Vision and Scope Document

for

My Diet

Version 1.0 approved

Prepared by
Ana Hernandez
Alaba Magallanes
Diego Torres
Julio Roa
Victor Rodriguez

27/09/13

Table of Contents

Revision History

Name	Date	Reason For Changes	Version

1. Business Requirements

1.1. Background

Obesity is the greatest preventable health-related cause of mortality, and it is a growing concern worldwide. There is an increased prevalence of obesity among adults with age[1]. Obesity is a major health concern, causing other diseases such as: diabetes, high blood pressure, heart disease, cancer, infertility, back pain, skin infections, ulcers, gallstones, etc[2]; increasing the risk of morbidity and mortality in obese individuals. Life expectancy in people with severe obesity is reduced by about 20 years.

Treatment of obesity starts with comprehensive lifestyle management which includes the following[3]:

- Self-monitoring of caloric intake and physical activity
- Goal setting
- Stimulus control
- Nonfood rewards
- Relapse prevention

Since obesity is a chronic medical condition, its effective managements must be based on a partnership between patients and a team of health professionals. The team of health professionals must be highly committed to the patient in order to keep them highly motivated and avoid any relapse.

1.2. Business Opportunity

Recent research published in 2009 by the National Center for Health Statistics showed that more than 78.1 millions of U.S. citizens were obese[4]. For this reason it is important to keep track of what the patients ingest; in order for them, or their physicians to control their diets. The annual cost in the U.S. of managing obesity is approximately $190.2 billion dollars per year, which is 20.6% of the national health expenditures.

Current lifestyle is so rush that few people have time to keep track of their diets. On the other hand, according to the eMarketeer statistics portal, about 62.60 millions of U.S. citizens use smart phones in 2010.

By creating a smart phone app that helps patients to keep track of their ingestion with an easy interface, we're helping the population to stay healthy, or at least be aware of calories in their

[1] Low, S. (2009). Review on epidemic of obesity. Ann Acad Med Singapore, 38(1).
[2] Puhl, R. M. (2009). The stigma of obesity: A review and update. Epidemiology reviews.
[3] Hamdy, O. (2013, 08 26). Obesity treatment & management. Medscape emedicine.
[4] Ogden, C. L. (2012). Prevalence of obesity in the united states, 2009–2010. NCHS Data Brief, 82

meals. This app would be covering some of the key points to weight reduction: self-monitoring of caloric intake, goal setting and nonfood rewards.

Some benchmarks against other Android Apps already on the market:

How to reduce ob	Self-monitoring of caloric intake		Goal setting	Nonfood rewards	
Features	Track calories of the food end user eats	Add food	Determine ideal caloric ingestion	Report how balanced user's daily meals are	Point-based system
South Beach Diet	No	No	No	No	No
My Diet Diary Calorie Counter	Yes	Yes	Yes	Yes	No
My Diet	Yes	Yes	Yes	Yes	Yes

Comparison between the apps includes:

- Self-monitoring of caloric intake: the user is able to track meals that has ingested.
    - Track calories: the app has a way to track calories intake
    - Add new meals: the app allows the user to add a non existent ingredient to the database or a new meal indicating quantity of calories per serving.
- Goal setting: the app allows to determine a goal to be reached by the user, either weight-based or calorie-ingestion-based.
    - Determine ideal caloric intake: the app determines an ideal caloric intake based on gender and activity.
- Non food rewards: the app provides a feedback system to the user promoting positive reinforcement.
    - Report balance of ingested meals: the app reports how balance their ingestion was.
    - Point-based system: the app provides a way to keep track of how good or bad the person has eaten in the past few days based on a point system.

1.3. Business Objectives and Success Criteria

My Diet will start as a pure free software business objectives for this first stage , however we do not close the option of a Multi-licensing option in the future. The Multi-licensing is commonly done to support free software business models in a commercial environment. In this scenario, one option is a proprietary software license, which allows the possibility of creating proprietary applications derived from it, while the other license is a copyleft free software/open-source license, thus requiring any derived work to be released under the same license. The copyright holder of the software then typically provides the free version of the software at little or no cost,

and profits by selling proprietary licenses to commercial operations looking to incorporate the software into their own business.

