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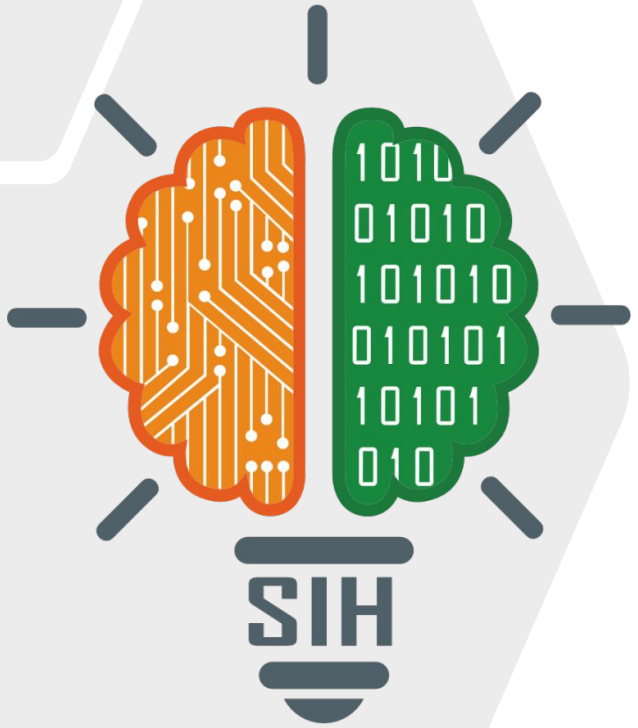

- **Problem Statement ID –SIH25018**
- **Problem Statement Title -Telemedicine Access for Rural Healthcare in Nabha**
- **Theme-MedTech/BioTech/ HealthTech**
- **PS Category- Software**
- **Team ID- 55237**
- **Team Name (Registered on portal):Healthbridge**

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AI-Powered Rural Healthcare Access Platform For Nabha and Surrounding Villages

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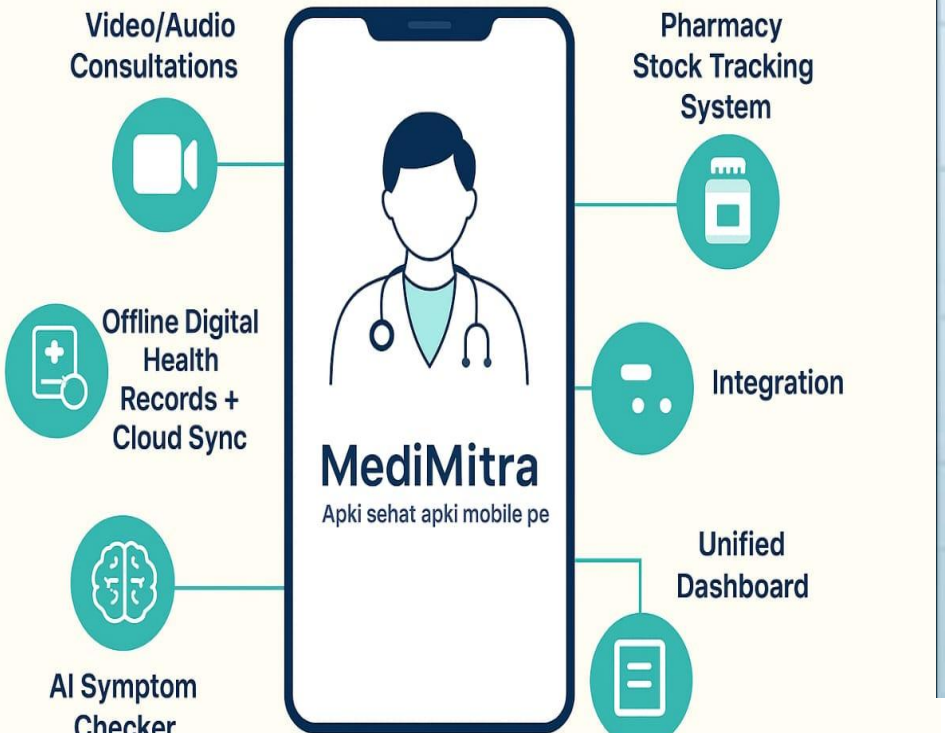

