Beta Demonstration
Mobile Health Management System

Team Medtronic
CSE 498, Collaborative Design
Project Overview

- Mobile Health Management System
- Improve health and prevent future health problems
- Two applications to track health:
  - iPhone Application
  - Web Application
- Input food and exercise information
- Select goals to track
- Display user’s progress on graphs
- Suggest healthier food choices
Architecture

- Internet Platforms (Google, Healthvault, etc.)
- Integrative Wellness Application
- Non-Med Data
- Patient
- Other 3rd Parties
- Social Network

- IMD Data
  - HR
  - HRV
  - Activity

- Consumer Input Data
  - Diet
  - Thoughts
  - Emotions
  - Behavior

- External Data
  - PHR Data

- Weight & Diet Management
  - Caloric Intake vs. Expenditure
  - Dietary guideline
  - Target Weight
  - Body Mass Index
  - Resting Metabolic Rate
  - Daily Caloric Needs

- Exercise Management
  - Activity level
  - HR, % of Max
  - Target HR Zones

- Stress Management
  - Autonomic Coherence
  - Respiratory Training

- Personal Growth
  - Changing Habits
  - Emotional Awareness
  - Performance Management

Team Medtronic
Welcome, Eric Smith!
April 11, 2010

Goal Summary

**Weight**
- Weight Target: 190
- Current Weight: **220.0**
You have **1261.0** before you reach your suggested caloric intake.

**Heart Rate**
- Target Heart Rate: 130
- Number of Minutes Above Target: 0
You have **30** minutes to go to reach your goal.

**Today's Total Food Consumption**

<table>
<thead>
<tr>
<th></th>
<th>Calories:</th>
<th></th>
<th>Saturated Fat:</th>
<th></th>
<th>Calories from Fat:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>1260.0</td>
<td></td>
<td>35.0 g</td>
<td></td>
<td>490.0</td>
<td></td>
</tr>
<tr>
<td>Total Fat</td>
<td>56.0 g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0.0 g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td>2520.0 mg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiber</td>
<td>42.0 g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>98.0 g</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Calories Burned Today</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Screen Shot

Add Food
What: 
Number of Servings: 

Nutrition Data
(per serving)
Calories: 
Calories From Fat: 
Total Fat: g 
Saturated Fat: g 
Trans Fat: g 
Cholesterol: mg 
Sodium: mg 
Carbohydrates: g 
Fiber: g 
Sugar: g 
Protein: g 

Add Exercise
Exercise: 
Time(minute): 
Total Calories Burned: 

Add Goal Information
Add Current Weight: 

Add Food
Add Exercise
Add Weight
Screen Shot

Heart Rate Day Review 4/11/10

Select a Graph to Display:
- Weight
- Caloric Intake
- Today’s BPM Value
- BPM Goals

Heart Rate (bpm)

Target Heart Rate
Actual Heart Rate

Time
12AM, 3AM, 6AM, 9AM, 12PM, 3PM, 6PM