Revolutionizing Healthcare with AI-Powered Health Assessments

Hola! Our **HealthAssist**, powered by Eka's **DocAssist**, uses advanced AI and Eka's in-house AI capabilities to give you a helpful, friendly experience. It connects your health concerns to personalized medical guidance.

By: Team LIFELINE 🩸
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The Current Healthcare Challenge

Inefficient Intake

- Long wait times
- Generic forms
- Limited patient context

Leads to delay and potential for missed critical information due to standardized questionnaires.

Delayed Diagnosis

- Manual data analysis
- Resource intensive
- Risk of oversight

Accurate diagnosis can be prolonged, impacting patient outcomes and increasing healthcare costs.

HealthAssist: Our AI Solution

AI-Driven

Powered by eka.care docAssist and other ai LLMs, our system intelligently adapts to patient inputs.

User-Centric

Engages patients with clear, relevant questions tailored to their specific health concerns.

Holistic Assessment

Gathers comprehensive information to form a complete picture of the patient's condition.

Personalized Plans

Generates custom treatment plans based on a detailed AI-driven assessment.

The Assessment Flow: A Step-by-Step Approach

Patient Concern Input

Patients articulate their primary health concern, which initiates the AI-powered assessment.

Initial Question Generation (DocAssist & Claude)

DocAssist and Claude, acting as our medical AI assistant, generates 2 initial, medically relevant questions. These are clear and easy for a non-medical person to understand.

Interactive Q&A (DocAssist & Claude)

The system presents questions one by one. Patients provide answers, and AI generates specific follow-up questions based on the conversation context, clarifying ambiguities and gathering more data.

Data Collection

All questions and answers are stored in the database, forming a comprehensive health assessment record.

This iterative question-and-answer process ensures that the AI system collects all necessary details, building a robust profile of the patient's symptoms and history.

From Assessment to Treatment

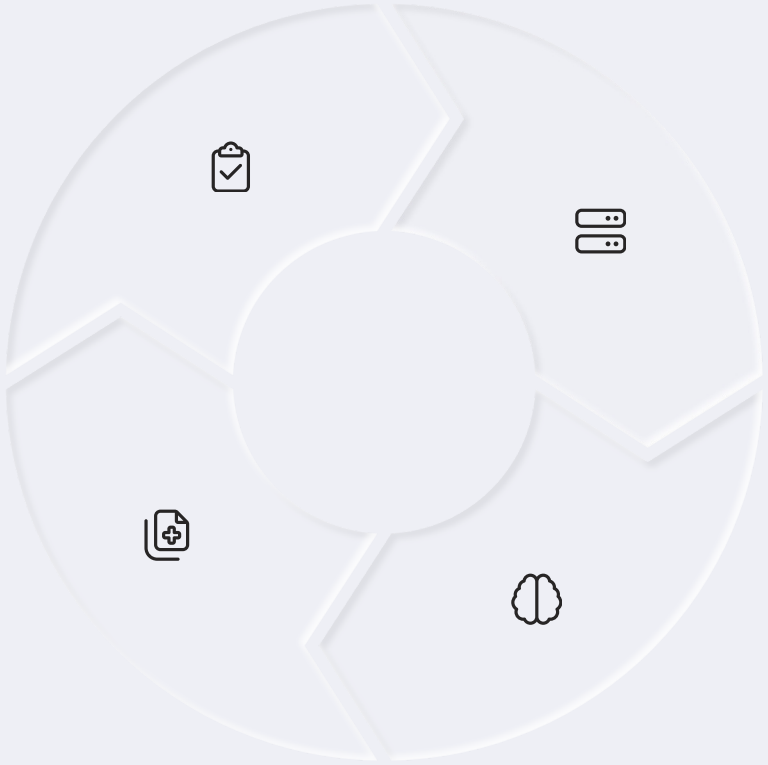
Once the interactive assessment is complete, the comprehensive questionnaire and answers are transmitted to the DocAssist and Claude server.

Assessment Data Sent

Full Q&A history, initial concern, and patient info are packaged for AI.

Comprehensive Plan Delivered

The final treatment plan, including diagnosis, recommendations, medications, lifestyle changes, and follow-up instructions, is presented to the patient.



AI Processing

The DocAssist and Claude server processes the assessment data to generate treatment plan.

Delivered to Eka PHR

After finalizing the treatment plan summary, effortlessly send it to the PHR app via a simple WhatsApp API call. Empowering Doctors to prescribe to their patients.

This two-tiered approach ensures that we combine the strengths of both specialized protocol engines and advanced generative AI for optimal results.

Impact & Scalability

Patient Benefits

Immediate, personalized, and accurate health assessments from home lead to faster symptom understanding, reduced anxiety, and informed decisions.

Doctor Benefits

Streamlines diagnostic processes with comprehensive, pre-assessed patient data, reducing administrative burden and enhancing care quality.

Healthcare System Benefits

Alleviates strain on resources by reducing unnecessary visits, promoting proactive health management, and improving overall system efficiency and accessibility.

