

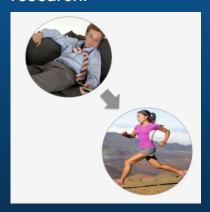
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ECE 564

Introduction



- Physical activity and diet play a critical role in human health.
- According to the most recent National Health and Nutrition Examination Survey (NHANES), 18.5% of children and 39.6% of adults had obesity in 2015-2016. These are the highest rates ever documented by NHANES.
- Although many healthy living smartphone apps exist, none effectively integrate the key themes below and have the potential for deploying adaptive interventions and tracking adherence for research.



Key Themes

- Facilitating and incentivizing healthy behavior
- Movement tracking / suggestions
- Dietary tracking / suggestions



Solution



Our app is able to utilize the real-time GPS location, the user's health data and preferred settings, and the detailed information of surrounding area to

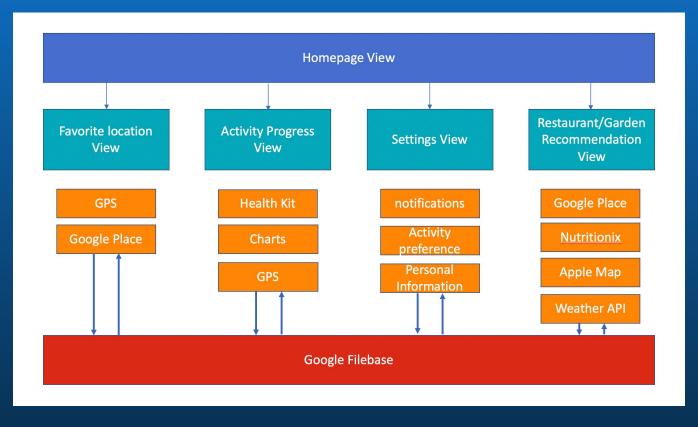
- Make suggestions for nearby restaurants and food options based on the available healthy choices on the menu.
- Make suggestions for nearby green spaces based on user-defined walking time or distance preferences.
- Help the user to do more exercise and decrease sedentary behaviors by pushing daily notifications and tracking weekly activity progress.

Key Features



- Daily / Weekly movement activity goal tracking via HealthKit
- Activity progress visualization using a line chart and a pie chart
- Location-based restaurant and green space recommendations, including detailed place information such as phone numbers and website
- Embedded Apple Maps and navigation functionality
- A favorite places view that lists user's starred locations
- Notifications as reminders for meals
- Current weather conditions
- A profile / settings view that allows the user to set personal information, activity goals, preferred place recommendation criteria, and notification time

System Architecture



THANK YOU!

Any Questions?

Google Places API

Overview





Note: Server-side and client-side libraries

The Places API is a service that returns information about places using HTTP requests. Places are defined within this API as establishments, geographic locations, or prominent points of interest.

Introducing the API

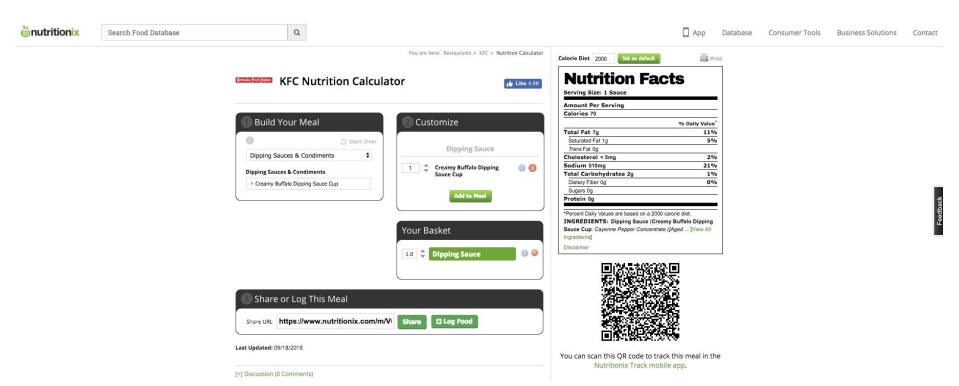
The following place requests are available:

- Place Search returns a list of places based on a user's location or search string.
- Place Details returns more detailed information about a specific place, including user reviews.
- Place Photos provides access to the millions of place-related photos stored in Google's Place database.
- Place Autocomplete automatically fills in the name and/or address of a place as users type.
- Query Autocomplete provides a query prediction service for text-based geographic searches, returning suggested queries as users type.

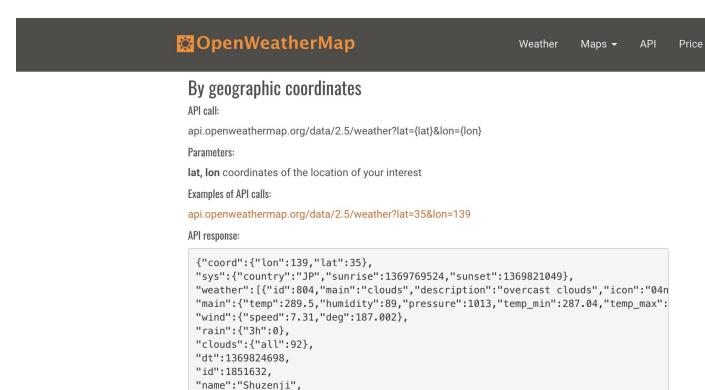
Each of the services is accessed as an HTTP request, and returns either an JSON or XML response. All requests to a Places service must use the https:// protocol, and include an API key.

The Places API uses a place ID to uniquely identify a place. For details about the format and usage of this identifier across the Places API and other APIs, see the Place IDs documentation.

Nutritionix API



OpenWeatherMap API



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Widgets

Blog

Stations

Partners

Firebase

