Team Name: NexusHealth AI

Making AI-powered healthcare accessible, affordable, and scalable for every citizen of Bharat.

Team Leader Name : Siddhardha Mourya Byna

Problem Statement : AI-Powered Intelligent Healthcare Assistant for Bharat

Brief about the Idea:

NexusHealth AI is an AWS-powered intelligent healthcare assistant designed to improve efficiency, accuracy, and accessibility within healthcare systems.

The solution focuses on:

- Clinical data summarization
- Workflow automation for doctors
- Patient education and support
- Predictive insights for proactive care

The system is designed for India’s high patient-load environment and supports scalable deployment across urban and rural healthcare centers.

1. How different is it from any of the other existing ideas?

What Makes NexusHealth AI Different

- All-in-One Platform – Combines clinical summarization, automation, and patient support in a single system
- Evidence-Based AI – Uses RAG to provide verified medical insights (no hallucinations)
- Hospital-Ready Integration – FHIR-compliant and compatible with existing systems
- Bharat-Focused Design – Multilingual support and optimized for high patient-load environments

Built for real-world deployment across hospitals in Bharat.

2. How will it be able to solve the problem?

How NexusHealth AI Solves the Problem

- Centralizes fragmented patient data using AWS HealthLake
- Converts doctor–patient conversations into structured clinical notes
- Provides instant patient summaries and risk alerts
- Automates triage, documentation, and follow-ups
- Delivers simple, multilingual guidance to improve patient understanding
- Reduces clinical documentation time by up to 40–60%.

Reduces doctor workload and improves care efficiency across Bharat’s healthcare system.

List of features offered by the solution

🧠 Clinical Intelligence
- Patient summary & risk alerts

⚙ Workflow Automation
- Voice-to-notes & smart triage

Patient Care
- Simple instructions, multilingual support, reminders

☁ Secure & Scalable
- FHIR integration, privacy protection, AWS cloud

Enhancing doctor efficiency and enabling accessible AI-powered healthcare across Bharat.

