Bamboo Mobile Health

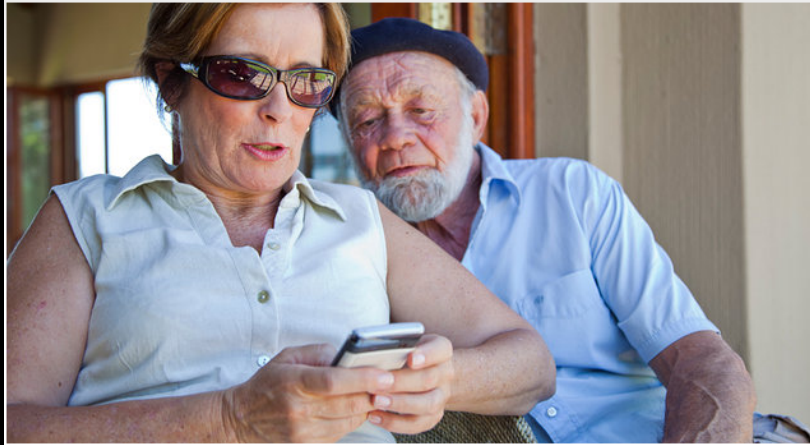· ·

Sponsor: Ray Zwycewicz

Jesse Couch, Denae Ford, William Geist, Monica Krishnamurthy, Alex Shipman, Alex Williams

Problem

http://www.bamboomobilehealth.com/

- Multiple Sclerosis (MS) patients have worsening symptoms based upon humidity and temperature

- Monitoring these changes can aid in management

- An easily accessible and engaging tool is needed

Introduction

- Simple mobile site for comprehensive data regarding MS patients and their symptoms

- Temperature of patient's current location vs. previous symptom information - graphically represented

