Development Process

Below are the steps and tentative timeline for this project.

* Complete design requirements (3/3-3/14)
  + Construct Detailed ER Model
  + Construct Detailed Relational Schema
  + Design database web application
* Implement the database (3/17-3/28)
  + Create the Database infrastructure
  + Work out the database Authentication and Accessibility (create logins, users, etc)
  + Load test information in tables
* Implement the application(4/1-deadline)
  + Access Database from application code
  + Implement algorithm for the virtual weight loss logic.
  + Complete the user interface.

Design Status

The initial draft of specification will not suffice for a relational database course project. Therefore, I expanded on the idea. Please refer to the Rough Draft of the Relational Schema for the system. Let me know if you can think of any use cases where this design may fail to account for. We will revise this design as we learn more about database systems.

Implementation Status

Since it was requested that the design should be implemented as a web application that is compatible across multiple platforms including mobile, my team and I plan develop with [HTML5](http://en.wikipedia.org/wiki/HTML5) using [QT Creator 3.0.0](http://en.wikipedia.org/wiki/Qt_Creator) as our integrated development environment and [MySQL 5.6.16](http://en.wikipedia.org/wiki/MySQL) as our database management system. All tools that will will use are free and open source.

Common Case

Below is the outline of the primary use-case based off our understanding of the system.

1. User signs up for the service and fills out personal information
2. User may adjust their user settings (options) for a more tailored experience
3. User select their Doctor. Each doctor is associated with a plan and a health care center..
4. When user logins in, they will see a weekly message and a daily message
   1. The weekly message will be feedback according to last week’s achievements
   2. The daily message will display what type of day it is and the type of workout that should be done.
5. At the “Input Time” of the day, the user will be prompted to enter the weight they lost or gained that day. (Input time is set in user options)
6. At the “Output Time” of the day, the feedback messages will be updated and the user will be notified with a message from the application.

Question and Concerns

Are we going to receive content and organization information for the application’s hosting site?

What specific deliverables pertaining to the database management system and database application to you expect? (We will not be able to do any advertisement as it is unrelated to our course objectives)

Are there only Exercise days and Non-exercise days? And what constitutes an exercise day?

What are tough, medium, and great messages? Will you have a set for each type, or are we only going to have three messages to send to the user.

You may want to consider increasing the logic that dictates what feedback to send to the user to allow for more detailed messages.

You may want to consider increasing the logic that dictates what level of exercise to perform each day, so we can send details about the type of exercise as well as the intensity.

Is there any information that the user should be able to pull from the database? (e.g. Dr Contact info, Healthcare center hours and location, etc)

Development Tools

Joomla

* <http://extensions.joomla.org/extensions/marketing/mailing-a-distribution-lists>
  + email extensions
* <http://docs.joomla.org/Accessing_the_database_using_JDatabase>
  + jdatabase information
* <http://www.sms-integration.com/how-to-connect-joomla-to-sms-service-133.html>
  + sms messaging straight through joomla
* <https://www.youtube.com/watch?v=MH36mH88iDA>
  + setup tutorial (joomla + database)