Projected Key Metrics

Our projections are based on the transformative impact of AI-powered health assessments on efficiency, accuracy, and resource utilization within the healthcare ecosystem:

Consultation Time ⬇️

Diagnostic Accuracy ⬆️

Healthcare Cost Savings 📈

Scalability & Adaptation

Built for easy expansion on a national level with cloud infrastructure and modular AI. The language-agnostic core allows seamless global localization and integration.

Next Steps: Doctor & Prescription Integration

Our immediate next step is to integrate the health assessment flow with location-based services to facilitate prescription and doctor assistance.

Location Detection

Utilize patient's current location (with consent) to identify nearby medical facilities and prescribing doctors.

Doctor Search & Filter

Integrate with Google Maps API to search for qualified doctors based on specialty, availability, and patient rating.

Prescription Forwarding

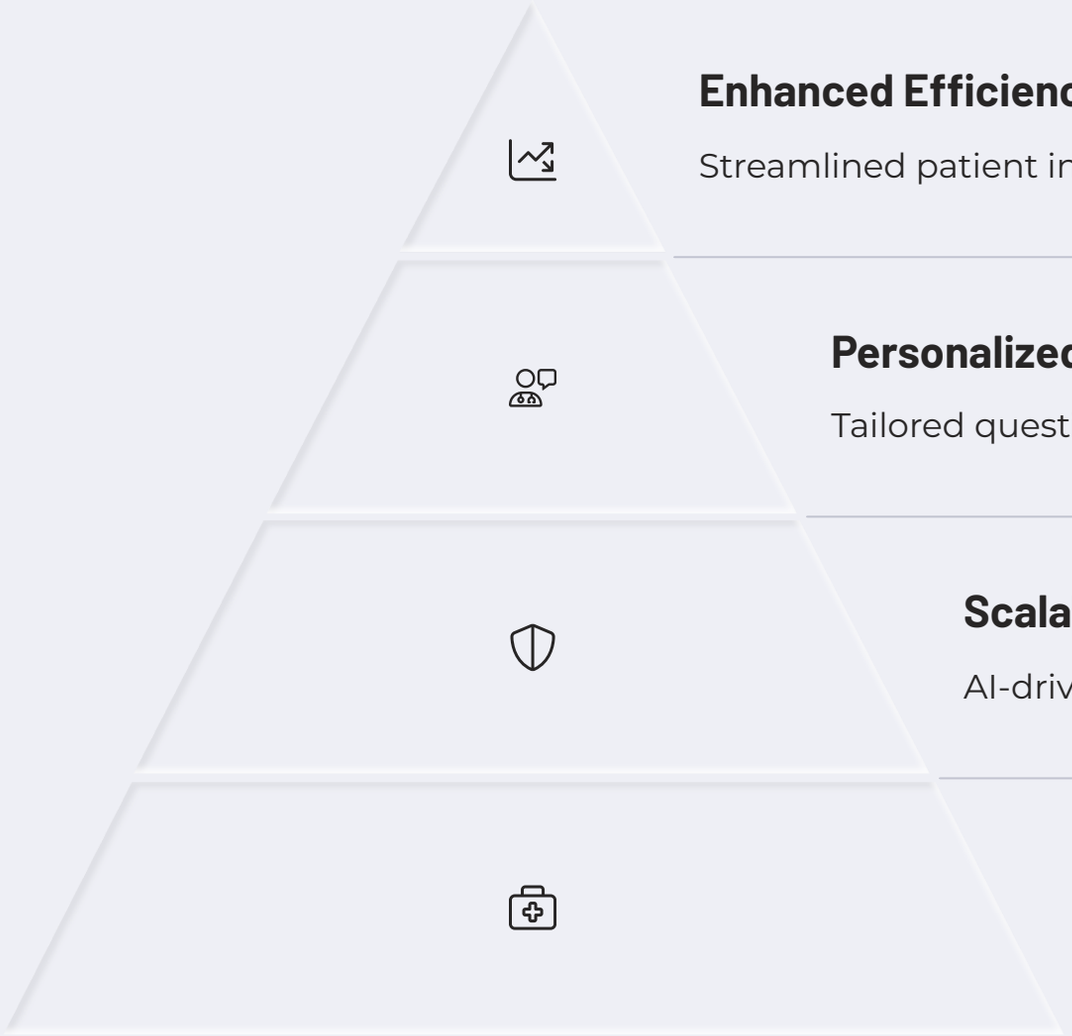
Easily link up with ABHA to upload your document. Doctors can instantly access the report on their tool.

Direct Communication

Enable seamless communication channels (e.g., WhatsApp API) for doctors to send prescriptions and follow-up directly to patients.

This integration will bridge the gap between AI-powered assessment and practical medical action, ensuring patients receive timely and localized support.

Key Takeaways & Future Directions



Enhanced Efficiency

Streamlined patient intake and assessment processes.

Personalized Care

Tailored questions and treatment plans for each patient.

Scalable Solution

AI-driven architecture for handling a high volume of assessments.

Legitness

Consult the closest doctor for expert guidance and linking with ABHA.

Future Directions: We aim to expand language support, integrate with electronic health records (EHR), and incorporate real-time vital sign monitoring for even more comprehensive assessments.

Thank You!

Link to Repo:
https://github.com/vickykr26941/aiassessment

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