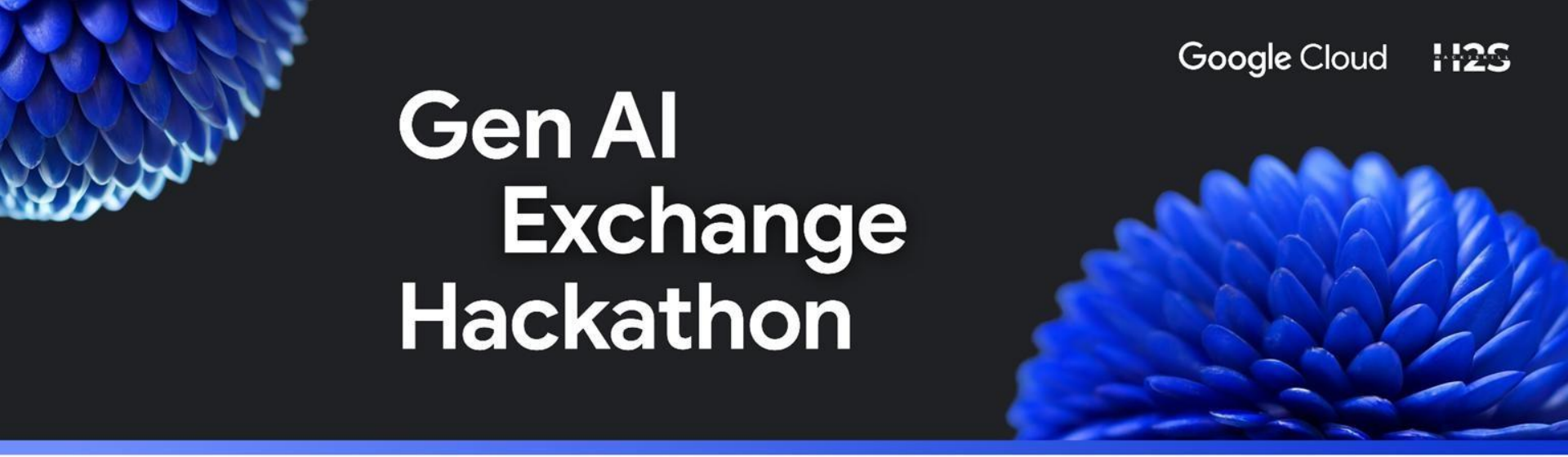


Team Name : SMART HUB

Team Leader Name : HEMANT.V.S

Problem Statement : Generative AI for Youth Mental Wellness

Our Mission

- Deliver immediate, accessible, and personalized mental well-being support
- Intelligent chatbot that tracks mood, stress, and anxiety levels
- Encourages positive habits through proactive tips & resources

The Prototype

- Generative AI-powered chatbot interface
- Beyond conversation → proactive emotional support
- Mood progress graphs & quick-action help (anxiety, sleep, confidence)
- Built-in safety with crisis helplines & emergency contacts

How is it Different?

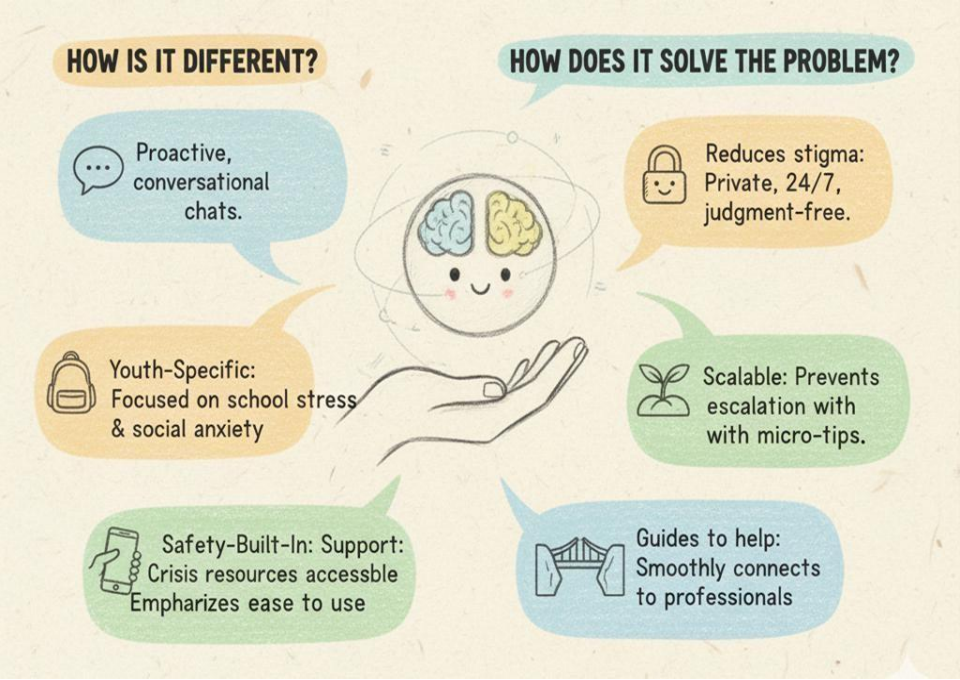
- AI Companion: Proactive, conversational chats
- Youth-Specific: Focused on school stress & social anxiety
- Hands-Free Support: emphasizes ease of use
- Safety-Built-In: Crisis resources always accessible

How Does it Solve the Problem?

