Problem Statement

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Abstract

C7 Fit is a mobile application for iPhone developed as a senior software engineering project under the supervision of eBay Inc. This app is essentially a health and fitness application that will be utilized by members of Club Seven Fitness in Portland. Currently Club Seven gym goers have difficulty tracking their workouts, goals, and schedules in the digital world. C7 Fit aims to integrate existing technologies from Club Seven's services (MindBody API) as well as various iOS frameworks to provide users an accessible interface for interacting with their health and fitness goals on a mobile platform. The app utilizes Apple's new Swift programming language and several diverse and complex Apple frameworks, mainly HealthKit and MapKit, to aggregate a user's health and fitness data. HealthKit will be used to integrate daily activities, like steps and activities, into the app. MapKit will be used to track the location user's during their workouts and provide location based recommendations. Furthermore, the app will integrate the MindBody API to provide the user access to scheduling functions and daily fitness tasks. In addition to providing Club Seven gym members a platform for enhancing their fitness lives, the intention of the application is to give eBay and OSU's teams experience with the Swift language and Apple's SDKs to determine their usefulness in future mobile projects.

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1   Problem Definition

The MindBody platform allows coaches/instructors to connect with their clients in many ways. One of these connections is the ability to give personalized advice at any time based on the client's workouts, nutrition, etc. The more information a coach has to work with, the better their advice is going to be. A personal trainer's advice is only as good as their knowledge about a client. Everyone's workout, lifestyle, and nutrition needs are different, and people pay their trainers good money for life-improving advice. As a coach's / trainer's practice grows, it can be hard for them to collect and retain valuable information about their clients. The Mindbody platform allows coaches to collect and view information about their clients online, allowing them to give better advice on workouts, nutrition and more. It also lets clients make appointments and payments to their coach that fit into their schedule. Sadly, it's currently difficult for clients and coaches to use the Mindbody platform with the frequency that some gyms would appreciate. The C7 Fit gym has recognized this issue and is in need of an iPhone application that will allow users to track their data and schedule appointments using their phone. Since our phones are almost always with us, this should make it much easier to frequently input workout and nutrition data, and to schedule appointments. And with access to an iPhone's various sensors and data streams, many tasks such as workout tracking and scheduling can be automated or at least augmented, e.g. overlaying a user's calendar agenda when they are trying to book an appointment.

2   Proposed Solution

Our solution is to develop a mobile app to encompass the various features a user would utilize away from the desktop to be able to interact with from the MindBody service. This solution encompases various existing features of the web app such as MindBody Calendar, MindBody Classes, and MindBody Class Registration. Communication between user and coach is streamlined through in app contact versus through web interface. Additionally various new features only available on the mobile front would be brought to light such as HealthKit to keep record of a user's daily exercise and MapKit to track a user's workouts. A combination of data from both MindBody and iOS such as MindBody Classes/Schedules, and HealthKit Activities will be displayed in an intuitive interface for the user to interact with. The proposed solution meets the needs of the problem as moving the MindBody platform over to the mobile front allows for a more engaging interaction between the various MindBody services and the user. The various fields of data previously only accessible through the web interface would be easily viewed on the mobile app. At the OSU Engineering Expo, we expect to display a near production iOS application. The end goal is that this iOS app would be published on the App Store and we intend to complete a viable product for publishing.

3   Performance Metrics

The success of our solution will depend on the completion and execution of the general project requirements. The general functions that the app should have were outlined in our meeting with a basic requirements document, but the actual execution of these requirements has been left open to our team. After we create our working prototype, the eBay team can give us feedback on our implementation. We will assess the app and make improvements using the feedback from the eBay team every sprint (bi-weekly). Baseline Metrics that were defined in our meeting are: the solution should be a functional app that can be uploaded to the App Store, it will authenticate though and integrate the Mindbody API, and it will use native IOS HealthKit and MapKit. In addition to these baseline project metrics, the success of our team will be measured on the team-client satisfaction on the finished product, learning experience, and the quality of work done within the timeframe of the class.

4 Signed Participants

Students
Brandon Lee
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Client