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AI for Bharat Hackathon

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Team Name : Spirit

Team Leader Name : Meghna Subramani

Problem Statement : Build an AI-powered solution that improves access to information, resources, or opportunities for communities and public systems.

Brief about the Idea:

- The AI Emergency Help Assistant is a multilingual, voice-enabled, low-bandwidth AI system designed to support people during the first critical minutes of an emergency—before ambulances, police, or fire services arrive.
- It detects emergencies automatically, identifies the type of emergency, and provides step-by-step first-aid guidance, while also helping users contact nearby emergency services and SOS contacts.
- The solution is optimized for panic situations, rural or low-connectivity areas, and users with little medical knowledge.

Problem Definition

In real emergencies (collapse, accident, disaster):

- People panic and forget basic first aid
- Emergency numbers are not easily available
- Users don't know what details to tell responders

Existing apps are text-heavy, English-centric, and require stable internet

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

Existing Solutions	AI Emergency Help Assistant
Static emergency apps	Dynamic AI-driven guidance
General health chatbots	Emergency-only intelligence
English-first	Local language + Voice
Internet dependent	Low-bandwidth / offline fallback
No panic handling	Step-by-step calm coaching

- How will it be able to solve the problem?

1. Detects emergency intent from voice/text
2. Classifies emergency type (medical, accident, disaster, threat)
3. Immediately switches to emergency mode (no long explanations)
4. Guides step-by-step actions (first aid, safety steps)
5. Fetches nearest emergency services
6. Prepares responder-ready information
7. Works offline if needed

This reduces panic, saves time, and improves survival probability.

- USP (Unique Selling Proposition) of the proposed solution

"Life-saving guidance in the first 5 minutes, for anyone, anywhere."

1. Emergency-first AI (not a general chatbot)
2. Voice-guided first aid coaching
3. Local language + cultural context
4. Works in low connectivity environments
5. Tells users *what to say* to emergency responder