How It Addresses the Problem	Innovation & Uniqueness
Doctors available virtually → reduces travel & delays	LLM-powered auto-transation bridingg language & literacy gaps
Offline-accessible health records → continuity of care	Offline-first + blockchain-backed EHRs (raare in rural healthcare)
AI symptom checker → helps patients reach correct specialists quickly	Voice-based LLM triage for semii-literate users
Pharmacy stock tracking → prevents wasted trips	Integrated pharmacy visiblity at the village level
Unified dashboards → efficient resource allocation & decision-making	Scalable AI-driven analytics for demand pedidiction

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TECHNICAL APPROACH

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Programming & Backend: Python, Django/FastAPI, Node.js

Frontend (App & Web): React Native (mobile), React.js (web)

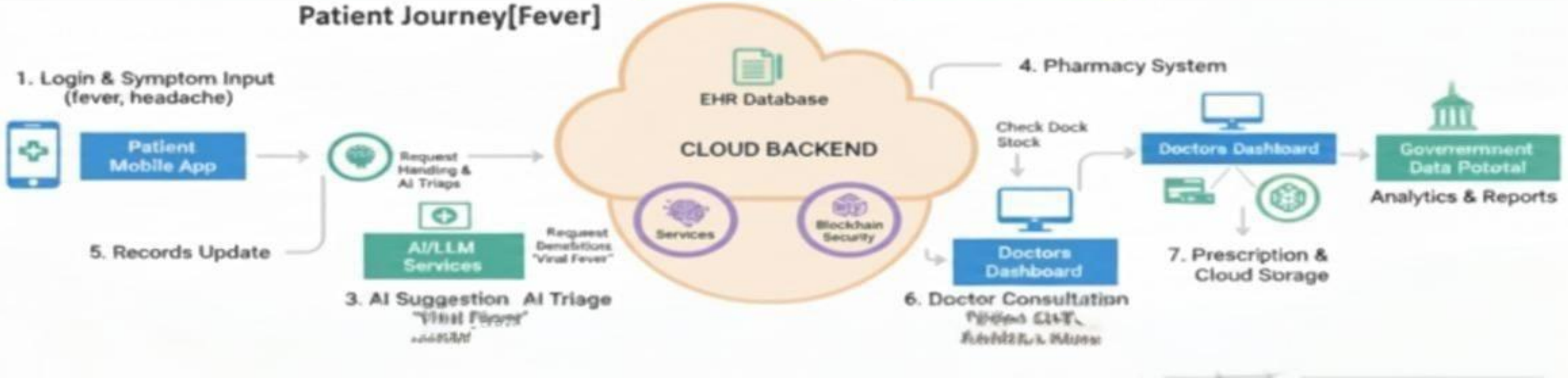
Databases: PostgreSQL + Blockchain layer for EHR security

AI/ML Models:

- LLMs (for translation & voice-based symptom triage)
- ML for demand prediction & pharmacy stock analytics

Cloud & Infra: AWS / Azure (with offline-first sync)

APIs & Integgration: Video/Auddio SDK (WebRTCf./Agora), Govt healtth APIs



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FEASIBILITY AND VIABILITY

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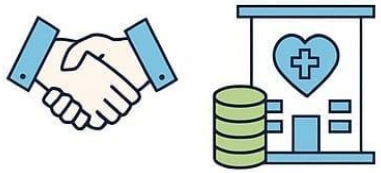
Feasibility
Technically feasible using AI/LLMs, cloud & mobile app frameworks
Scalable across multiple rural regions in India
Affordable deployment with open-source tools & phased rollout
Partnership opportunities with govt & NGOs
Sustainable with recurring govt/CSR support

