MediTrack Overview

MediTrack is a cross-platform medication tracking solution that unites a mobile app, a GraphQL backend, an OpenCV-powered unwrap service, and a lightweight verification site. It guides patients through bottle scanning, keeps schedules organized, and keeps providers in the loop with timely notifications.

What it is
- A complete medication-adherence experience spanning mobile, server, and computer-vision components.
- Patient-friendly flows for registering bottles, scanning labels, and confirming doses.
- Provider-ready data through secure GraphQL APIs and optional notifications.

How it works
- Mobile app \(React Native + Expo\) walks patients through bottle capture, AI assistant prompts, reminders, and dashboards.
- NestJS GraphQL backend manages authentication, schedules, dose records, and delivers Expo push or SMS notifications.
- OpenCV Flask service unwraps short rotation videos into sharp frames/contact sheets for OCR-ready ingestion.
- Verification site \(Vite/React\) handles account confirmation and password resets against the API.

Key features
- Guided bottle scanning with computer-vision unwrapping for consistent label reads.
- Smart reminders tied to personalized schedules and delivery via push or SMS.
- AI assistant inside the mobile app to answer medication questions and walk through next steps.
- Secure account lifecycle with email verification, password resets, and role-aware data access.
- Cloud-ready architecture with Prisma/PostgreSQL and S3 storage options for extracted frames.

Why customers care
- Reduces missed doses by pairing reminders with easy confirmation flows.
- Cuts support overhead by guiding patients visually and answering questions in-app.
- Provides providers with reliable, timestamped adherence data through a standards-friendly API.
- Deployable in parts or as a whole, fitting into existing care-management stacks.