Counselling Code: VBIT

VIGNANA BHARATHI Institute of Technology ®

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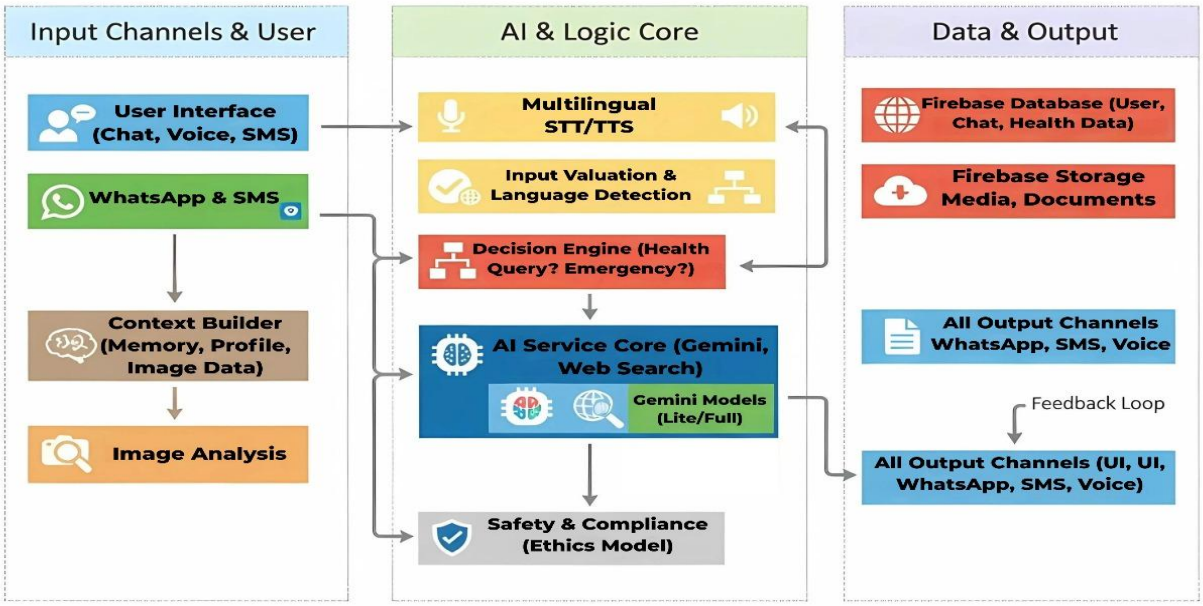
SMART INDIA HACKATHON 2025

INTERNAL HACKATHON SIH-2025

Team Name: TOMAN **SIH PS NO.: SIH25049**

- Problem Statement:
  "AI-Driven Public Health Chatbot for Disease Awareness"

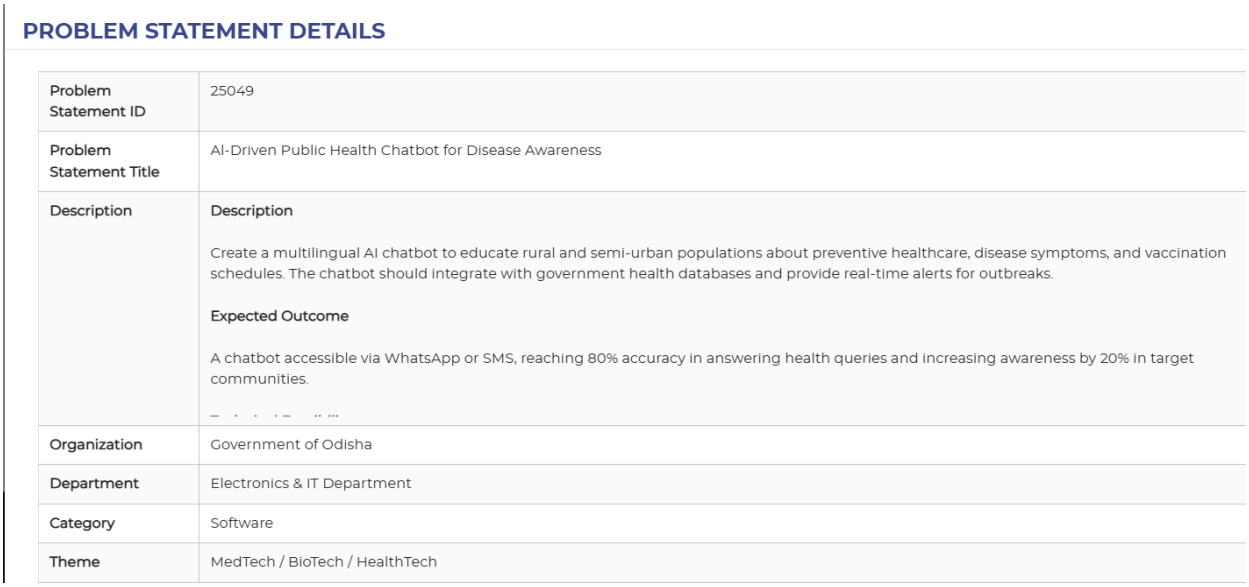
- Solution:
  - A multilingual chatbot available on WhatsApp and SMS, with voice support on WhatsApp, to make healthcare information accessible to everyone.
  - It explains preventive care, identifies emergency symptoms through rule checks, and gives families vaccine reminders based on a child's date of birth.
  - The system also shares real-time outbreak alerts and uses official health sources to provide trusted and updated guidance.
- Uniqueness:
  - Built on a custom AI stack with Gemini, WaveNet, Redis, and WhatsApp API for faster, multilingual, and voice-enabled interactions.
  - Every answer is linked to government and WHO guidelines, ensuring reliability and transparency.
  - Reaches users who are often left behind by traditional apps, through simple language, local dialects, and basic phone access.
- Architecture:



- Technology Stack:

Programming Languages	TypeScript, JavaScript
Frameworks	Pinecone
API's	Gemini2.5, WhatsApp Business API, Firebase APIs
Database	Firebase Real-Time Database

- Problem Statement Photo:



PROBLEM STATEMENT DETAILS

Problem Statement ID	25049
Problem Statement Title	AI-Driven Public Health Chatbot for Disease Awareness
Description	**Description** Create a multilingual AI chatbot to educate rural and semi-urban populations about preventive healthcare, disease symptoms, and vaccination schedules. The chatbot should integrate with government health databases and provide real-time alerts for outbreaks. **Expected Outcome** A chatbot accessible via WhatsApp or SMS, reaching 80% accuracy in answering health queries and increasing awareness by 20% in target communities.
Organization	Government of Odisha
Department	Electronics & IT Department
Category	Software
Theme	MedTech / BioTech / HealthTech

- Conclusion:

The proposed multilingual healthcare chatbot offers a practical approach to improving access to reliable health information. By combining WhatsApp, SMS, and voice features, it ensures inclusivity for both rural and urban populations, including low-literacy users. The system focuses on preventive healthcare by providing simple guidance on nutrition, hygiene, vaccination schedules, and early detection of disease symptoms.

Through timely reminders, outbreak alerts, and trusted information from official health sources, the chatbot supports communities in making informed decisions and reduces dependence on unreliable channels. Its custom technology stack makes it scalable, cost-effective, and adaptable for future needs such as chronic disease management.

Overall, the solution demonstrates how digital tools can bridge healthcare gaps, create awareness, and contribute to better public health outcomes.