

System Requirements Specification

REVITALIZE

Team 13, REVITALIZE

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Table 1: Revision History

Date	Developer(s)	Change
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1 Project Drivers

1.1 The Purpose of the Project

Sustaining a healthy lifestyle requires people to keep track of their eating, exercising, and sleeping habits. This can prove to be a daunting and time consuming thing to do especially when most people are very busy with their lives. The purpose of this project to create an all in one health and wellness mobile application that allows users to manage their diet, exercise, and sleep. REVITALIZE is designed to supply users with the means to improve their health by providing them with meal recipe's based on their nutritional preferences, a personalized workouts planner and a sleep tracker.

1.2 Scope

REVITALIZE will allow users to find recipes for meals based on nutritional preferences such as calories per meal, diet selections, allergies to avoid and ingredients included. The user will be able to count their calorie and nutrient intake through the nutrition logger. The workout planner will allow users to choose from an already existing list of workouts or construct their own workout schedule along with weights, sets, and repetitions. The sleep tracker will provide users with information regarding their sleep.

1.3 The Stakeholders

1.3.1 Primary Stakeholders

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

1.3.2 Secondary Stakeholders

Individuals who may not use the application directly for themselves or are not directly involved with the use of the application but have an indirect benefit. For instance, personal trainers can use REVITALIZE to keep track of workouts, sleep, and the overall health of their clients.

1.3.3 Facilitating Stakeholders

Team 13 members building the REVITALIZE application.
Dr.Spencer Smith and the 4G06 TAs.

2 Project Constraints

3 Context Diagrams

4 Functional Decomposition Diagrams

4.1 Use Case Diagram

4.2 Activity Diagram

5 Functional Requirements

6 Non-functional Requirements

Note: followed the volere requirements template

6.1 Look and Feel Requirements

6.1.1 Appearance Requirements

LF1. The application must have a neat and attractive design.

Fit Criterion: A focus group of primary stakeholders such as teenagers and young adults will look at UI/UX design of application and would require an 85% approval rating.

6.1.2 Style Requirements

LF2. The application must use colours that are appealing and contrasting to make it more accessible and non-intrusive.

Fit Criterion: A focus group of primary stakeholders such as teenagers and young adults will test application with a focus on colour and need an 85% approval rating that the associated colours do not intrude/distract users from overall application.

6.2 Usability and Humanity Requirements

6.2.1 Ease of Use Requirements

UH1. All aspects and features of mobile application can be used using only one hand/one finger.

Fit Criterion: 95% of stakeholders with varying size hands/fingers are able to use all aspects of mobile application using one hand/one finger.

UH2. The application home page must be simple so that user can access any feature of application in under 10 seconds

Fit Criterion: 90% of stakeholders can navigate to any of application features from home page in under 10 seconds.

- UH3. The application should be easy to use for targeted demographic
Fit Criterion: A focus group of primary stakeholders such as teenagers and young adults with youngest age being 14 will test application and need an 85% approval rating that application was easy to use.

6.2.2 Personalization and Internationalization Requirements

NOT AVAILABLE

6.2.3 Learning Requirements

- UH4. Users without any prior experience should be able to use and understand application within 3 iterations of each feature.
Fit Criterion: 85% of stakeholders can use and understand basic/common aspects of all features within 3 iterations.

6.2.4 Understandability and Politeness Requirements

- UH5. Associated UI aspects such as buttons, drop-downs, words etc. must be consistent
Fit Criterion: 85% of stakeholders agree that all UI aspects are simple, consistent and understandable.

6.2.5 Accessibility Requirements

- UH6. Mobile application should be compatible with android screen readers tool, for potential users with impaired vision.
Fit Criterion: Accessibility tests, will be conducted and 95% of application UI should be able to be read using an android screen reader tool.

6.3 Performance Requirements

6.3.1 Speed and Latency Requirements

- PE1. All output data of application must take 5 seconds or less to load, based on associated inputs.
Fit Criterion: Developers will run performance tests and ensure all output data loads within 5 seconds or less for 95% of all API responses and outputs.

6.3.2 Safety-Critical Requirements

NOT AVAILABLE

6.3.3 Precision or Accuracy Requirements

- PE2. All output data/numbers should be accurate for double precision floating points.
Fit Criterion: Perform associated testing (ex. unit testing) to ensure output is accurate for double precision and passes all test cases.

6.3.4 Reliability and Availability Requirements

PE3. Application must have an uptime of 99%.

Fit Criterion: Description provides all necessary information.

6.3.5 Robustness or Fault-Tolerance Requirements

NOT AVAILABLE

6.3.6 Capacity Requirements

PE4. Application can be used by a large amounts of users simultaneously.

Fit Criterion: Application can withstand the usage of at least 50+ users without performance being affected.

PE5. Application can store/save large amount of data.

Fit Criterion: Application can store/save 1 million+ of data points for all users.

7 Project Issues