The revenue analysis for this first stage will be more in terms of marketing and strategically position of My Diet in the Android market. The final objective is to be ranked on the top 25 apps for calories track and diet control.

1.4. Customer or Market Needs

As we described on the previous background section, the treatment of obesity starts with comprehensive lifestyle management which includes the following:

- Self-monitoring of caloric intake and physical activity
- Goal setting
- Stimulus control
- Non food rewards
- Relapse prevention

A regular end user has the need to control all these values in order to avoid (or treat) the obesity in conjunction with his rush life.

Current customers encounter the problems of :

- Few times they eat homemade meals(Usually eat in restaurants or fast food)
- Few knowledge of nutritional information (They are not aware of the quantity of calories each meal has)
- Few time to investigate nutritional information

All these problems have different solutions but a single interface that most of they use in common, the mobiles systems. As we described in the background the use of mobiles systems (such as cell phones or tablets) is considerable (about 62.60 millions of U.S.citizens use smart phones in 2010) . This gives us the opportunity to create a solution that:

- Can run in Android Devices (Compatibility described below)
- Can run in ARM and X86 architectures platforms (Compatibility described below)
- Simple user interface (More details described below)
- Run without any data connectivity dependencies (WIFI or 3G)

1.5. Business Risks

Since the software for the application will be copyrighted under a license open source GNU Genaral Public License 2.0 where all improved versions published have to be free software as well in order to avoid competition with improved versions.

Another risk is that the features included in the app will not satisfy the end user’s needs to control and monitor their caloric intake. This would be known after the firsts versions are released and in this case the app would have to be modified in order to satisfy those mentioned

needs. If that happens and the features are not modified then there is a risk that the app cannot rank between the 25 best apps for calories track and diet control of the Android Market and in this case, the license could not be sold to commercial operations and the company would lose its opportunity to get a revenue for the development.

2. Vision of the Solution

2.1. Vision Statement

Our vision for a year after the first release is to be ranked as one of the 25 best apps for calories track and diet control on the Android Market. The goal of the app is to help people control their caloric intake with a reward-system and help them in their quest to reduce overweight and obesity or avoid either one of those diseases. By achieving this, then, the company could sell the software license and obtain a small revenue in return.

2.2. Major Features

As described on the business requirements the major features to be included in the app are:

Feature 1: Self-monitoring of caloric intake
- Track calories
- Add new meals

Feature 2: Goal setting
- Determine ideal caloric intake

Feature 3: Non food rewards
- Report balance of ingested meals
- Point-based system

2.3. Assumptions and Dependencies

- All Android Apps are compatible among Android Hardware platforms. (within OS versions).
- The users know their caloric needs.

3. Scope and Limitations

This project will consist of creating an Android application (app) for tracking, controlling and supervising a user's diet or nutrition data based in the daily user's records. The project will be completed by November, 2013. Modules of the app will include a simple record form for meals, a way to report daily meals, adding food form, a user profile form, and caloric calculator.

The following features are included:

- Create customs meals (ex. Taco al pastor) and calculate their calories.
- Create user profile.
- Save daily records for meals.
- View daily nutritional summary reports.
- Calorie counter or calculator
- Check the progress with a simple calorie tracker that shows how you're tracking against your daily calorie budget and diet.
- Add food items easily with our database (foods and recipes).
- View information about the ingredients or food - from calories to vitamins and minerals and cholesterol.
- Help module. (user guide or how to use the app)
- Customized goals and calorie counter based on your specific diet profile – age, gender, height, etc.
- Set reminders and notifications for meals and reports.

