MediShare: Authentic Medicines. Transparent Lives.

What is MediShare?

MediShare is a blockchain-powered platform focused on eliminating counterfeit medicines, verifying authenticity, and making essential medicines affordable through redistribution and dynamic pricing.

Core Features:

- 1. Batch Authentication via NFTs
- Each batch from a pharmaceutical manufacturer is issued a unique NFT on the blockchain.
- This ensures tamper-proof proof of origin and authenticity.
- 2. Medicine Verification via QR/Barcode
- End-users can scan QR codes or barcodes on medicine packages.
- They get instant verification of authenticity, batch info, and expiry.
- 3. Medicine Donation & Redistribution Platform
- People or hospitals can donate unused medicines.
- Donated meds are redistributed through a platform with condition-based dynamic pricing.
- 4. Dynamic Pricing Engine
- Medicines are priced based on their condition and expiry proximity.
- Helps low-income individuals access essential drugs at cheaper rates while minimizing waste.

Tech Stack:

- Blockchain: Smart contracts for NFT-based batch authentication & traceability
- QR/Barcode Scanner: Web/mobile-based scanner for public verification
- AI-Powered RAG Chatbot: Assists users with information from medishareDocs.pdf
- Dynamic Pricing Algorithm: Adjusts resale value based on condition/expiry
- Frontend: Next.js / React
- Backend: FastAPI

MediShare: Authentic Medicines. Transparent Lives.

- Database: PostgreSQL / Supabase

- Hosting: Vercel + Render

- Vector DB: Chroma or Pinecone

- LLM: Groq (Mixtral or LLaMA3)

Why MediShare?

- Combats counterfeit drugs
- Transparent medicine tracking
- Reduces medicine waste through verified redistribution
- Makes healthcare accessible to all

Target Users:

- Patients & caregivers
- Pharmacies & clinics
- NGOs & medical donation drives
- Pharmaceutical manufacturers

Impact:

- More lives saved through affordable medicine access
- Safer healthcare via verified authenticity
- Reduced medical waste through redistribution