

# Project Plan

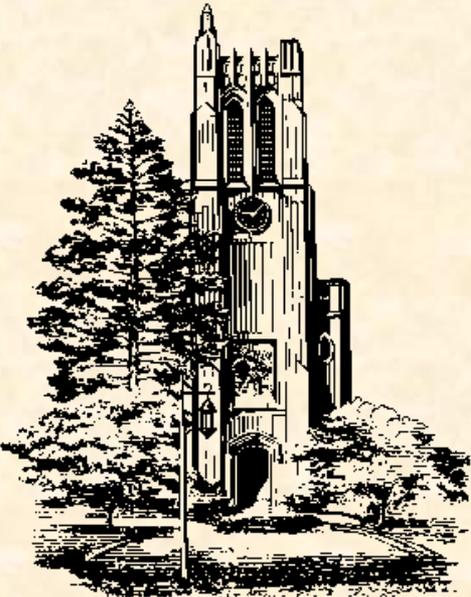
# Mobile Health Management System

Team Medtronic  
CSE 498, Collaborative Design

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# Project Overview

- Portable Health Management System
- Improve health and prevent future health problems
- Two applications to track health:
  - iPhone Application
  - Web Application



# Functional Specifications

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- Collect food and exercise information from user
- Create goals
- Track progress:
  - Quick progress meter on home page
  - Individual goal progress graphs
- Display current nutrition counts
- View device data
- Easy to use!!!



# Design Specifications



- Most used functionality on the home page
  - Inputting food and exercise
  - Viewing daily nutrition counts
  - Progress quick view
- Graphs displayed are based on goals the user selected to track
  - Less cluttered
  - More user specific

# Web Application Screen Mockups



Welcome User!

[Edit Account](#) | [Log out](#)

Home

Track Progress

Customize Account

### Today's Current Counts:

|                  |     |
|------------------|-----|
| Calories:        | ### |
| Sugar (g):       | ### |
| Fat (g):         | ### |
| ...              |     |
| Cholesterol (g): | ### |

### Add Activity:

Food

v

What:

How Much:

(in servings)

Add

### Hungry?

Snack:

Apple

Carrots

Meal:

Sesame Seed Chicken

# Web Application Screen Mockups



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Track Progress

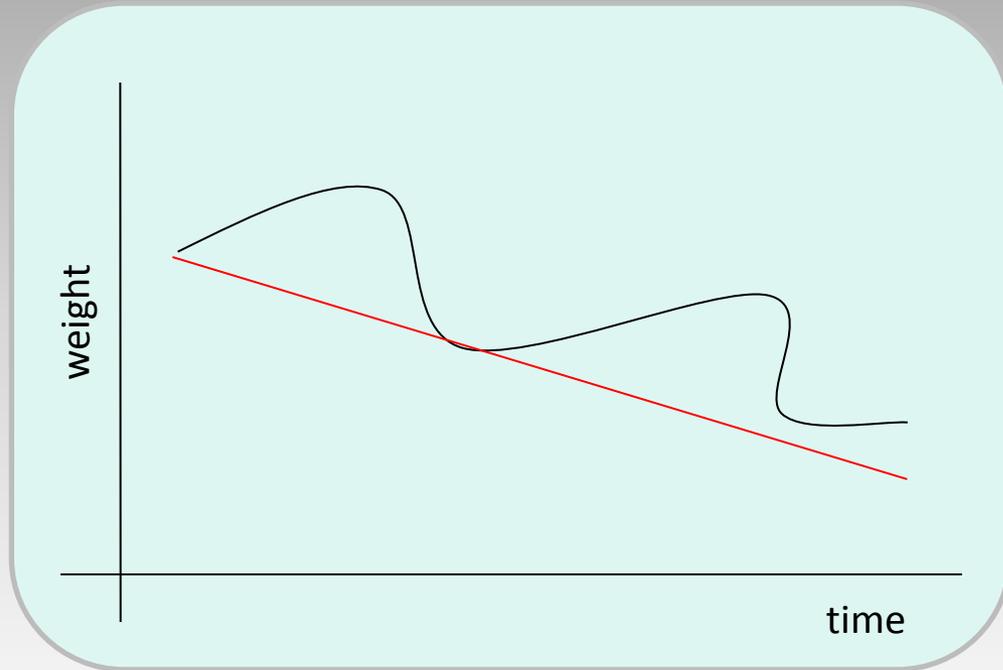
Customize Account

Weight

BMI

Heart Rate

Calorie Intake



Show Projected

# iPhone Application Screen Mockups



View

Back Personal Information Next

Date of Birth

Race

Weight (pounds)

Height (inches)

Blood Type

Gender

Male Female

This mockup shows a 'Personal Information' screen. It features a title bar with 'View', 'Back', and 'Next' buttons. Below the title bar are five text input fields for 'Date of Birth', 'Race', 'Weight (pounds)', 'Height (inches)', and 'Blood Type'. At the bottom, there is a 'Gender' section with two buttons: 'Male' (highlighted in blue) and 'Female'.

