

# Fit Tracker - AI Fitness Coach

## 1. Problem

Most people who start training stop within a few weeks or get hurt because:

- They do not know how to design a safe, effective plan for their goals and schedule
- Generic online programs ignore injuries, equipment and time constraints
- Progress is not tracked in a clear way, so it is hard to see whether anything is working

Personal trainers help but are expensive and do not scale. There is a gap for an AI based coach that builds and adapts plans from real user data and makes it easy to follow and stick with them.

## 2. Target users and job to be done

### Primary Users:

- Beginners and busy professionals who want guided, low friction workouts
- Intermediate and advanced lifters who want structured, data informed plans (later)
- Users returning from injury who need safe progressions (later)

### Job to be done

"When I commit to getting fitter, I want a plan that fits my goals, time, equipment and limitations, tells me exactly what to do today and shows that I am getting better, so I can stay consistent without hiring a coach."

## 3. Solution overview

Fit Tracker is a mobile app that uses GPT and simple user/device data to create training plans that people can actually follow.

### V1 focuses on:

- **Onboarding to a realistic plan:** short intake on goal, schedule, experience, injuries and equipment.
- **GPT generated plan:** Backend calls GPT with a vetted exercise library and constraints, gets back a structured multi week program (days, exercises, sets, reps) that passes server-side safety checks.
- **Light weekly adjustment:** Once a week, summarize adherence and basic recovery, then let GPT tweak volume or exercises within tight bounds.
- **Guided workouts and progress view:** Today's workout with simple logging, plus a basic dashboard for adherence and over time.

## 4. Technical approach (high level)

- **Architecture:** React Native mobile app talking to a Node.js (TypeScript) backend over REST. Backend owns auth, plan generation, workouts and basic analytics.
- **GPT integration and guardrails:** Backend calls the latest GPT model via API using schema constrained output to get JSON plans. A server-side validator enforces a fixed exercise library, volume and progression limits, and injury constraints before any plan is saved or updated.
- **Data and integrations:** PostgreSQL for users, plans and workouts, Redis for caching active plans and sessions. Basic Apple HealthKit / Google Fit integration for adherence and simple load signals.

## 5. Success metrics

### Product

- **Activation:** % of new users who complete onboarding and at least 2 workouts in their first 7 days
- **Plan adherence (core behavior):** Median % of scheduled workouts completed per week during a user's first 4 weeks
- **AI trust:** % of workouts where users keep the suggested plan without major edits, with in-app "plan helpfulness" > 85%

### Technical

- Crash free sessions > 99.5% with responsive core flows (load plan, start workout, log set)

## 6. Key risks and mitigations

- **Low trust in AI plans:** Show short explanations for key choices (for example "extra volume here because you only train 3 days") and let users adjust simple constraints like days per week & available equipment without breaking safety rules.
- **Unsafe or odd GPT recommendations:** Use a closed exercise library, strict volume and progression limits, and server-side validation on every plan. If a plan fails checks, fall back to a conservative expert template.
- **Drop in adherence after novelty fades:** Use phased programming that changes every 4–6 weeks, plus simple streaks and progress views that highlight meaningful gains (more consistent weeks, more total work, etc).