**Progress Report**

**- Increment 3 -**

**Group 2**

# Team Members

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1. **Project Title and Description**

The app we completed is a fitness tracker. It has the ability to take in user information such as height and weight, and tailor workouts and diet information based upon the calculations made with this info. For example, when a user’s BMI becomes in the range of overweight, we begin recommending more cardio based exercises to the user in the workout page. Similarly, we recommend fewer calories to be consumed by the user each day to help them reach a healthy BMI range. The app also displays the number of calories burned on average by each workout and the number of calories for each food item on the diet page.

The current iteration of the application supports a login page that allows users to either sign in or create an account as well as upon login authentication the user will be taken to the home view of the application. If the user has forgotten their password, they are also able to reset it and regain access to their account. Once the user has accessed the home page, there is a tab view at the bottom of the screen allowing the user to navigate to the workout, diet, fitness profile, and settings views. The user is able to see various cards in the workout and diet views that are clickable and will display information to the user about the workout and diet for the day. The fitness profile and settings views contain various input from the user related to their health and calculations we make such as BMI are displayed here.

1. **Accomplishments and overall project status during this increment**

For this increment we successfully added a forgot password functionality, created content that is dynamic to the user’s health information such as displaying different workouts and diet goals based upon their height and weight, displaying statistics about the users health on the fitness profile page, and adjusted the signup page. With these changes implemented, we believe we have created a minimum viable product for a fitness tracking application. This is an app we would be willing to use ourselves, although we wish we had the time to implement more features and make the app slightly more functional.

1. **Challenges, changes in the plan and scope of the project and things that went wrong during this increment**

One of the most significant challenges we faced during this increment was working with XCode and GitHub in combination. For some reason we were not able to pin down, we began running into conflicts when committing to any branch. Eventually, we started manually adding our code to GitHub by copying and pasting the changed files, then cloning the repository again. However, even this was occasionally not enough. When the repository was cloned, and the project attempted to build, files that were added would not be recognized by references to them in other files. For example, when we added a new view and attempted to navigate to that view, the reference to the view would not be found. Further, when adding the changes each member made locally on each of our XCode’s, we would see an error that the file already existed. We could not find an adequate work around for this that would allow us to develop in tandem, and significantly delayed the production of our application. This also hindered testing as we could not independently verify other team members commits before adding to main, and ultimately, we decided to download the version of the repository that last worked and add all of the files changed over the course of this increment manually to allow us to demonstrate the application in our video.

One other problem we ran into was working with multiple tables in firebase. Although all of our group members have experience with other databases such as SQL, we were unable to make queries and store information about the user the same way we could have had an alternative database been available to us. This prevented the implementation of some of the features we had previously planned such as tracking weight over time and allowing users to design their own workouts or diets

1. **Team Member Contribution for this increment**

a) Progress Report

Noah - Edited sections 2, 3, 4.

Matt - Added to sections 1, 2, 3, 4, and 6.

Randy - Added to sections 2, 3

Xander - Contributed to project description in section 2

Jalal - Contributed to writing section 4 (challenges) and edited section 3. Contributed to updating sections 2, 3 ,6

b) requirements and design document

Noah - contributed to 1- 3, and did the sequence diagram, contributed to the last 3 docs

Matt - Contributed to section 1 overview and section 7 assumptions and dependencies

Randy - Contributed to section 6 by describing the overall run environment as well as if there are any functional dependencies that the app relies on to pull data from and run properly.

Xander - Provided use cases used to make diagrams.

Jalal - Created the use case diagram using the use cases made

c) implementation and testing document

Matt - Wrote the section 1 programming languages

Noah - Edited section 1 programming languages

Xander - Wrote currently used technologies in section 2.

Jalal - edited section 2 to included Xcode IDE

d) source code

Matt - Finished workout page to suggest users different workouts depending on weight. Fixed full body workout to be clickable.

Noah - I created the user data pages, and edited the profile pages. Added the workouts in the workout page.

Xander - Created profile view to show user information like age, height, weight.

Randy - Added diet descriptions based on BMI information for profiles, made buttons on dietview display correct meal recommendation information.

Jalal - Added code to the signup page as well helped point navigation from display. Implemented Data Storage using Firebase Database. Displayed user info on settings page. Created forgot password view. Added Bmi storage for users in firebase

e) the video or presentation

Randy: Recorded Video

Noah: I created the user data pages, and edited the profile pages. Added the workouts in the workout page.

Xander: Contributed to description of current state of the project

Matt: Helped review the code and functionality of the project to determine what would be discussed during the video

Jalal - Helped review the features and code associated with our program

1. **Plans for the next increment**

There is no future increment for this application, however, if we were given the time the features we would like to have implemented include tracking user health information over time. This would enable us to display the user’s progress to them over time and display information graphically such as how their weight has changed. Although it may sound minor, this kind of information can be incredibly motivating to the user, and we would like to have been able to implement it. Further, the user should be able to edit their information as they change over time, however, this feature was not able to be implemented either despite our wishes.

1. **Link to video**

<https://youtu.be/bJDLq5zDcxE>