List of features offered by the solution

Emergency Intent Detection

Emergency Type Classification

Step-by-Step First Aid Guidance

Voice-Based Multilingual Interaction

Nearby Emergency Services Lookup

One-Tap Emergency Calling

Emergency Summary Generation

Panic Mode UI

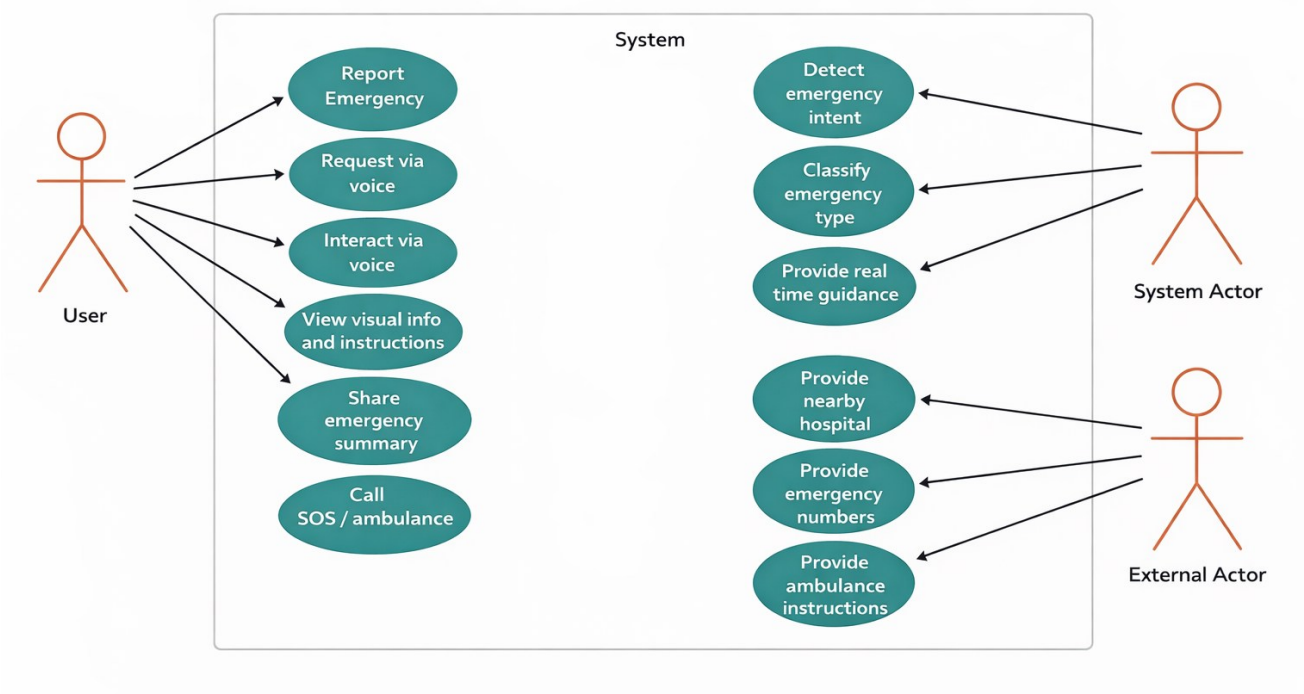
Visual First Aid Illustrations

SOS Contact Notifications

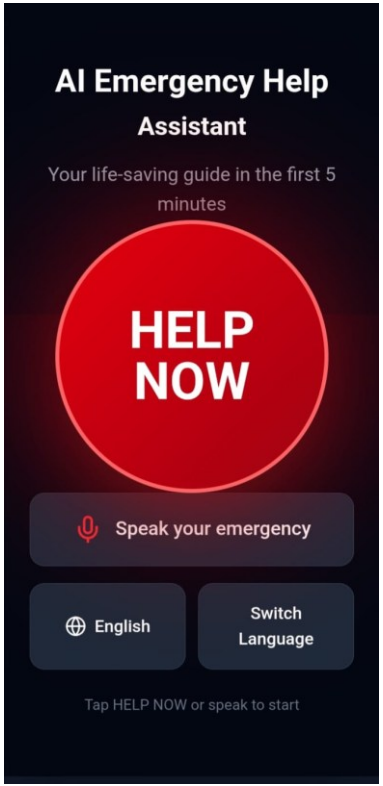
Offline Emergency Protocols

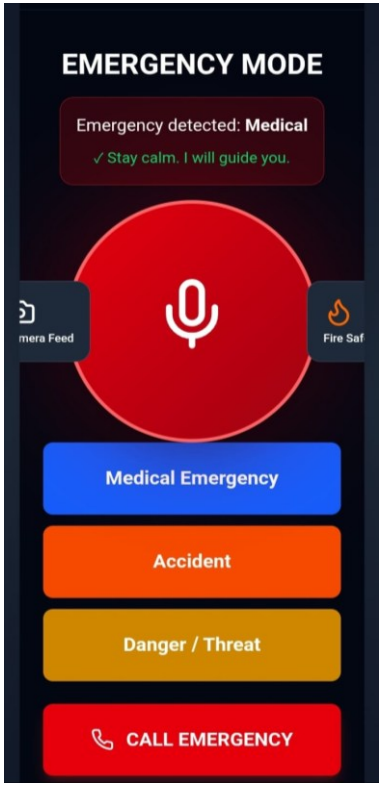
Data Privacy & Security

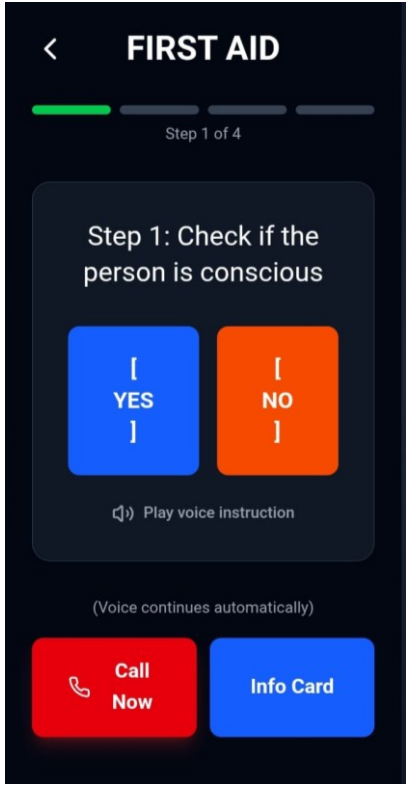
Process flow diagram or Use-case diagram – AI Emergency Assistant