- Simple interface - patient inputs their username & current zip code to generate the graph
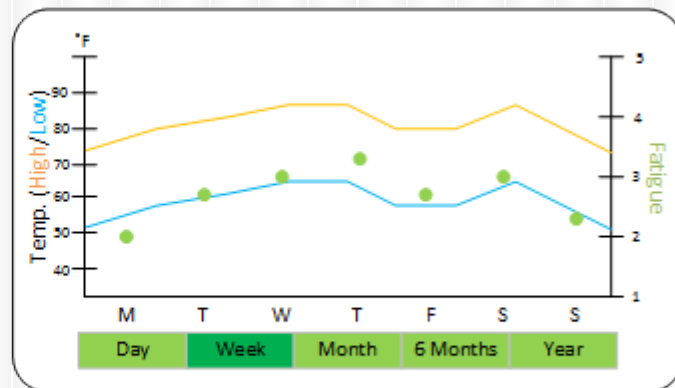
Prototype
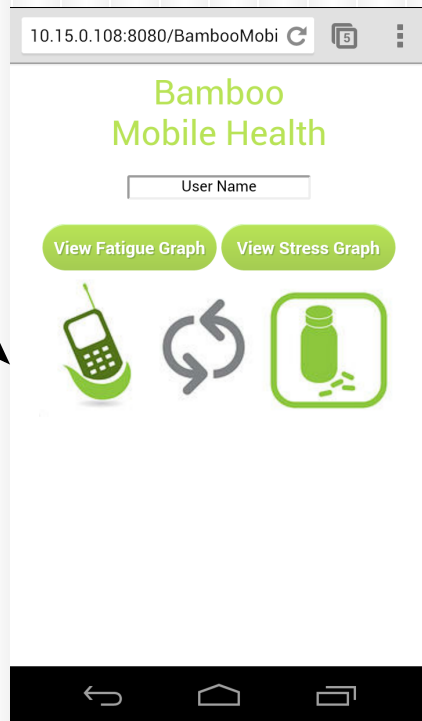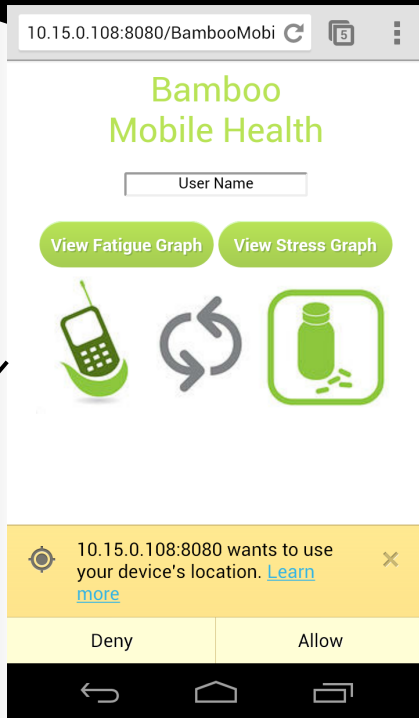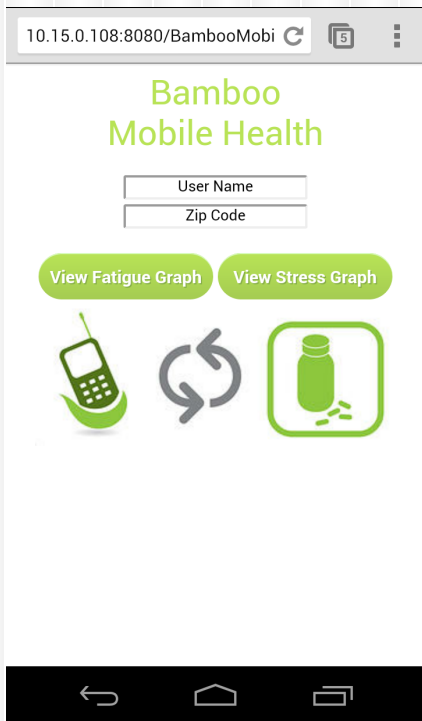
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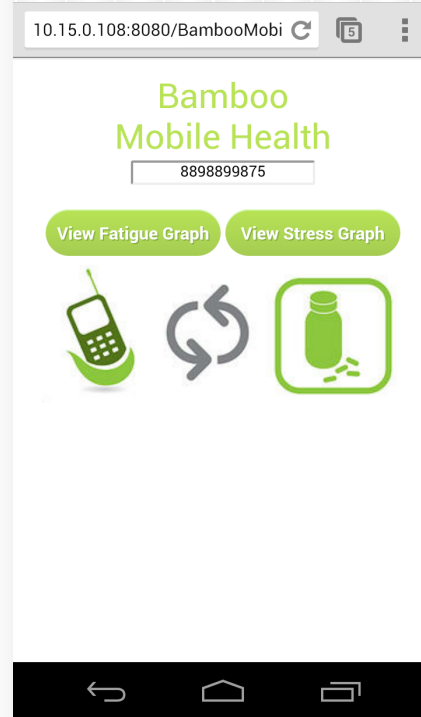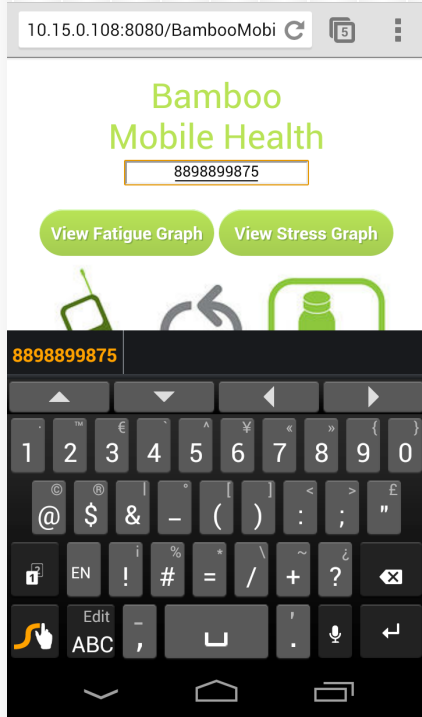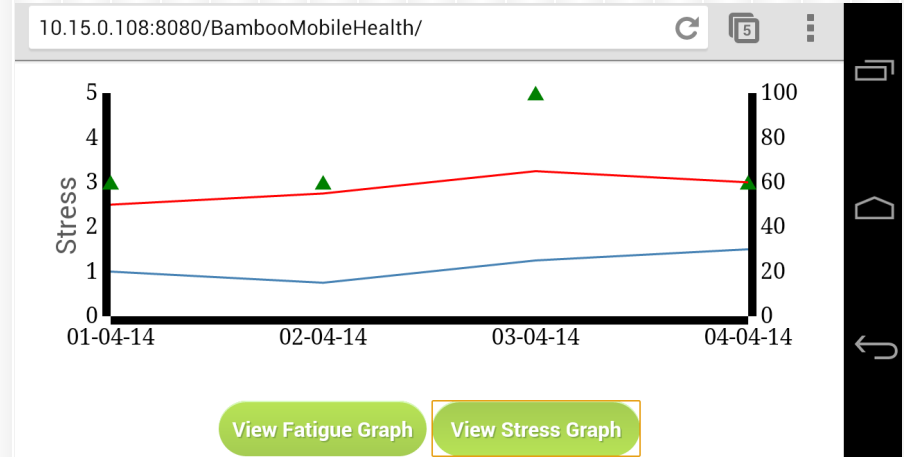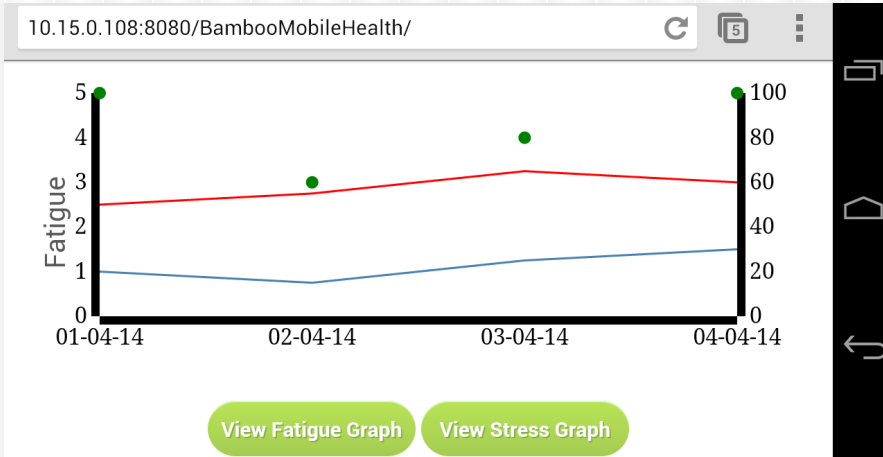# Components

- HTML5
  - Location, Mobile Scaling

- Javascript/JQuery
  - Parse Weather API Data
  - Parse Data from CSV File

- CSS Version 3

- D3
  - Data Visualization

Progress

- Device location (HTML5)

- Pull Weather from API (JSON)

- Read Patient Data (CSV)

- Scatter plot, Line plot (D3)

- Weather API Research (Wunderground, NWS, WeatherSource)

- Hosting (NCSU, GitHub)

Future Work

- Date Range Selection

- Screencasts

- Sponsor Hand Off

Lessons Learned

- Large collections of weather history is difficult to obtain

- Don't lose your Wunderground "Raindrops"

- JavaScript is asynchronous

Thank You

Questions? Comments? Tips?