

Fitness trainer booking app

Overview

Custom Flutter development for a fitness booking platform in the U.S.

A gym chain was looking to build a mobile platform for clients, where they could find, book, and pay for personal trainers. The company aimed to improve automated scheduling and make payments easier within a single cross-platform app.

Touchlane joined the project to design and build a Flutter-based solution that could match the client's goals. The solution went through a full development cycle, from design and architecture setup to payment integration and release.

Initial task

Description

The gym chain needed a powerful mobile app that could manage thousands of users every day and show the precise availability of trainers at various locations. The application had to facilitate real-time notifications, video conferences, and safe online payments.

Technology stack

Framework / Flutter

Programming language / Dart

Architecture / BLoC

Backend services / Firebase + GraphQL

Payments / Stripe

Notifications / Firebase Cloud Messaging

Testing / Flutter Testing, Postman

Challenges

The gym's old system led to double-bookings and frustrated clients. Touchlane's core challenge was to replicate the nuanced logic of a gym manager. This included handling last-minute cancellations, different session lengths, and trainer travel between locations – all within an interface simple enough for a client to book in under a minute.

Another complexity involved balancing UI performance and real-time updates for both clients and trainers within a single Flutter codebase.

Touchlane also needed to implement flexible access levels – for clients, trainers, and gym managers – while keeping the navigation intuitive.

Development

Phase 1. Discovery and architecture

Touchlane's team began with technical and business discovery sessions to define user flows and app structure. The engineers then used Flutter with BLoC for clean state management to design a scalable architecture.

Phase 2. Core features and UI/UX design

The next stage focused on developing and connecting the essential modules:

- **Trainer discovery** – filtering by specialization, experience, and location
- **Booking management** – real-time availability and session scheduling
- **Payments** – secure integration with Stripe for instant transactions
- **Notifications** – in-app and push reminders about upcoming sessions.

The UI/UX designer at Touchlane produced a user-friendly interface that mirrored the gym's brand identity and promoted recurring interaction.

Phase 3. Testing, optimization, and deployment

QA engineers conducted functional and integration testing on multiple iOS and Android devices. To speed up data handling and decrease response time, the team employed GraphQL queries and Firebase Performance Monitoring.

After final testing, the app was released to the App Store and Google Play. Touchlane also set up post-launch monitoring.

Results

- within three months after launch, the app **kept over 60% of users active every week**
- an average booking time dropped to **under 30 seconds**
- trainer utilization grew by **40%**.

Touchlane continues to maintain the app and deliver new features such as loyalty points and group class scheduling.