

Lean Analytics for a Leaner Person

Demo #2

Fall 2015, Group #8 – Information & Members

Project Repository @ GitHub – <u>Health Analytics</u> Project journal – http://blog.willkara.com

Website Homepage--http://willkara.com/projects/HealthAnalytics/index.html

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1. What is our project?

Our solution for people struggling to get healthier and wanting to understand what healthy mean is the Health Analytics System. Users can use Health Analytics to track their personal health activities and understand how these activities directly affect their health. This system created a health model utilizing health-related data and statistics from sources like the CDC and the NIH and using our model the system will

allow users to visualize their health characteristics and will become more accurate as they (and other users) interact with it. While doing this we also allow healthcare providers and various medical professionals to collect anonymized, aggregate, health information allow them to provide solutions tailored to the health problems of the communities they serve.

2. Main Functions in Our Project

Data Collection & Filtering

We created our initial model using several data sources like CDC, NIH and Census, which included data from the 1990s to the present. We downloaded, filtered and extracted the data using several methods, ranging from manual to systematic scripts. The model will help users see their health statistic ranges and will vary depending on the user; this is because the system will also allow the user to enter their information (e.g. birth date, workouts, food consumption, etc.) via a mobile application and website. This kind of data source will be more reliable; it will ensure correct formatting and include useful information like time, type of activity, among other things. Meanwhile, the user can view this information at any time using our mobile app and website.

Mobile Application & Website

Our mobile application and website will allow users to create accounts, enter details about their workout and food activities directly to their account, which include the duration of their activity, type of activity and their location, among other things.

Activity Comparison & Visualization

Our application will display this information in the website and mobile application so the user can see how they are doing and track their progress. The user the will be able to see his or her workout and food consumption history. Finally, the user will be able to see how communities are doing at an aggregate level; visualizations will provide a nice way for users to see this data in our system.

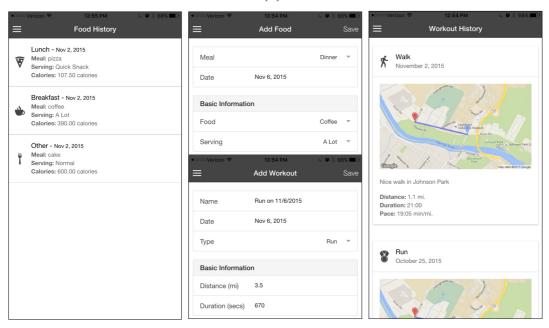
Health Model

This is the main feature in our system. As previously stated, we created health models used to predict cholesterol levels, blood pressure

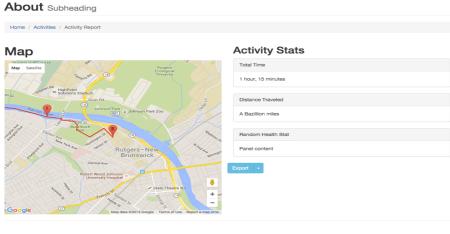
and heart rate. These are instances of a regression tree, whereas the user's information (like age, height, weight, etc.) will be dimensions used to predict their statistics. The system will have a module, which is responsible for generating and exporting this model and other components will import it, persist it and use it. Finally, users can easily to manage their health schedule based on our health model.

3. Screenshots about Our Mobile Application & Website.

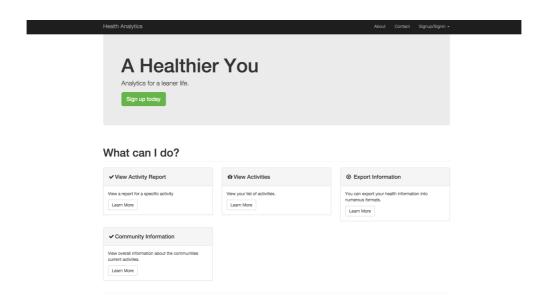
Mobile Application



Website



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About

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Leaner analytics for a leaner you

The goal of this site and application is to help streamline the process of finding out more about the current health trends of yourself and those around you.

Not only will you have the ability to enter in your workout information, you'll be able to compare it to those around to compare and contrast different metrics pertaining to health.

- Run time & Distance
- Averaging splits
 Caloric Intake

The Healthy Community

Not only will our project allow you to have a consolidated place for all of your health information, you'll also be able to look at health trends from your community and those around you. Has everyone been slowly improving their running times over 5 miles? Is the average bike ride aorund 12 miles?

Our Team

Contact

