Jianqiang Du, Peter Bui, Taylor Bui, Trung Nguyen

Hello Team Snappy,
My name Jane Conoley and I am the president of California State University, Long Beach. We hope to provide a reputable and accessible workout application for students. To accomplish this, we are interested in the development of a mobile application that aids in exercising. The hope is that new gym goers will be aided in their pursuit of a healthier lifestyle. With this in mind, the software must be an android mobile phone application, having two separate account types: users(students), and administrators. In addition we will need on-going maintenance, bug fixes, and possible feature updates.

BUSINESS REQUIREMENTS:

1. Features that we will need:

a. Account Management:

i. Create Account: Users should be able to create an account for this application. Distinct email addresses will be used to create a user via gmail or facebook login. The application may be used without an account although some features may be unavailable to users without accounts.
ii. Edit Account: Users should be able to change their login information.
iii. Ban User: Admins should be able to ban abusers with the report function.

b. Workout plan

i. Add work out plan: User should be able to create and adjust a customizable workout schedule from a few templates such as weight lifting, cardio, stamina, strength building.

ii. Edit work out plan: Users will be able to customize the workout plan from the template and adjust it based-off their preference.

iii. Export User's work out plan: Users should be able to recommend their workout plan to other users as well as get it approved by Administrators.

iv. Mark as complete: Users should be able to mark the workout as completed for the day.

v. Create a workout template. Administrators should be able to create template workouts. Only administrators may add workout to the default templates without further approval.

vi. Workout timer. Users should be able to set timers for rest time or hold times.

    c. Exercise examples

        i. Viewing techniques: Users should have the option to view work out techniques such as proper form and movement in the form of videos or images. There should also be a text box for a written explanation of the technique

        ii. Adding techniques: Administrator should be able to add techniques to this page.

    d. Progression log

        i. Logging progression: Users should be able to log their progress by weight, reps, and body weight.

        ii. Viewing progression: Using part i's data, a graph should be viewable to show progression.

        Iii. Exporting Progression: Users should be able to export their progression to show other users or people.

2. Other Considerations:

    a. Admin access: Only a few specific users will have access to admin account and will be allowed to manage other user accounts.

    b. Trainer access: Only a few specific users will have the ability to suggest work out plan to users.

    c. Required data for the system:

        i. User: Email, password

SOFTWARE REQUIREMENTS:

1. Mobile Application:

    a. We would like for the software to be a mobile application. The priority is for the application to work on Android.

    b. iOS is not required but the project should have the opportunity to expand to iOS after a stable release.

2. User Interface:

a. There are no rigid UI or UX requirements. In fact, we would like you to be creative and experiment with your ideas. The best way we can think of is to provide a mock up so we can discuss further. The UI should be user friendly with a simplistic design.

b. WCAG Standards: As we are an education institute, it is necessary for the mobile application to follow WCAG standards.

3. Reliability:

a. The application should provide users with the most relevant and recent information. If users submit a report, the flagged facility/utility will be marked with an "unverified" report to the administrator. Once the report is verified, it will be marked as unavailable for all users and adjusted accordingly.

b. The application should be available at all times with or without internet access. Some options will be unavailable without an internet connection such as the video examples.

4. User Authentication:

a. We would like to use mongoDB as the database system to store user credentials, logs, and information.

5. Security:

a. The software must be protected from spam attacks.
b. The software must also be protected from data theft.

HARDWARE REQUIREMENTS:

1. Data Storage:

a. User information should be stored client-side.
b. All other data should be stored server-side.

2. Server: We will provide a server for you and provide administrative access to it so you can store data and setup a working environment based on your programming language preference.

3. Compatibility: The application should be compatible for most Android mobile devices and

will be compatible for Apple and any other devices after a successful launch. A webapp is definitely possible in the future.

SUPPORT:

1. Maintenance and Upgrades: We need the data storage to be scalable in the case that we reach number one on the app store.

We need the software to be completed by the end of Fall 2020 semester. These requirements are subject to change. If there are any questions or issues with the requirements, please let us know so adjustments can be made to the requirements or we can also provide clarification. We are expecting you to fulfill the technical details.

Thank you,

Jane Conoley
CSU, Long
Beach