1. FINCA.AI

FinAI Reports – Automated Financial Report Generator with AI

A full-stack AI-powered system that automates the generation of GST summaries, Income Statements, and Audit Reports from raw accounting data — saving accountants hours of manual work.

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2. Problem Statement

Preparing financial reports like GST summaries, income statements, and audit observations is **time-consuming, repetitive, and error-prone** for accountants and businesses.
They spend hours manually cleaning data, classifying transactions, calculating taxes, and formatting reports into professional PDFs. Mistakes during this process can lead to compliance issues, missed deadlines, or financial penalties.

FinAI Reports aims to solve this by using **AI and automation** to process raw accounting data, generate accurate financial calculations, and produce **ready-to-download professional PDF reports** — all within minutes.

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3. System Architecture

Flow:
Frontend → Backend (API) → Database → AI Layer → PDF Generator

Stack Example:

- **Frontend:** Next.js (React) with Tailwind CSS + shadcn/ui

- **Backend:** Node.js + Express

- **Database:** PostgreSQL (relational)

- **AI Layer:** OpenAI GPT-4 for report drafting and classification

- **PDF Generation:** ReportLab / Puppeteer for structured PDFs

- **Authentication:** JWT-based login/signup

- **Hosting:**

  - Frontend → Vercel

  - Backend → Render / Railway

  - Database → Aiven / Supabase / ElephantSQL

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5. Key Features

Category	Features
Authentication & Authorization	User registration, login, logout, role-based access (e.g., CA, business user)
Data Ingestion	Upload Excel/CSV financial data or connect to accounting APIs (mock/Tally/QuickBooks)
AI Processing	Automatic classification of transactions (Sales, Purchases, Expenses, GST Input/Output), anomaly detection
Financial Calculations	Generate GST summaries, Income Statements (P&L), audit flags, cash flow summaries
AI Report Generation	GPT-based drafting of audit summaries, GST commentary, and insights (e.g., expense trends, compliance notes)
PDF Report Export	Professional-quality PDF generation (cover page, tables, charts, summaries) ready to share with clients/auditors
Frontend Dashboard	Dashboard for uploading files, previewing reports, and downloading final PDFs
Automation (Optional)	Monthly auto-generation, email scheduling, and real-time syncing with accounting tools
Hosting	Full-stack deployment of frontend + backend on Vercel/Render for accessibility

6. Tech Stack

Layer	Technologies
Frontend	Next.js (React), Tailwind CSS, shadcn/ui, Axios
Backend	Node.js, Express.js
Database	PostgreSQL (with Prisma ORM)
Authentication	JWT / NextAuth
AI	OpenAI GPT-4 / GPT-4o for text generation and classification
PDF Generator	ReportLab (Python) / Puppeteer / pdfkit (Node)
Hosting	Vercel (Frontend), Render / Railway (Backend), Supabase / Aiven (Database)

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7. API Overview

Endpoint	Method	Description	Access
/api/auth/signup	POST	Register a new user	Public
/api/auth/login	POST	Authenticate user	Public
/api/upload	POST	Upload CSV/Excel financial data	Authenticated
/api/process	POST	Trigger AI + calculations to process uploaded data	Authenticated
/api/reports	GET	List generated reports	Authenticated
/api/reports/:id/pdf	GET	Download PDF version of a report	Authenticated
/api/reports/:id/delete	DELETE	Delete a specific report	Admin/CA only