Process flow diagram or Use-case diagram

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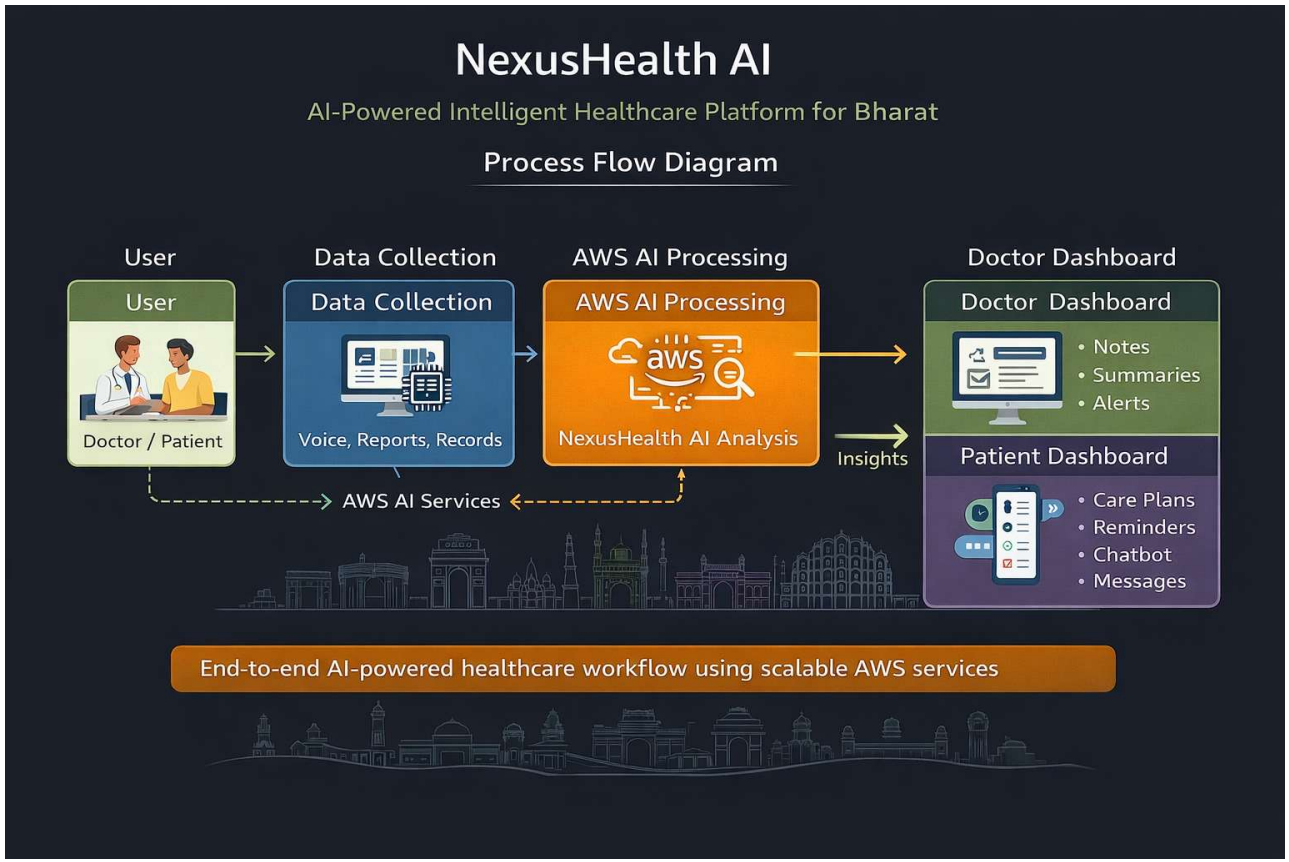
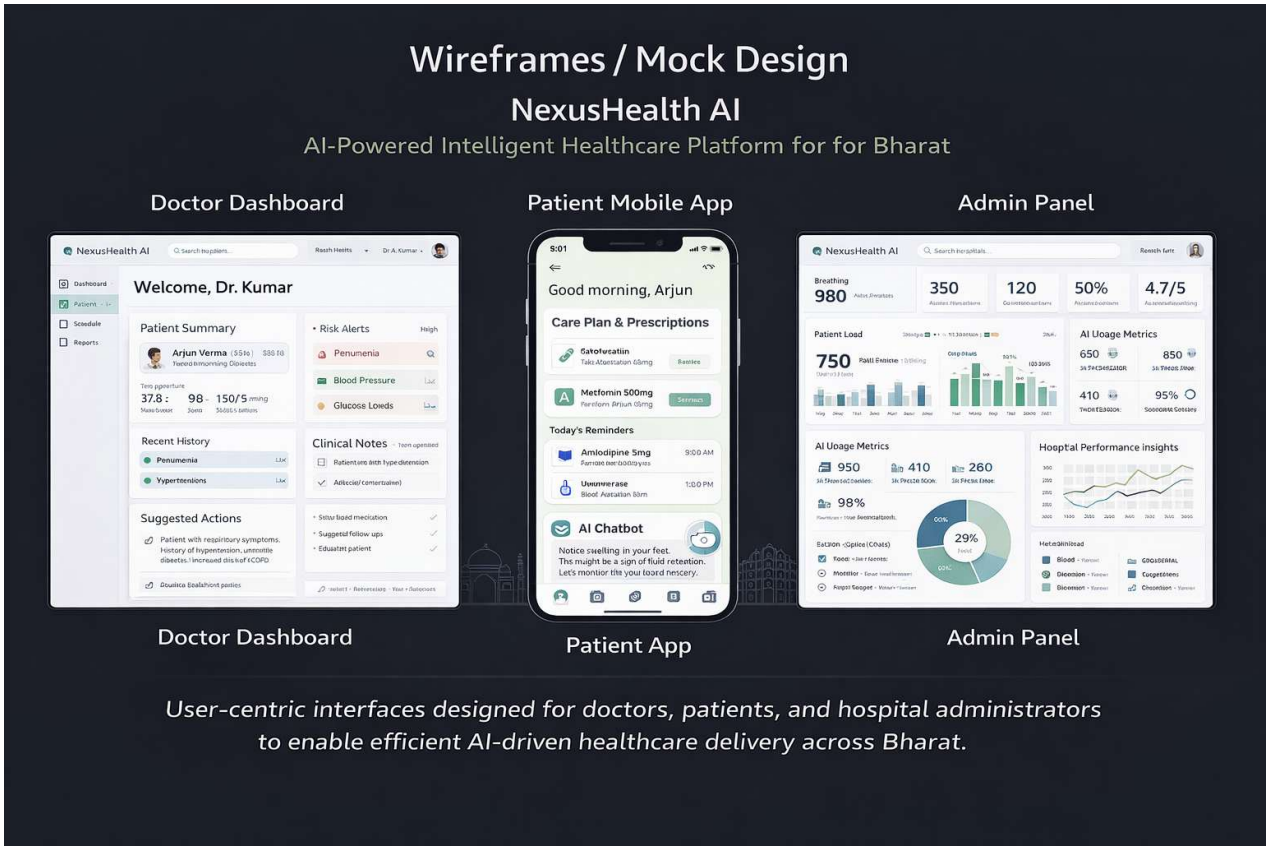
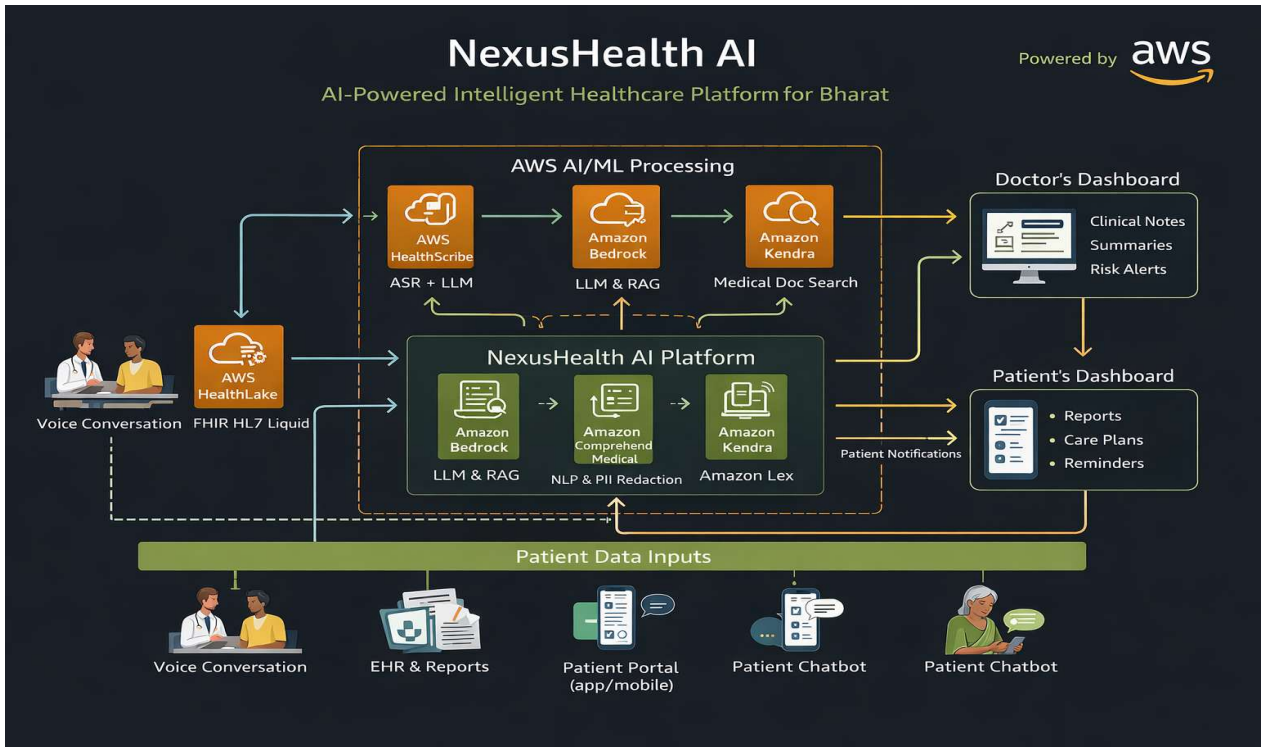