View

Day Week Month

Show Diet Statistics Here

Add Food

This mockup shows a 'Diet Statistics' screen. It features a title bar with 'View', 'Day', 'Week', and 'Month' buttons, and dashed arrows on either side. Below the title bar is the text 'Show Diet Statistics Here' and a single 'Add Food' button. A black bar is visible at the bottom of the screen.



# Technical Specifications

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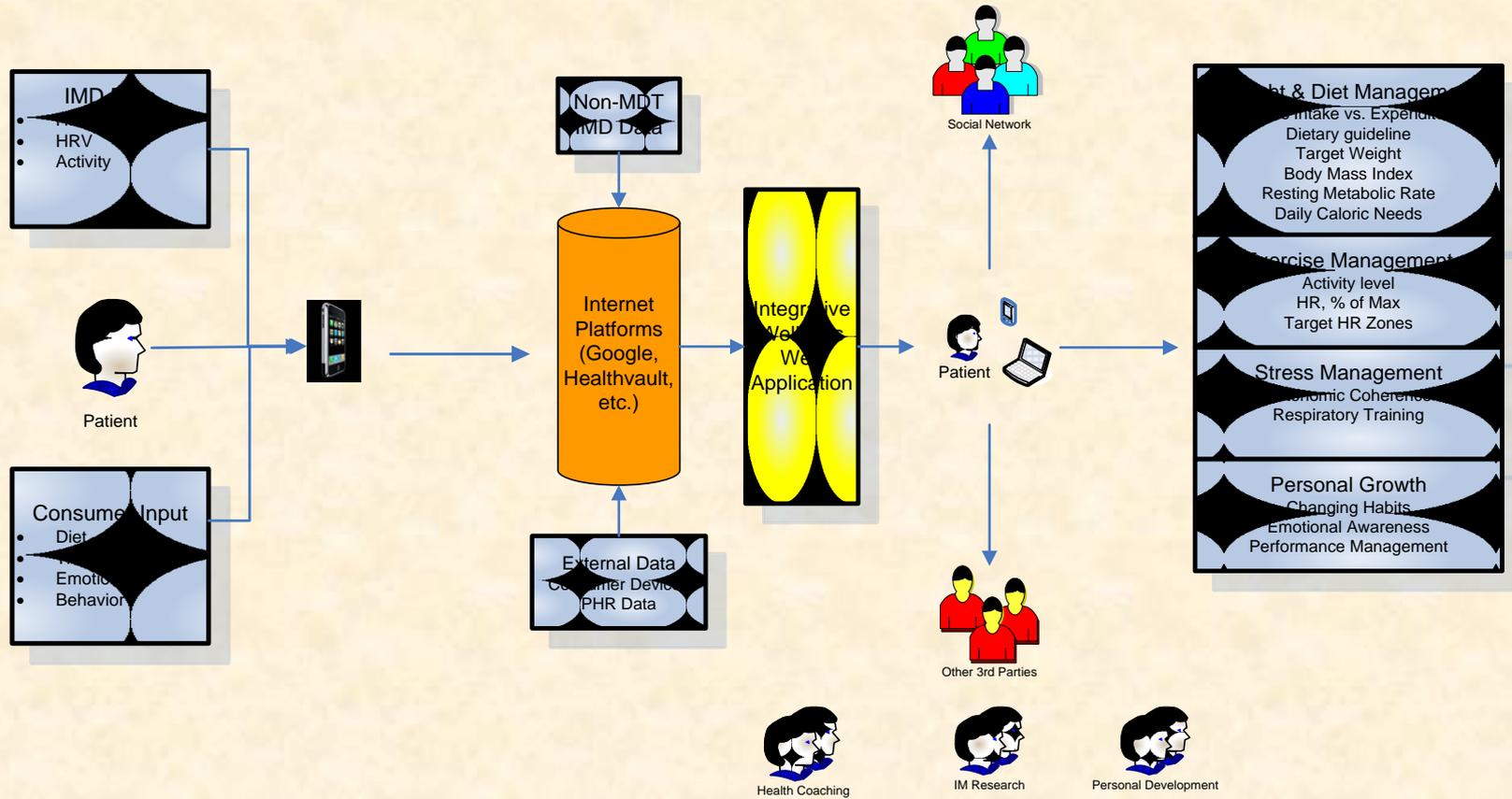
- iPhone:
  - Will be run on all iPhone OS
  - Will use touch screen along with other hardware features
  - Developed using iPhone SDK
- Web:
  - IE7, IE8, Firefox 2.\*, 3.\*, Safari
  - Compatible with 800x600 to 1280x1024 screen resolutions
  - Developed with Java and HTML
  - Use of Apache Tomcat



# Architecture Illustrated



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# System Components

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- Hardware Platforms
  - Windows Sever 2003
- Software Platforms / Technologies
  - Apache Tomcat
  - Grails/Groovy
  - MySQL



# Testing

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- iPhone:
  - Personal use
  - Unit testing
  - Cross over regression testing
- Web:
  - Use debuggers through Grails
  - Line by line checking
  - Cross over regression testing



# Risks

- Communicating Between iPhone and Server
  - Insert data into iPhone and save in database
- iPhone SDK
  - Graphic class
- Setting up Sever
  - Apache tomcat
  - MySQL
- Import information from Microsoft HealthVault