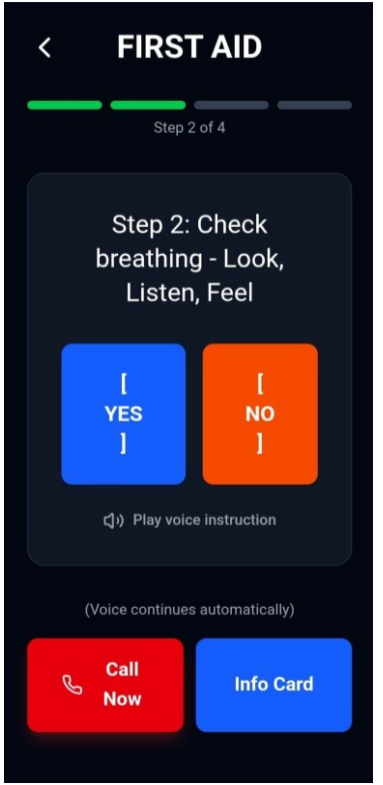


Wireframes/Mock diagrams of the proposed solution









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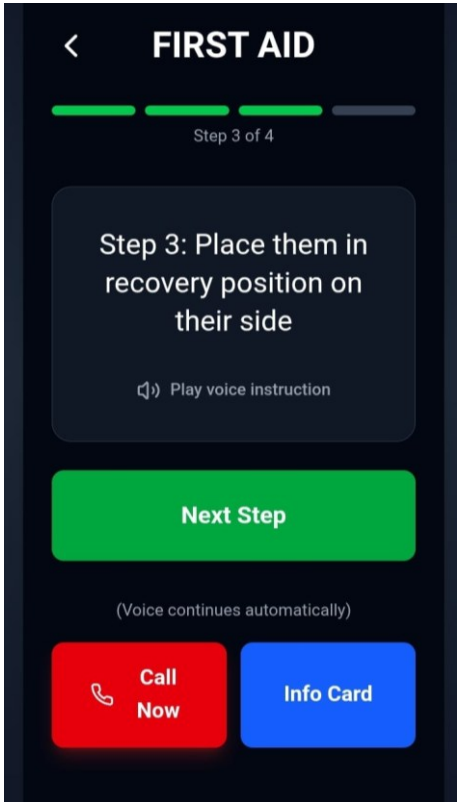

