DiaLog

Version 2.0

Software Project Management Plan

Submitted to

Department of Computer Science and Engineering

California State University, San Bernardino, California

by

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Project manager:

- Eduardo Reyes 007351208

Assistant project manager:

- Braden Post (006944412) | Back End Engineer

Development team:

- Aaron Massey (007133328) | Front End Engineer
- Andres Ventura (007168353) | Back End Engineer
- Saul Cubillo (007199147) | Back End Engineer | Quality Assurance

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1. Overview

1.1 Project Summary

The Software Project Management Plan will lay out the details of the internal development of the DiaLog mobile application.

1.1.1 Purpose, scope and objectives:

The purpose of our project is to provide a simple and accessible healthcare tool for patients with diabetes, especially type 2 diabetes, in the form of a mobile application that can be regularly checked and used to log relevant biometric information. Because of the relative ubiquity of iOS devices, as well as their compatibility with the effective health and fitness tool of the Apple Watch, this project will primarily be developed and targeted towards iPhone users. Using this application, our objective is to improve quality of life for diabetic patients with a convenient and secure place to store their health information and receive suggestions on how to improve their condition.

1.1.2 Assumptions and constraints:

Assumptions and constraints:

- Mandatory weekly attendance for all team members.
- Mandatory delivery of tasks by the due date assigned to each team member.
- Completion and deployment of mobile application.
- All team members expected to follow documentation.
- All team members are expected to participate and contribute to delivering weekly results, leading to the overall success of the project.

1.1.3 Project deliverables

- Deployed mobile application.
- Project documentation including: SRS, SPMP, software source code, software architecture, maintenance manual.

1.1.4 Schedule and budget summary

Week 1: Select groups and identify project goals

Week 2: Identify project scope, including target audience, format, and platform to be used

Week 3: Finalize on roles and languages to be used; begin researching software requirements for completing the project

Week 4: Develop use case diagrams and finalize on class models

Week 5: Create sequence and data flow diagrams

Week 7: Finalize on the early iterations of documentation

Week 8: Program login logic and its interaction with user database

Week 9: Create user interface and optimize user experience

Week 10: Update documentation to reflect changes made to software

Week 11: Debug application and present demonstration

2. References

Xcode by Apple Developer

https://developer.apple.com/xcode/

Firebase by Google

https://firebase.google.com/

Replit Online IDE

https://replit.com/~

3. Definitions

BGM: Blood Glucose Meter- The small meter that Diabetics use to measure current blood sugar.

Hypoglycemia: The condition behind an individual's below average blood sugar levels, and a main condition of Diabetics.

Hypoglycemic Shock: A potentially dangerous affliction that occurs when hypoglycemia takes place, indicated by a sugar level of 70mg/bl or lower. This

condition is the primary condition this app aims to prevent, as it can cause lightheadedness, immune system dampening, numbness, blurred vision, blindness, heart attacks, seizures, and strokes.

Insulin: a chemical hormone produced in the body that regulates the body's glucose intake and production. The lack of this pivotal hormone within the bloodstream is what causes the condition of Diabetes.

SRS: Software Requirements Specification

SPMP: Software Project Management Plan

Project Manager: Provides the team with the vision of what the requirements of the project should be and allocates tasks to other members in order to appropriately divide the project so that it is completed in a timely manner

Assistant Project Manager: Acts as a secondary project manager to ensure that the software manager's requirements are being met in a correct and timely manner