- Reduces stigma: Private, 24/7, judgment-free
- Scalable: Instant help for thousands
- Early support: Prevents escalation with micro-tips
- Guides to help: Smoothly connects to professionals

USP (Unique Selling Proposition)

- Your pocket-sized AI mental wellness companion—proactive, personalized, and always connected to help



Quick-Access Wellness Guides

One-tap help for anxiety, stress, sleep

Voice & Text Input

Express feelings via typing or speaking

Generative AI Conversations

Empathetic and intelligent dialogue

Personalized Interaction

Tailored mood-based check-ins

Mood Progress Tracking

Graphs to track emotional journey

Self-Help Resources

Breathing & mindfulness techniques

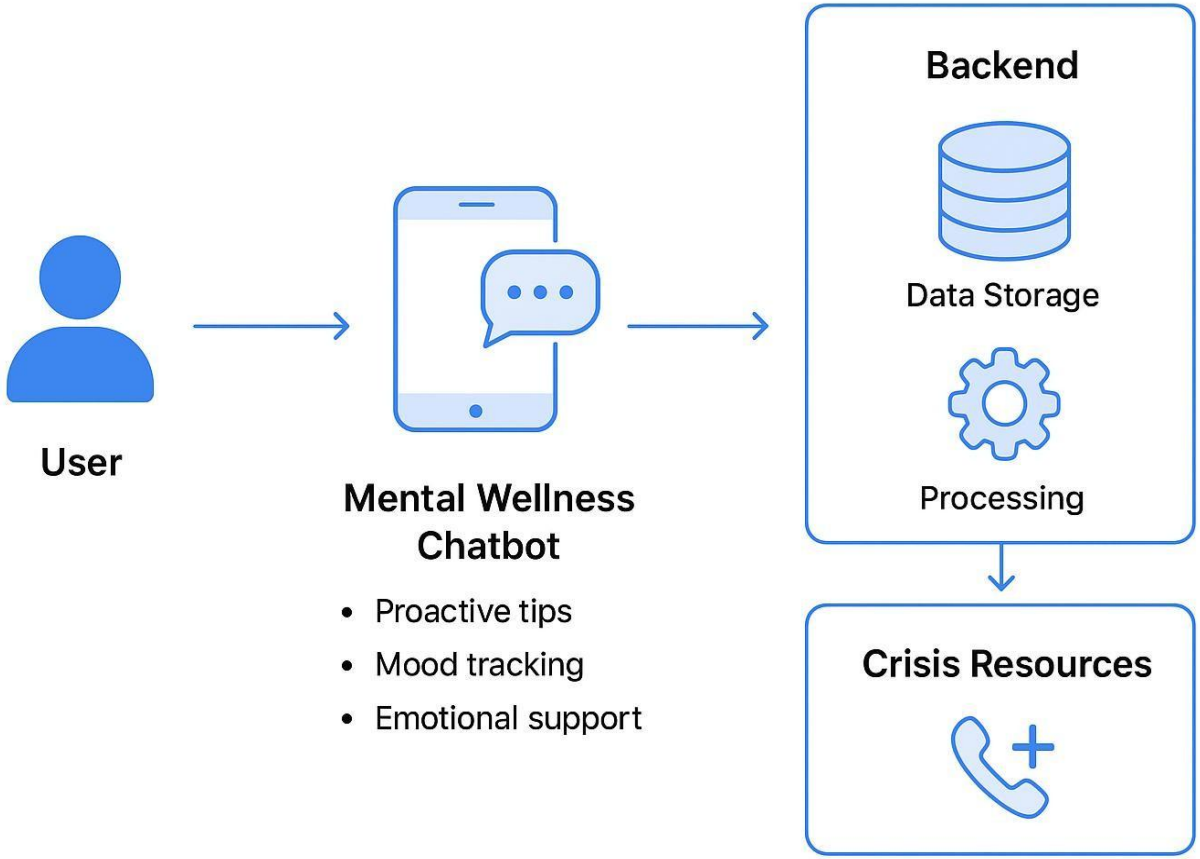