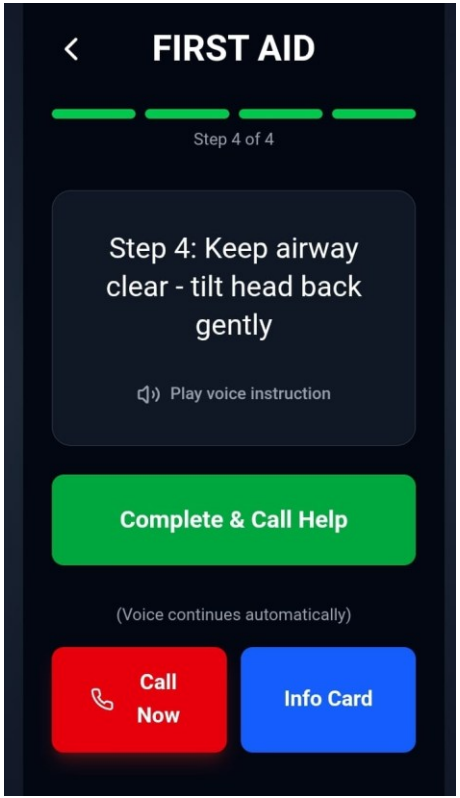

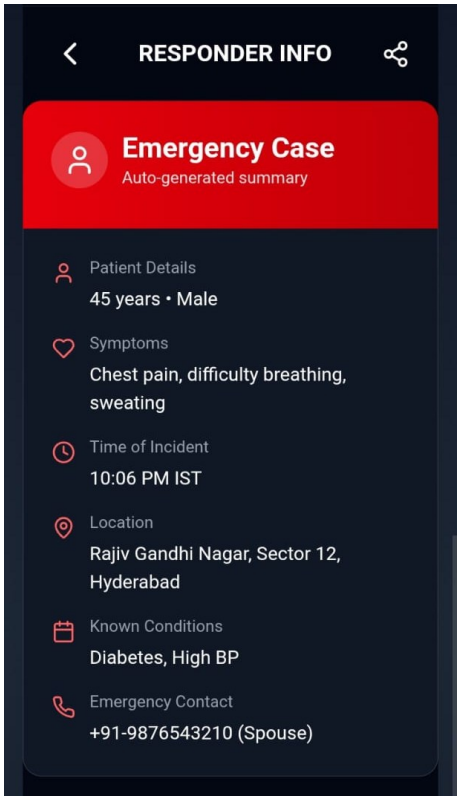

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