

# SneakTrack Overview

## Project Goals

- Monitor product availability across multiple retailers in real time.
- Provide instant notifications for restocks, raffles, and price drops.
- Enable personalised alerts based on size, brand, and sneaker model.
- Empower users with actionable data to improve purchase success.
- Offer cross-platform accessibility (mobile, web, desktop).

## Architecture Diagram

*Client (Web/Mobile) -> Next.js API Routes -> Firebase Functions -> Retailer APIs/Scrapers  
|-> Firebase Firestore (Real-Time Sync + Caching) -> Notifications (FCM)*

## Mock UI Preview

*Homepage shows:*

- *Sneaker Cards with images, prices, and availability*
- *Retailer links*
- *Wishlist + notification buttons*
- *Real-time restock indicators*

## Stack Used

- Frontend: Next.js (TypeScript, Tailwind CSS)
- Backend: Firebase Functions (Node.js, Firestore)
- Scraping: Puppeteer (planned)

## Development Status

Scrapers under dev - mock data used for GradEX