Software Development Plan

MyCampusGym

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4.1 Plan Introduction

This software development plan provides the details of the planned development for MyCampusGym which is a mobile application available for users to monitor busyness of colleges' gyms, schedule fitness classes, and book licensed personal trainers.

4.1.1 Project Deliverables

- **Accounts:** The application will allow users to create an account with a username and password so their information can be saved specific to them. The application will provide an option for those with existing accounts to login as well as the ability to create a new account for new users.
- **MyJournal:** The application will allow users to be able to record the details of each workout and exercise they engage with.

- **MyPlan:** This application feature will allow users to indicate what their workout plan is in terms of frequency, fitness goals (including weight loss, muscle tone, etc.), and the time when working out is expected on a daily or weekly cadence. The application will allow users to select from professionally curated plans as well as the option to indicate personal plans.

- **MyFitness:** This application feature will allow users to access information about different fitness options. The application will integrate with campus fitness center systems to show current occupancy and hours so users can be aware of what the availability is to workout. Additionally, the application will allow administrators to update fitness class offerings in this section so that users can sign up or reserve spots to participate in the fitness classes.

- **MyBuddies:** This application feature will provide an area for users to interact with other users. This section will utilize an algorithm to match users together based on the workout plan to help foster accountability. This feature will also contain the option for users to post group workout opportunities such as community runs, pick-up sports games, etc. Finally, this section will connect to a messaging feature in order to allow the users matched to communicate in-app.

- **MyMentor:** This application feature will work similar to my buddies, but will match users to professional trainers and coaches based on their profile information. This algorithm will provide recommendations for which trainers or coaches may be able to best assist a user in meeting their fitness goals depending on their focus. Lastly, this section will also contain a messaging feature in order to allow the users and mentors matched together to communicate in-app.

- **MyFeed:** The my feed feature of the application will provide two options, a feed where users can post to other users at their campus in order to allow for posting and sharing workout tips, discussing workout best practices and more. A secondary feed will be for professionals to post allow users to ask questions and review professional training recommendations posted by trainers and coaches in the app.

4.2 Project Resource

This project will require a few specific software resources in order to support the mobile application development process. As a cloud hosted application, there are no hardware requirements for this project.

4.2.1 Hardware Resources

There are no hardware resources required for this project as all services are cloud hosted and testing will be performed on simulated devices with Xcode.

4.2.2 Software Resources

This project will require iOS via Xcode integrated development environment (IDE). It will also require Google Firebase for Authentication and Firestore services. For progress tracking of the project we will also use the Gannt functionality of Smartsheet and Google Drive documentation. Additionally, the GitHub repository will be used for version control and collaborative coding.

4.3 Project Organization/ Human Resources

Members of the team will collaborate on all aspects of application development. Including the project management and the technical development. Within the shared responsibilities each team member will focus on a particular specialty as follows:

- Troy: Front-End Development
- Anthony: Back-End Development
- Brandon: Project Management

These specialties are based on previous experience and will allow the project team to get a cross-functional experience while also ensuring that each team member is able to get assistance and unblocked if they run into issues with any particular task.

4.4 Schedule

The project schedule will be maintained in Smartsheet to allow for management of the ever-changing timelines and progress.

4.4.1 PERT/ GANTT Chart

The Gantt Chart for this project schedule can be found here.

4.4.2 Task/ Resource Table

Task	Dependency	Resource
1. MyProfile	N/A	Troy
1.1 Create Account	N/A	Troy
1.2 Login/Logout	1.1	Troy
1.3. MyJournal	1	Anthony
1.4: MyHealth	1	Anthony
1.5 MyRewind	1, 1.3	Brandon
1.6 MyPlan	1	Brandon
2. MyFitness	1	Brandon
2.1 Classes	N/A	Troy
2.2 MyPairings	1, 1.6	Anthony
2.3 MyGym	N/A	Anthony
3. MyBuddies	1, 1.6	Brandon
3.1 MyMessages	3	Brandon
4. MyMentor	1, 1.6	Troy

4.1 MyMatches	4	Troy
5. MyFeeds	1	TBD
5.1 Campus Forum	5	TBD
5.2 Builder Feed	5	TBD