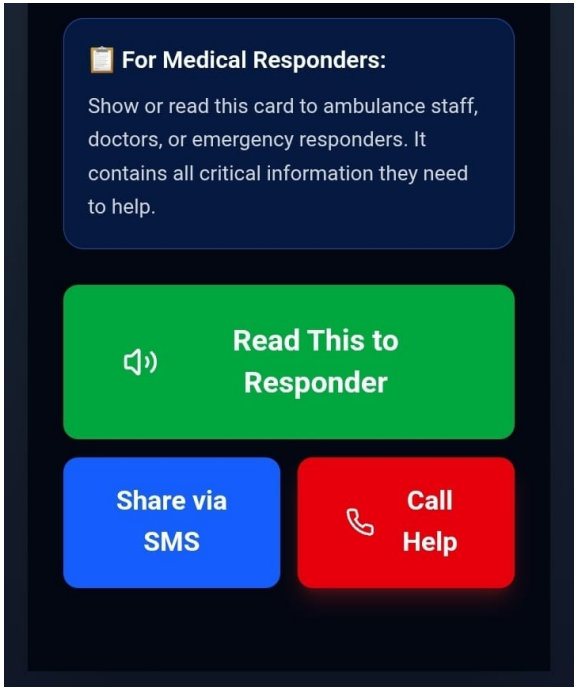
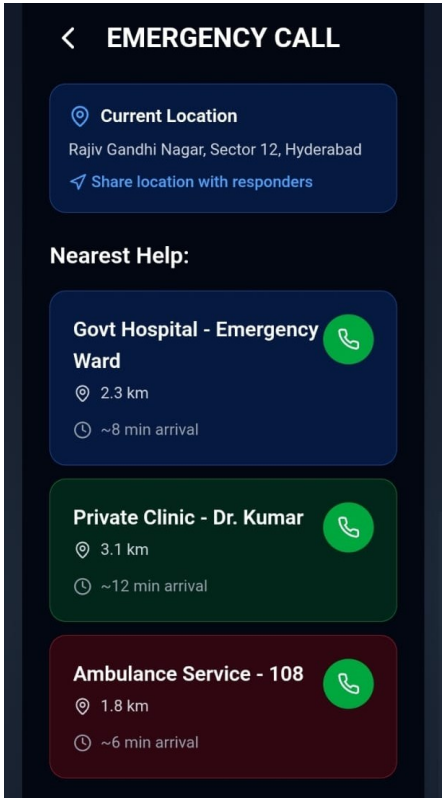
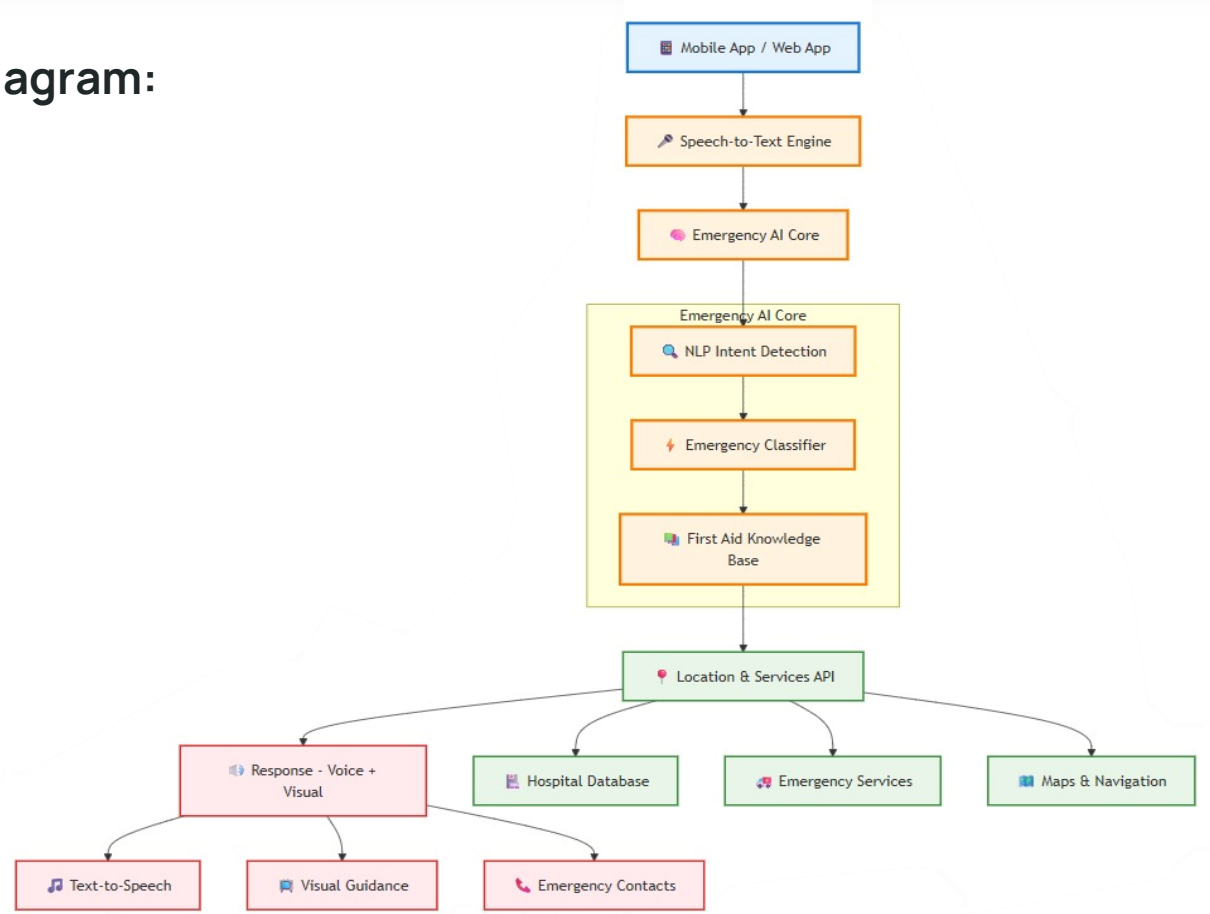
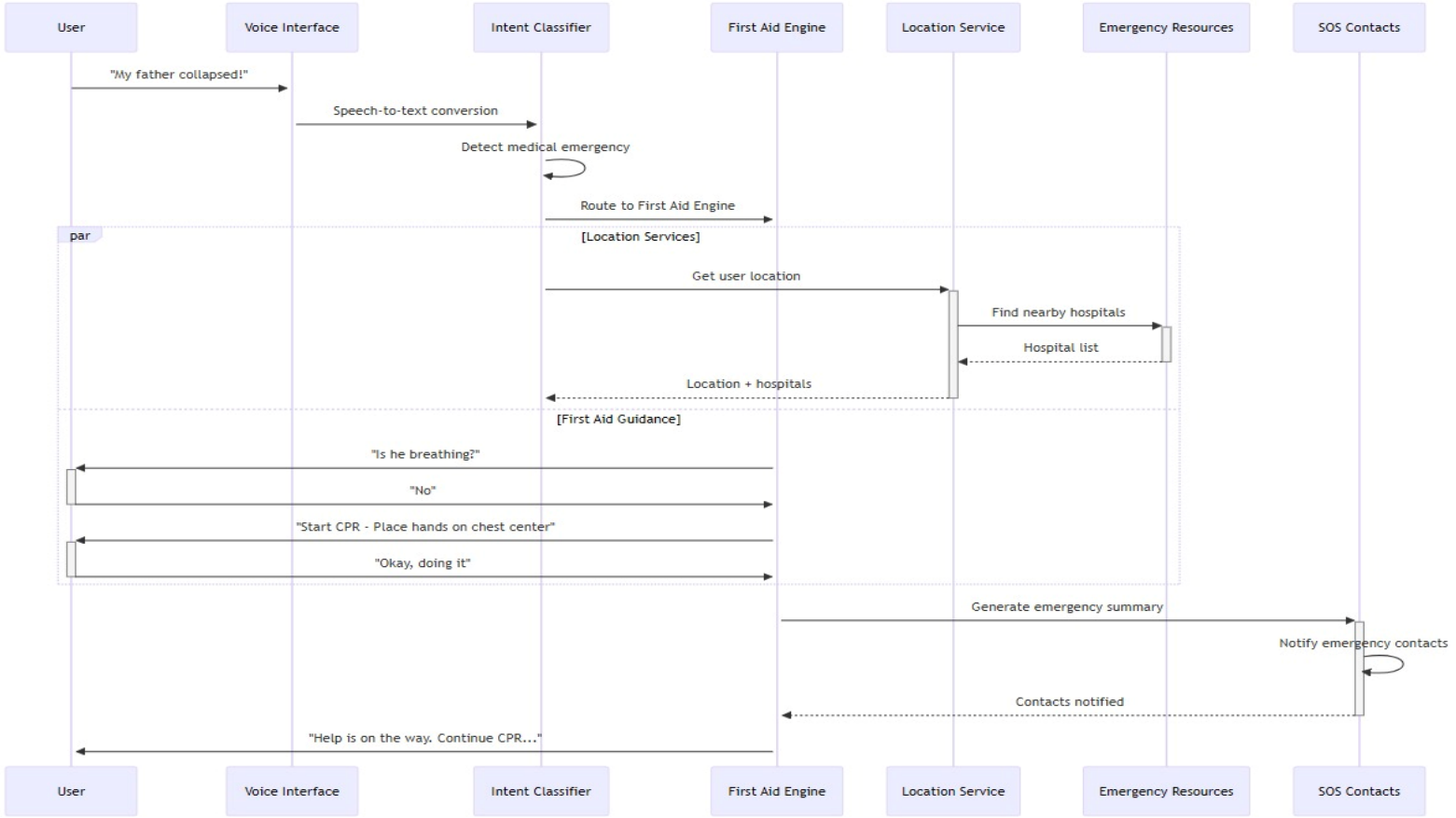




