

# Problem Statement and Goals

## REVITALIZE

Team 13, REVITALIZE  
Bill Nguyen and nguyew3  
Syed Bokhari and bokhars  
Hasan Kibria and kibriah  
Youssef Dahab and dahaby  
Logan Brown and brownl33  
Mahmoud Anklis and anklism

Table 1: Revision History

Date	Developer(s)	Change
September 26th, 2022	Bill Nguyen	Initial Problem Statement, Goals
September 26th, 2022	Logan Brown	Initial Problem Statement
September 26th, 2022	Syed Bokhari	Initial Goals, Stretch Goals
September 26th, 2022	Mahmoud Anklis	Review Problem Statement
September 26th, 2022	Hasan Kibria	Review Problem Statement
September 26th, 2022	Youssef Dahab	Review Problem Statement
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# 1 Problem Statement

## 1.1 Problem

In today's busy world, one's health and wellbeing are often the first things sacrificed to make more time. Keeping track of your meals, nutrition, sleep, etc. are no small feats and require a monumental effort. The REVITALIZE app aims to provide an all in one product that can help anyone get a jump-start on improving their health. Through an easy to use interface and multiple tools being condensed into one platform, users will be able to save precious time without having to neglect an essential aspect of being human.

## 1.2 Inputs and Outputs

### 1.2.1 Inputs

- User calorie goals
- User nutrient goals
- User sleep data
- User's workouts

### 1.2.2 Outputs

- Recipes that meet calorie/nutrient goals
- Sleep benchmarks and statistics
- Daily nutritional requirements to meet goals
- Improvement statistics from previous data
- Organized workout tracker
- Saved library of previous workouts
- Encouragement messages

## 1.3 Stakeholders

Primary Stakeholders: Adults/teenagers who want to improve and keep track of their overall health and wellness via an easy to use, all in one application.

Secondary Stakeholders: Individuals who may not use the application directly for themselves or not directly involved with the use of the application but have an indirect benefit. An example are personal trainers can use this application to keep track of workouts, sleep, overall health etc. of their clients.

Facilitating Stakeholders: All team 13 (REVITALIZE) members building application, Dr. Spencer Smith, 4G06 TAs, Project Supervisor.

## 1.4 Environment

Software application, specifically mobile application that will be only available for android devices.

## 2 Goals

Table 2: Product Goals

Goal	Explanation	Reasoning
Ease of Use	The user interface and user interaction of application should be innate and simplistic so users of all levels can smoothly identify all application's features/components and instructions shown to them.	A simplistic product will help reduce confusion and time spent figuring out how to use product, which can lead to more time spent using the product more effectively to help improve health and wellness, and make overall experience more enjoyable.
Accurate Data	User data for all components of application such as recipe finder, sleep tracker etc. is outputted and maintained precisely based on the given inputs and communication between user and application.	Must provide reliable and precise data, in order to ensure trust to users that our product works as intended, in order for users to accurately track overall health and wellness progress. Also providing accurate data, that can match or exceed rival products, can provide a competitive advantage and can make it easier to penetrate the intended market.

Secure	All private user data, should be protected and application should prevent any data leakages from occurring. User data should only be available for the user unless, user specifies otherwise.	In society, there are many hacking attempts, and hacking has become a profitable business where the victims are innocent users. So by making application more secure by creating high-level authentication and testing our product thoroughly, it can help ensure more trust to our users.
Customizable	The application should be flexible and customizable to cater to the user's personal health and limitations. The Recipe Finder, Workout Planner and Sleep Scheduler should have preset values that can be altered to the user's preferences.	Each individual has a varying body types, strengths and weaknesses. The Recipe Finder should have options that consider dietary restrictions and calorie goals. The Workout planner should have a large variety of exercises to choose from for each muscle group. The sleep tracker should be able to adjust the sleep timer to allow for planning within the user's schedule.
Progress Tracking	User interactions with the app should be logged and tracked in a diary format to ensure that the user is able to better understand their daily habits	When making a lifestyle change, it is important to keep track of progress to ensure that daily, weekly and monthly targets are met. It is essential for the user to be able to reflect on their habits and routine and adjust to better aid in their journey.

Digestable Visualization of Big Data	The data accumulated throughout the use of the app should be easily accessible in a digestable format to help the user better understand progress and keep track of their longterm health	User's can have the option to view their progress in terms of long term data sets that can help to visualize progress. A visual representation can be extremely beneficial to understanding the change in habits over a long period of time.
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### 3 Stretch Goals

Table 3: Product Goals

Stretch Goal	Explanation	Reasoning
Personal Trainer Integration	User diet, workout routine and sleep schedule can be set by personal trainer. The trainer can also view user progress and adjust schedule	Integration with a professional can help ease the lifestyle transition and can be used as a source of motivation to stay on track
Sleep data predictions	User sleep data points can be used to extrapolate user health conditions	Sleep is a fundamental indicator of overall health and wellness. The sleep data can explain many issues the user is facing during the day.