Crisis Support Integration

Instant helplines and emergency contacts

Secure Registration

Safe user details & preferences

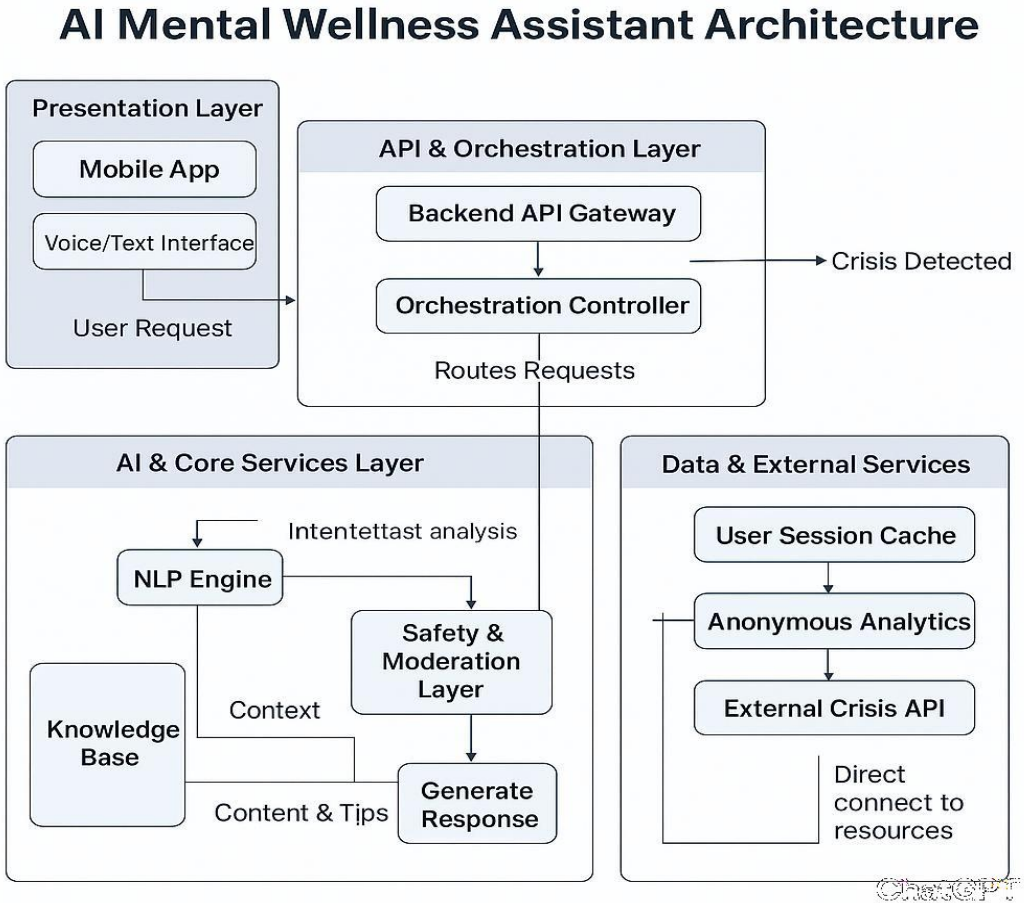
Process Diagram



Architecture diagram of the proposed solution

AI Wellness Assistant – Architecture

- **Presentation Layer** - App (chat + voice)
- **API Layer** - Routes & manages requests
- **AI Core** - NLP, Safety, Generative AI, Knowledge Base
- **Data & Services** - Session history, Analytics, Crisis support



Technologies in our solution

Frontend & UI: Streamlit, CSS3, HTML5

Backend & Logic: Python (pandas, base64, etc.)

Voice Processing: SpeechRecognition (speech-to-text), gTTS (text-to-speech)

AI Engine: LangChain (prompt & conversation management), Ollama (local LLM - Llama3)