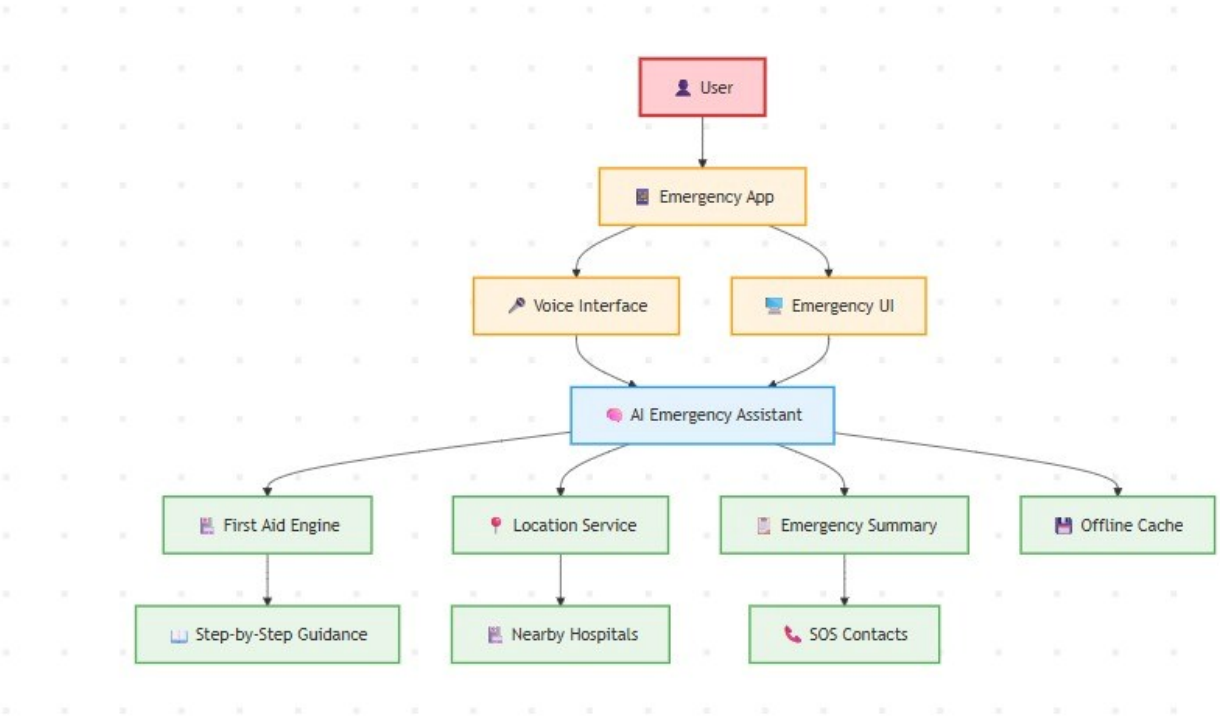
Architecture diagram:



Sequence diagram:



FlowChart diagram:



Target Users

- Rural & semi-urban populations
- Elderly caregivers
- Factory & construction workers
- Women & children in safety threats
- Disaster-prone communities

Example User Flow

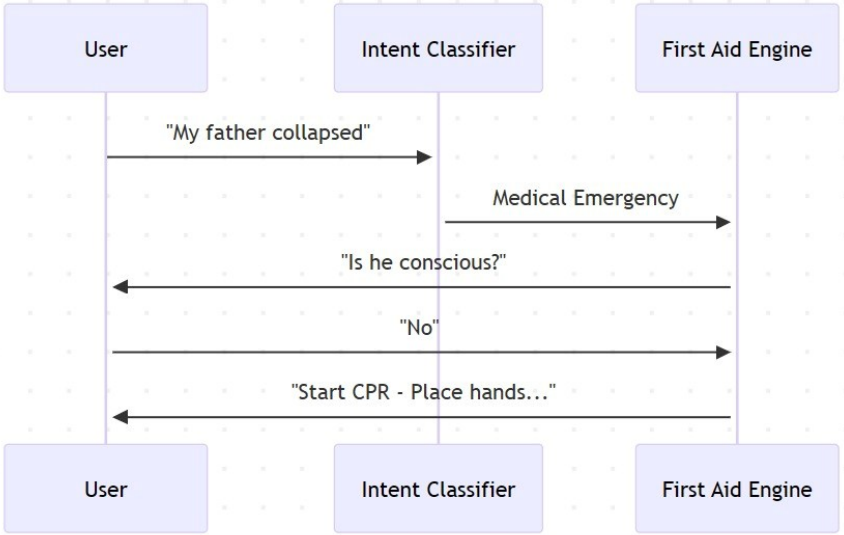
User: “My father collapsed”

AI Flow:

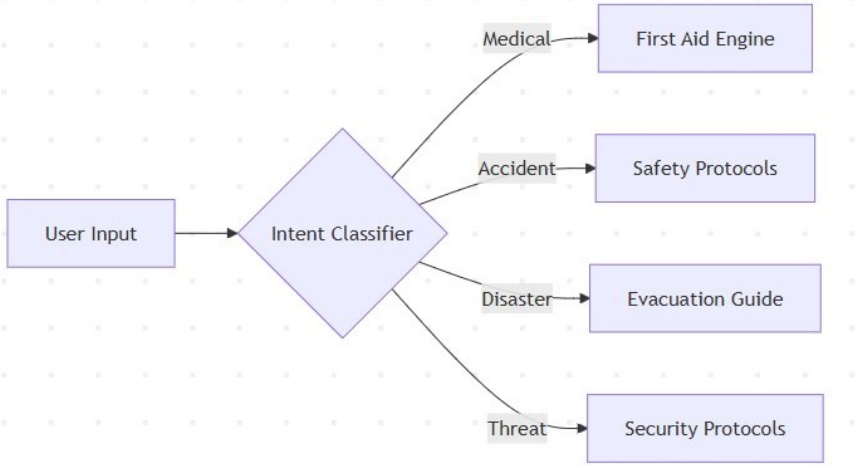
1. Detects medical emergency
2. Asks: “Is he conscious?”
3. Guides CPR or recovery position
4. Shows ambulance & hospital
5. Generates info card:

- Age
- Symptoms
- Time of incident

Sequence diagram:



Activity diagram:



Technologies to be used in the solution:

Frontend

1. Flutter / React Native
2. Android SDK
3. Accessibility UI Components

Backend

1. Python (Fast API)
2. Emergency Rules Engine
3. Vector DB for protocols

AI & ML

1. NLP intent classification
2. Speech-to-text (Google / Whisper)
3. Text-to-speech (Festival / Azure / Google)
4. Rule-based + ML hybrid for first aid logic

APIs

1. Maps & location services
2. Emergency contact database

Real-World Impact:

i. Saves lives in golden hour
ii. Helps rural & underserved communities
iii. Reduces panic-related mistakes
iv. Supports emergency responders with clear summaries
v. Scalable nationwide

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Thank You