Wireframes/Mock diagrams of the proposed solution (optional)



Architecture diagram of the proposed solution:

System Architecture: Data → AWS AI → Insights for Doctors & Patients



End-to-End AI-powered healthcare workflow built on scalable AWS services

Technologies to be used in the solution:

- Amazon Bedrock – AI and LLM orchestration
- AWS HealthScribe – Clinical speech-to-text
- AWS HealthLake – FHIR medical data storage
- Amazon Comprehend Medical – NLP and PII redaction
- Amazon Kendra – Medical document search
- Amazon Lex – Conversational AI
- Amazon Pinpoint – Patient notifications

Estimated implementation cost (optional):

Prototype / Pilot Deployment (Small Hospital)

- AWS (pay-as-you-use services): ₹3,000 – ₹8,000/month
- Basic hosting & storage: ₹1,000 – ₹2,000/month
- Initial development (prototype): ₹1–2 Lakhs (one-time)

Total Estimated Cost:₹1–2 Lakhs setup + ₹4K–₹10K/month

Built on serverless and scalable AWS architecture to ensure low operational cost and affordable deployment across small, mid-size, and rural hospitals in Bharat.

Add as per the requirements for the hackathon:

NexusHealth AI delivers an end-to-end intelligent healthcare solution aligned with hackathon goals:

- AI Clinical Intelligence – Patient summarization and evidence-based decision support
- Smart Workflow Automation – Ambient scribing, triage, and automated documentation
- Patient-Centric Care – Multilingual guidance, reminders, and 24/7 AI assistance
- Secure & Scalable Architecture – FHIR-based data integration, privacy protection, and AWS-powered deployment

From conversation to care — NexusHealth AI transforms patient data into real-time clinical insights, enabling faster, smarter healthcare for Bharat.

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AI for Bharat Hackathon

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Thank You