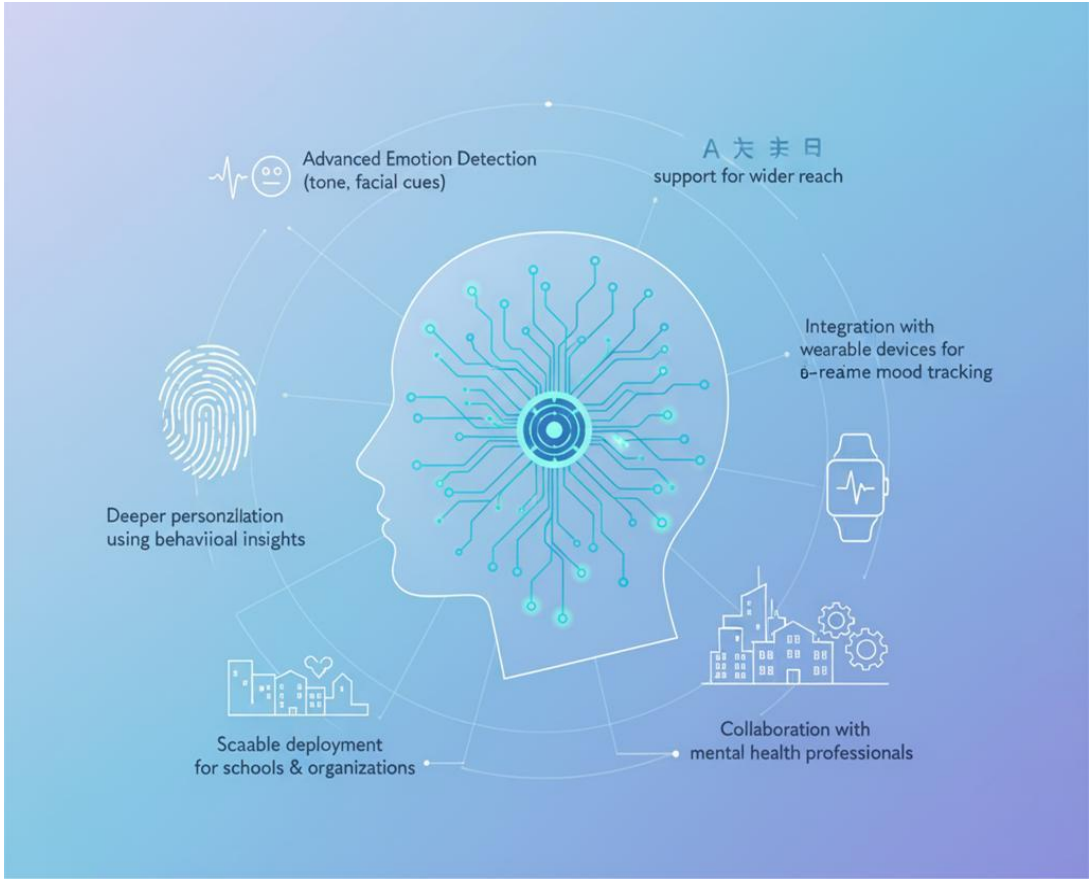
Visualization: Matplotlib (mood progress charts)

State Management: Streamlit Session State

Utilities: Regular Expressions, Custom Data Structures

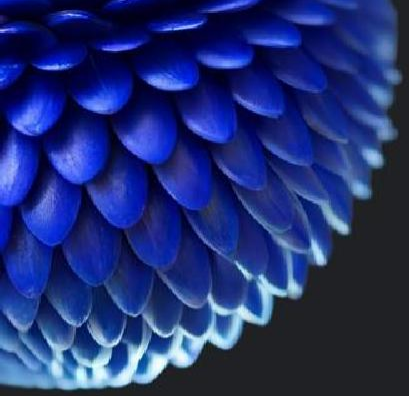
Future Scope

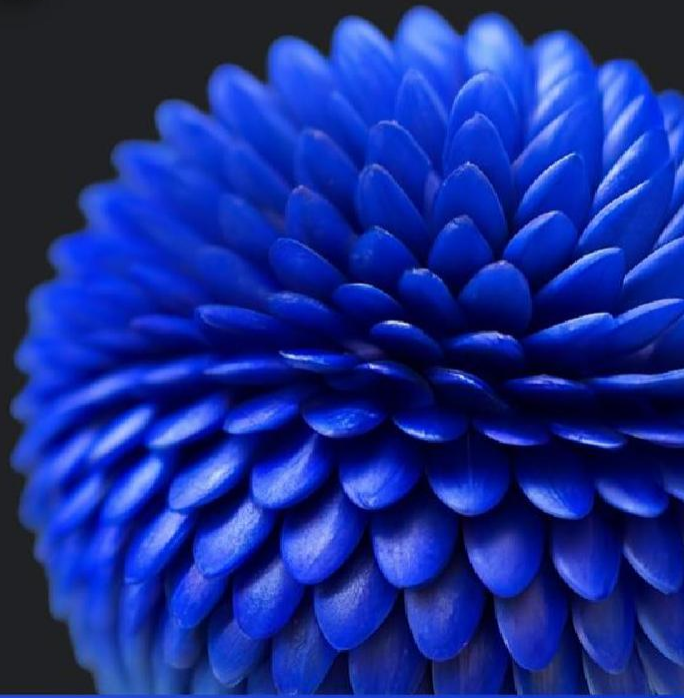
1. Advanced emotion detection (tone, facial cues)
2. Multilingual support for wider reach
3. Deeper personalization using behavioral insights
4. Integration with wearable devices for real-time mood tracking
5. Scalable deployment for schools & organizations
6. Collaboration with mental health professionals



Google Cloud H2S

Gen AI Exchange Hackathon





Thank you