

Fitcom

Custom app solutions for health, wellness & fitness industries



Introduction

US fitness industry growth is primarily driven by significant increase in the obese population, changing lifestyles, and increasing health concerns. According to the mobile analytics firm Flurry, health and fitness app usage in the U.S. has grown by 330% between 2014 - 2017.

Various fitness studios are offering a personalized branded app for their members to keep them engaged & motivated to achieve their fitness goals. Yet, it is not practical for all the fitness studios to build a custom mobile application, because of the limited budget and technical expertise. FITCOM took initiative to build a platform which can be leveraged by different health & fitness entities to create their own custom mobile app in a few days and with less cost.

Quality check and Hosting Challenges

Apps will help their clients manage workout, diet plans, supplement dosage, etc. at a single place.

Trainers, gyms and dieticians find it very challenging to use multiple apps for managing different fitness programs for their clients like workouts, yoga, meal plans et al. Even users lose their interest by keeping track of the progress in different apps.

To tackle this, Fitcom wanted to build a platform where gyms, fitness clubs/studios, physical therapy centers, dietitians et al can craft a personalized fitness app for their clients for a small monthly fee. Such apps will help their clients manage workout, diet plans, supplement dosage, etc. at a single place.

One of the major technical challenges was to build customizable packages, maintaining different instances for hosting of different whitelabeled apps. Moreover, performing full QA of the customized app before it hits the app store was a tedious job.



Result cost saving custom apps using White label platform

We built a SaaS platform, where fitness studios can build custom iOS and Android native apps by not just adding their logo and brand color but also adding curated workouts and nutrition plans for their customers. By utilizing Appium for automated testing, we removed the need of 1 week long manual QA cycle and reduced the deployment time to few hours with automation script.

FITCOM had great reach among different fitness entities like gyms, coaches, clubs, trainers et al, hence it didn't take much time to get traction.

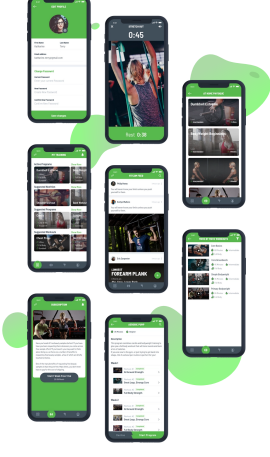
DESIGN

One app that fits all size

Before mobilizing the development team, we wanted to add value to the platform so that it can easily penetrate the market. We conducted research on various fitness apps available in the market and decided to add pre-existing key features to the platform. Apart from creating value, it also helped us to quickly roll out the new custom apps as majority of the features were already covered in pre-existing features. Some of the Major features that comes with basic app package -

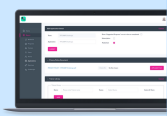


If the studio has a requirement for some additional custom features, then the app can be launched in a short span of few weeks depending on the complexity of the features.



Easy to use CMS for white-labeling

There are lots of white-label fitness apps available, but they tend to have a narrow focus on customization, and many are limited to features that are not useful for many people. Our main focus was to provide modern fitness features, with simple and less time consuming roll-out of white labeled app for the fitness partners. The partner can add app logo, brand logo, theme, workouts, programs, team members as well as trainers. Also, the users can be added to the application by just uploading the CSV file which made it very easy for studios with large number of members. The partner can also add its team to the platform, which can manage the content and the user in the application.



Testing and Deployment Automation to reduce the time to market

Launching multiple apps with same functionality in a single week isn't possible without automation, especially in testing. We developed a Unix Shell script that fetches the code of default and common app features and merges it with the branding related responses (Logo, colors, fonts etc) submitted by the partner.

The script automatically generates the new build along with versioning for both the platforms i.e. iOS and Android which then goes under quality check using Appium mobile automation tool. With the help of Appium, system can perform more than 500 test cases in minutes removing the need of manual testing. Automation scripts were designed to perform UI testing, Functional testing as well as Performance testing.



Publishing iOS & Android apps on the stores is the most tedious task and it also increases the release cycle drastically. We used Fastlane, which is a collection of 12 tools, that allowed us to define the workflows like automate screenshots for different devices, dealing with code signing and ultimately publishes a new release on stores automatically.

Reliability and Scalability achieved through multiple instances



One of the critical success factors for this business is to provide 24*7 availability when the platform and user base grows. Though we have auto scaling facilities on hosting server, it is not wise to host all the APIs, databases for all the studios on single instance. We leveraged Microsoft Azure Virtual Machine to cater the hosting needs and deployed app packages on different instances each time we built new app for any studio.