

1. Problem Statement

In India and globally, healthcare data and services are fragmented. Users face the following key challenges:

- Scattered health records across clinics, labs, and hospitals
- No immediate access to health data during emergencies
- Poor doctor-patient coordination (booking, prescription sharing)
- No centralized app for real-time health tracking and goals
- Lack of engagement and motivation to maintain health habits
- No personalized insights or trend analytics for users or doctors

2. Objective

To build a full-stack MERN web application that acts as a complete digital health ecosystem — integrating re

3. Key Modules & Features

A. Smart Health Record Vault

- Upload medical reports with OCR (Tesseract.js)
- Organized records by tags
- Shareable securely with doctors

B. Emergency Access via QR/OTP

- QR or OTP-based emergency data access
- Logs time, location, and access type

C. Telemedicine & Doctor Booking

- Booking with verified doctors
- WebRTC/Twilio for video calls
- Instant e-prescriptions

D. Health Tracker + Gamification

- Track water, steps, vitals, sleep
- Graphs using Recharts/Chart.js
- Gamified goals, challenges, streaks

E. Doctor Dashboard & Insights

- Trend graphs for each patient
- Auto red flag alerts
- Annotated feedback with smart suggestions

F. Security & Auth

- Role-based access
- JWT + bcrypt encryption
- File encryption + access logs

4. Tech Stack

Frontend: React.js, TailwindCSS, Redux

Backend: Node.js, Express.js