Gen AI Exchange Hackathon

Team Name : AI Avengers

Team Leader Name : Lalit verma

Problem Statement : **Generative AI for Youth Mental Wellness**

Brief about the prototype:

• **The Problem:** Mental health remains a significant societal taboo in India, creating a formidable barrier for young adults and students.

• **Our Solution:** Mindful is an AI-powered, empathetic, and confidential mental wellness solution that helps youth overcome stigma and access support.

• **Prototype Overview:** We have a working prototype demonstrating the core features of our AI companion. It showcases a seamless conversation flow, a daily mood check-in, and a guided breathing exercise.

• **Live Demo:** We will now demonstrate the prototype's key functionalities to show how Mindful provides immediate support.

• **Visuals:** Use a simple, modern illustration of a phone screen with a friendly AI chatbot icon.

Opportunity should be able to explain the following:

- **How is it different?** Unlike other solutions, Mindful is designed specifically for the unique cultural context of Indian youth. It's a comprehensive platform, not just a simple Q&A bot.
- **How it solves the problem?** It addresses the core issues of **accessibility** and **stigma** by offering an anonymous, 24/7, and free-to-use platform.
- **USP of the proposed solution:**
- **Culturally Contextual:** It understands local pressures and can communicate in languages like Hinglish.
- **AI + Human Safety Net:** It acts as a smart triage system, seamlessly escalating to human help in a crisis.
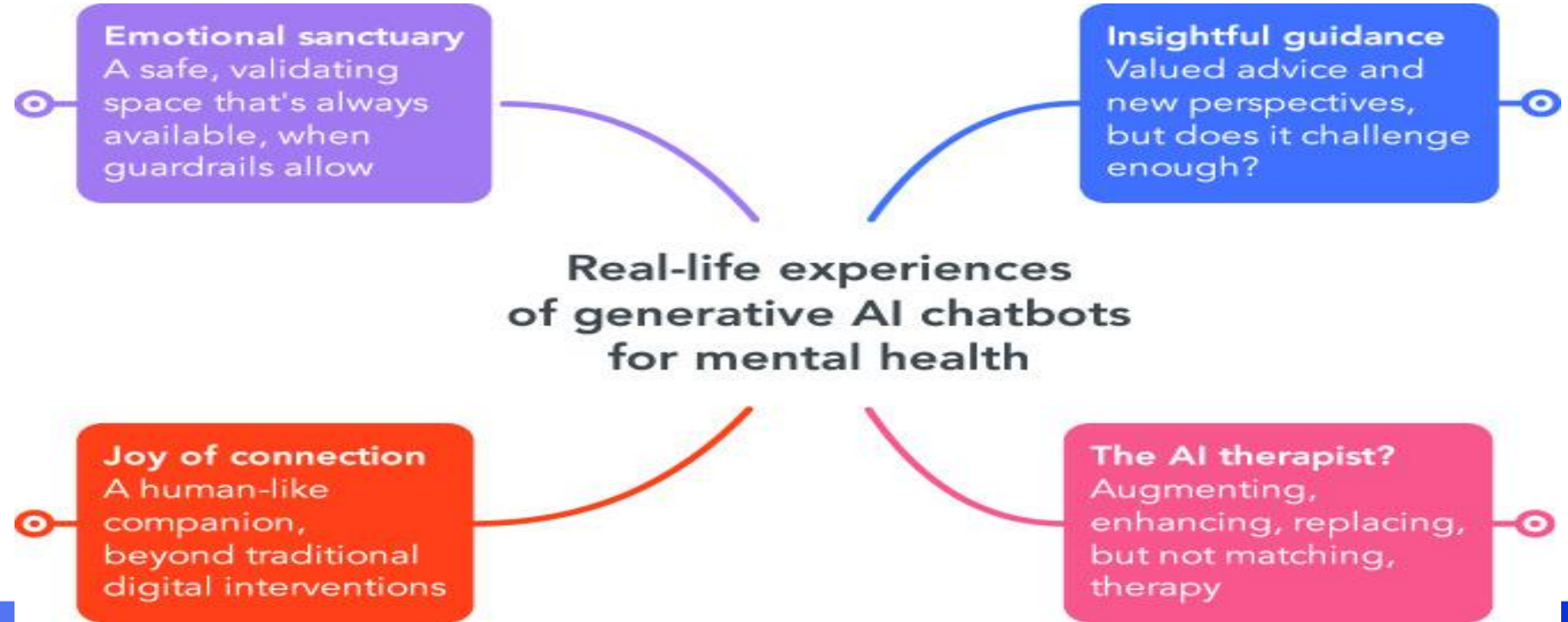
List of features offered by the solution :

- **Empathetic AI Chatbot:** An anonymous conversational partner for emotional support.
- **Daily Mood Check-in:** Personalized insights and coping tips based on mood logging.
- **Guided Modules:** Self-help exercises for breathing, journaling, and mindfulness.
- **Crisis Detection:** AI-powered system that identifies distress and connects users to professional helplines.
- **Low-Bandwidth Access:** Built for both web and mobile, with future plans for SMS/IVR.
- **Visuals:** Use a grid of five simple icons: a chat bubble, a calendar, a meditating person, a rescue cross, and a mobile phone icon.