The following features are not included:

- Images food recognition (ex. take a picture of a meal, a reorganize the food and calculate their calories).
- Download food items from foods repositories, just can update the internal DB.
- User templates profiles (ex. soccer player, engineer, policeman, etc).
- Tracking exercise, weight, cholesterol, blood and other health data.
- Customized weight loss goals, default ingredients, pages.
- BMI (Body Mass Index) calculator.
- Personalize with an avatar the profiles.
- Not integrated with social networks.
- Perseverance Tips.
- Motivational Assistants.
- Diet and Meal Planner.
- Calories burned calculator.
- Weight Tracker.
- Diet tips.
- Daily lifestyle advice.
- Healthy cooking tips.
- Fitness routines.
- Motivation from other dieters.
- Backup the information.
- View online trackers.
- Integrate data across devices.
- Option to connect with medical, nutritionist forums.

3.1. Scope of Initial Release

In the first release, we are going to develop the major features for My Diet App, such as:

- Save daily records for meals: It contains functions, such as: creating, reading, modifying, deleting meals records.
- View information about the ingredients or food: It contains functions, such as: installing, integrating and reading the database.
- Create user profile

3.2. Scope of Subsequent Releases

The following table shows up the next releases and their implemented features.

Release	Implemented features
1.0	1. View daily nutritional summary reports. 2. Calorie counter or calculator.
1.1	1. Check the progress with a simple calorie tracker that shows how you're tracking against your daily calorie budget and diet. 2. Add food items easily with our database (foods and recipes).
1.2	1. Set reminders and notifications for meals and reports. 2. Customized goals and calorie counter based on your specific diet profile – age, gender, height, etc.

3.3. Limitations and Exclusions

The following table shows up the limitations and exclusions for My Diet App:

Limitations	Exclusions
Two months for development process.	Older versions of Android, specifically Gingerbread, honeycomb, ice cream sandwich, kitkat*.
Three developers part-time.	
The application will develop only for Android platform (*Gingerbread*).	

4. Business Context

4.1. Stakeholder Profiles

this project is actually a school project, we don't have any additional stakeholders besides the people directly immersed on it . The people who is currently most involved in this venture are the following:

- Developers and Testers - Students, part of the team. In charge of the proper coding development, following standards to deliver high quality software.
- Project Manager - A selected student also part of the team. In charge of managing the team resources during the project.
- Customer - The class professor will have this role assigned. As a customer he will deliver requirements to the group and evaluate at the end if the application meets the expected usability and user experience desired.

Stakeholder	Major Value	Attitudes	Major Interests	Constraints
executives	increased revenue	see product as avenue to 25% increase in market share	richer feature set than competitors; time to market	maximum budget = $1.4M
editors	fewer errors in work	highly receptive, but expect high usability	automatic error correction; ease of use; high reliability	must run on low-end workstations
legal aides	quick access to data	resistant unless product is keystroke-compatible with current system	ability to handle much larger database than current system; easy to learn	no budget for retraining

4.2. Project Priorities

Since our intention is to deliver a good product with the best quality standards, in the timeframe required and with all the functionality features the customer required, the following table shows a quick overview of the key facts and considerations we are taking into account for the successful development of this project.

Dimension	Driver (state objective)	Constraint (state limits)	Degree of Freedom (state allowable range)
Schedule	release 1.0 due to	Due to other	Release 1.0 and 1.1

	15/10, release 1.1 due by 1/11 and release 1.2 due by 31/11	occupations, developers can only work a few hours a week on this project.	could be rescheduled if needed.
Features	Number of completed features.	Features marked as completed could not fully meet the requirements or have several bugs.	Requirements' scope can be redefined depending or rescheduled from one release to another.
Quality	Number known issues or bugs after final release.		90 of user acceptance tests must pass for release 1.1, 95-98% for release 1.2
Staff		Three part-time developers. One part-time tester. Some of the developers are not familiar with Android development.	
Cost		If a more aggressive expansion and development of the app is needed, there is not budget to hire extra developers.	

4.3. Operating Environment

Since the application will be hosted in the Android's Play Store, every user around the world is going to be able to download it. Given that, we will develop the application on English since is the most broadly used language nowadays. As stated before the operating system where this application will run is *Gingerbread* 2.3 and up