

# FINTRACK APP SUMMARY

## What it is

- FinTrack is a Next.js web app that pulls transaction-related Gmail messages and converts them into a personal finance dashboard.
- It parses debits/credits, bank names, VPAs, and categories, then visualizes spending and income trends.

## Who it's for

- Primary persona: an individual user who receives UPI/bank transaction alerts in Gmail and wants quick, local-first expense tracking.

## What it does

- Gmail OAuth login with read-only Gmail scope, then fetches current-month transaction emails.
- Parses amount, debit/credit type, bank, VPA, date, and category from email headers/body.
- Displays dashboard cards for total expenses and total income.
- Shows charts for income-vs-expense over time and spending-by-category.
- Provides bank-wise and person-wise drill-down pages with transaction totals.
- Supports month/custom/all-time filters plus quick presets (this month, last month, etc.).
- Lets users override transaction category labels and stores overrides locally.

## How it works (repo evidence)

- UI layer: Next.js App Router pages in /app with reusable components (Layout, Sidebar, charts, tables).
- Auth layer: AuthContext uses Google Identity token client and stores gmail\_token in localStorage.
- Data layer: app/lib/gmailService.js fetches Gmail message list/details; app/lib/parseTransaction.js applies regex/rule parsing.
- State layer: TransactionContext stores transactions/date filters and computes filteredTransactions.
- Security/session: passcode setup/unlock pages hash PIN via Web Crypto; app auto-locks after 5 minutes idle.
- Persistence: localStorage/sessionStorage for token, PIN hash, category overrides; no server/database layer found in repo.
- Not found in repo: backend API service, database schema, automated tests, CI/CD pipeline details.

## How to run (minimal)

- Prereq: Node.js (version not specified in repo).
- Install dependencies: npm install
- Set env var in .env.local: NEXT\_PUBLIC\_GOOGLE\_CLIENT\_ID=<your\_google\_client\_id>
- Start dev server: npm run dev
- Open: <http://localhost:3000>