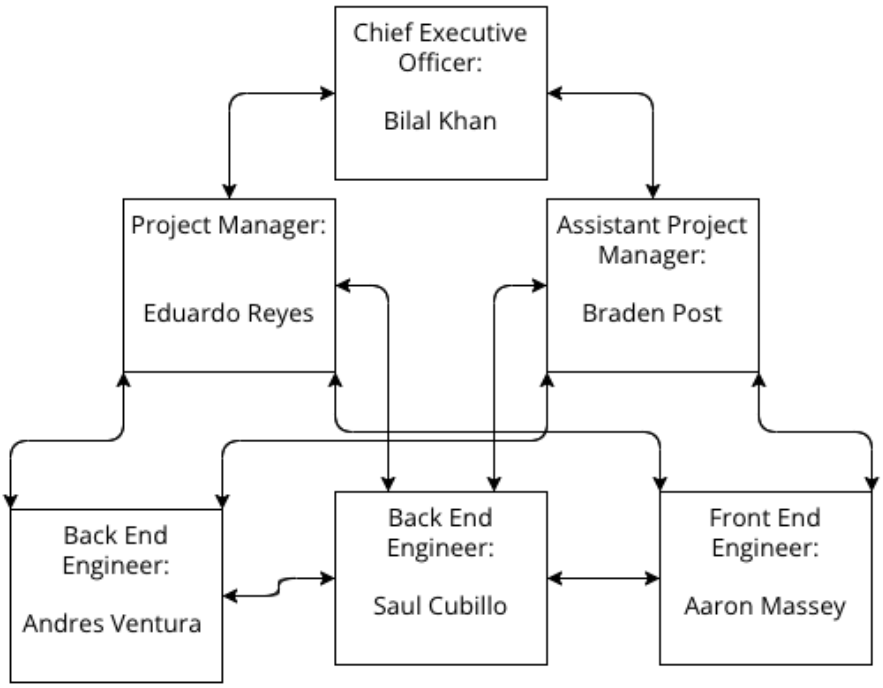
Backend Engineer: Develops, tests, and maintains the aspects of the project concerned with data management and security

Frontend Engineer: Develops, tests, and maintains the aspects of the project concerned with the user interface and experience

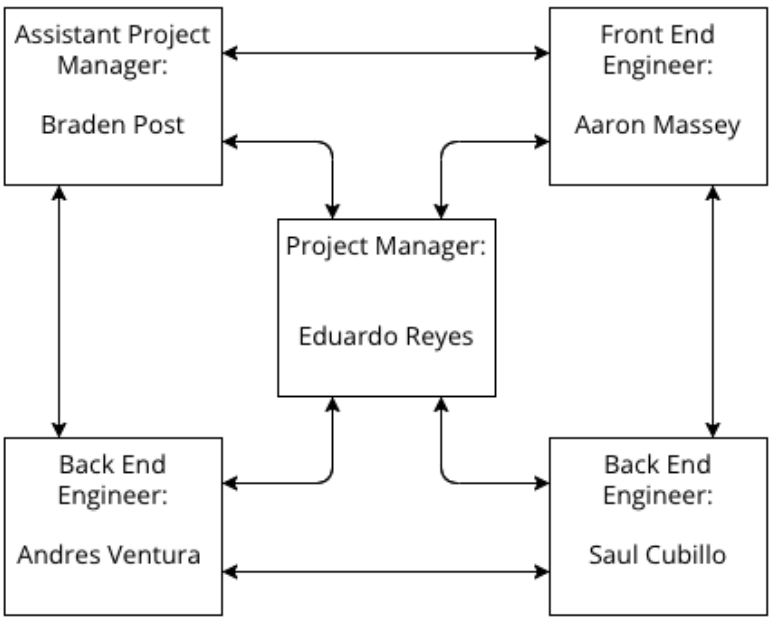
Quality Assurance Manager: Reviews software requirements and compares them to iterations of the project to ensure that it is working as intended so that the project can meet its deadline requirements

4. Project Organization

4.1 External Structure:



4.2 Internal Structure



4.3 Roles and Responsibilities

Eduardo Reyes | Project Manager:

Assigns responsibilities to the team members and works along with the rest of the team on the documentation. Communicates with the CEO and oversees all activities.

Braden Post | Assistant Project Manager | Back End Engineer

Assists the Project Manager in overseeing the completion of the documentation along with topic research. Also provides technical support in the framework of the mobile application.

Aaron Massey | Front End Engineer

Will work on the mobile application UI. This includes application navigation and layout.

Andres Ventura | Back End Engineer 1

Will develop and manage the requirements of the application in terms of database allocation and back end logic of the application.

Saul Cubillo | Back End Engineer 2

5. Managerial Process Plans

5.1 Start Up Plan

5.1.1 Estimation Plan

- Discussing what clients would need in the ios mobile application.
- Group research on what tools are needed to implement the functions into the app.
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