Long-term Sustainability

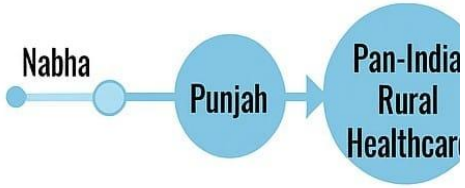
Ayusman Bharat Government Schemes

Integration with Avusman Bharat & Govt Schemes

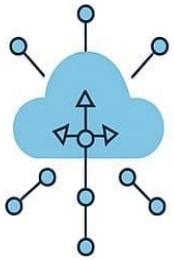


CSR Funding & Public-Private Partnerships

Scalability Angle



Designed to expand from Nabha → Pan-India



Cloud-Native Architecture Supports Nationwide Rollouts

Challenges / Risks	Mitigation Strategies
Low internet penetration in rural areas	Offline-first architecture + data sync when online
Resistance to adoption among villagers & staff	Training, multilingual support, community awareness drives
Data privacy & security concerns	Blockchain-backed EHRs + strong encryption policies
Limited tech literacy among patients	Voice-based interfaces & LLM-powered translation
Supply chain gaps for medicine availability	Real-time pharmacy tracking & predictive analyation

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IMPACT AND BENEFITS

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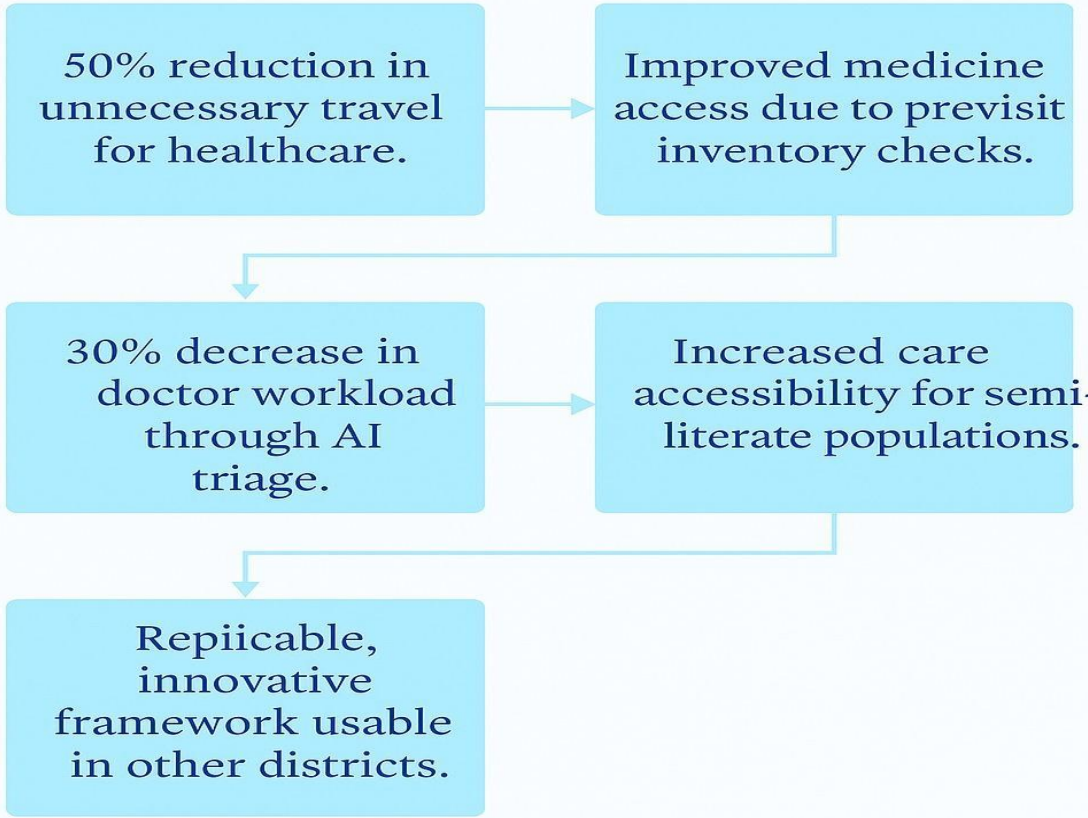

Impact	Benefits
Timely healthcare access for rural patients	Multilingual telemedicine for all literacy levels
Early diagnosis & better health outcomes	Offline digital health records for continuity
Reduced travel & saved income	Real-time pharmacy stock updates
Increased awareness & trust in healthcare	AI-powered symptom checker for urgent cases
Optimized resource use for hospitals	Scalable & replicable across rural India

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RESEARCH AND REFERENCES

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