacy/consumer-health-content/free-web-content/apis-developers/how-use-api
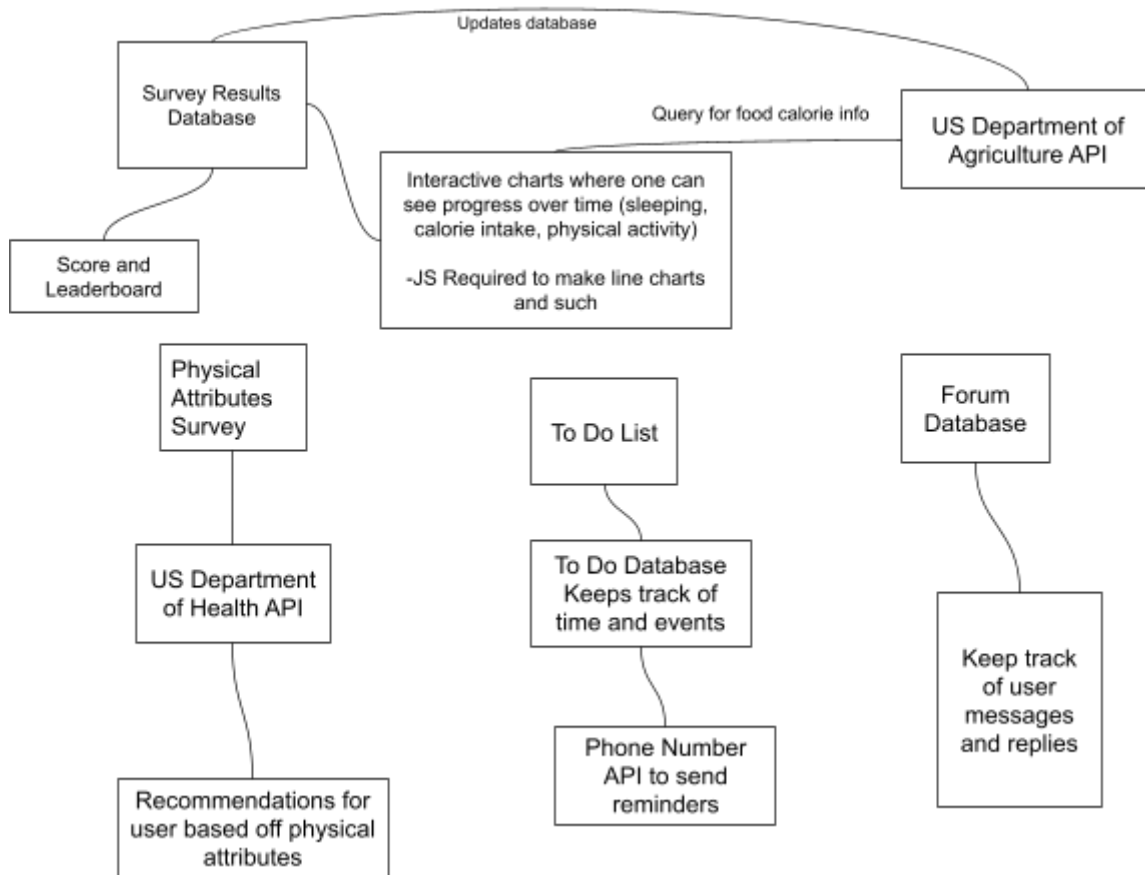
US Department of Agriculture: Return nutrition data for food
https://fdc.nal.usda.gov/api-guide.html

FRONT END SITE MAP:

COMPONENT MAP:

Updates database

Survey Results Database

Query for food calorie info

US Department of Agriculture API

Interactive charts where one can see progress over time (sleeping, calorie intake, physical activity)

-JS Required to make line charts and such

Score and Leaderboard

Physical Attributes Survey

To Do List

Forum Database

US Department of Health API

To Do Database Keeps track of time and events

Keep track of user messages and replies

Recommendations for user based off physical attributes

Phone Number API to send reminders

DATABASE:

user_info

Username	Password	Phone Number

user_physcials

Username	Height	Weight	Preferences	Goals

Survey_results

Username	Date	Calorie Intake	Time slept	Time spent undergoing physical activity	score

forum

username	message_id	message_contents	replies

To-do

User	Date-Time	Tasks	Completed Tasks

FRAMEWORK

We will use Bootstrap because it offers us better customizations to our site that make our site look more professional. Such features include: progress bars, sliders, loading buttons, various colored/shaped buttons, customizable tables, collapsibles, forms, search bars, and tooltips/popovers(hovering will show text).

BREAKDOWN OF TASKS

Daniel:
-interactive charts in the user dashboard and their associated surveys
-SMS reminders
-To Do List

Brian:
- Front end
- API calls for US Department of Agriculture

Prattay:
-Online forum
-API calls for US Department of Health

Vansh:
- interactive charts in the user dashboard
- Database creation and management