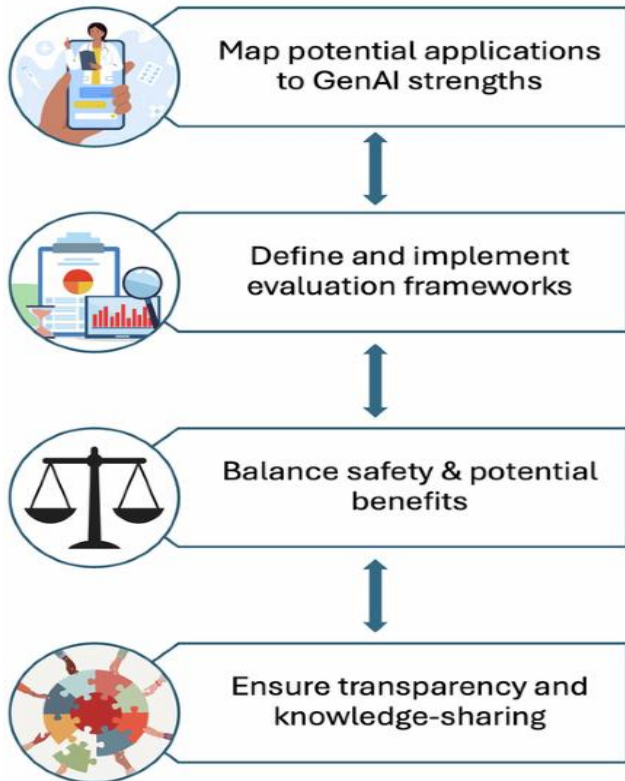# Process flow diagram or Use-case diagram :

•A simple diagram showing the user's interaction flow:

      1.User feels stressed/anxious (trigger event)

      2.User opens Mindful App

      3.Chatbot Interaction: User types a message → AI (Vertex AI) processes it → AI responds with empathy/tips.

      4.Coping: User engages in a guided module (e.g., breathing exercise).

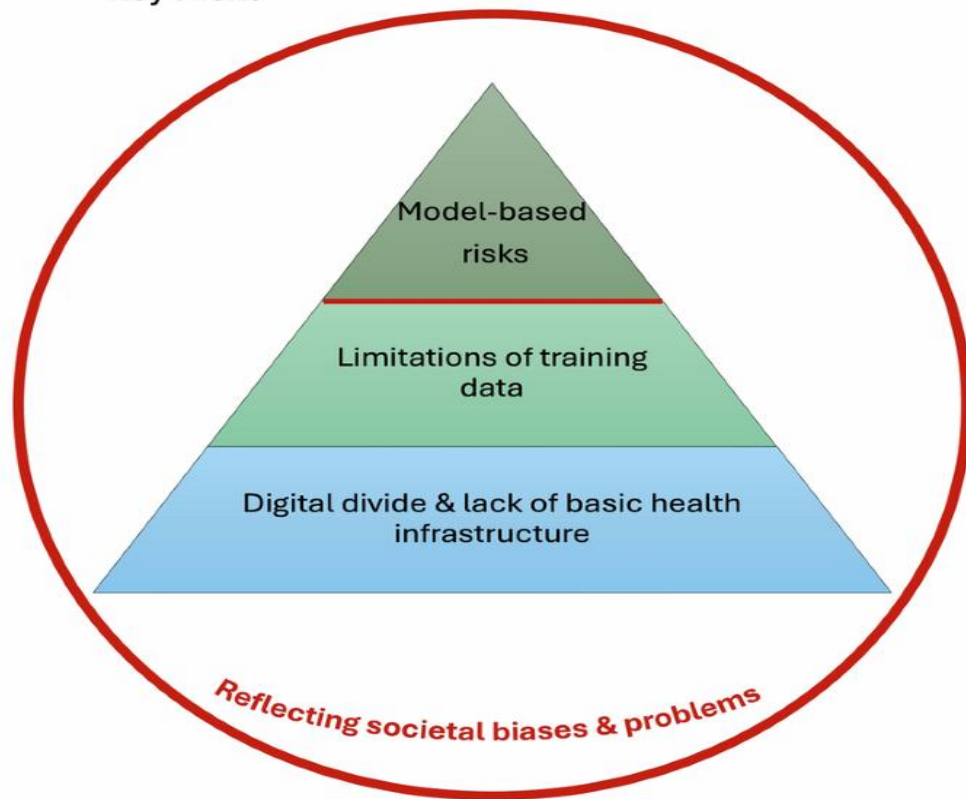   **5.Crisis Escalation:** If AI detects risk, it provides a direct, immediate link to a human helpline.

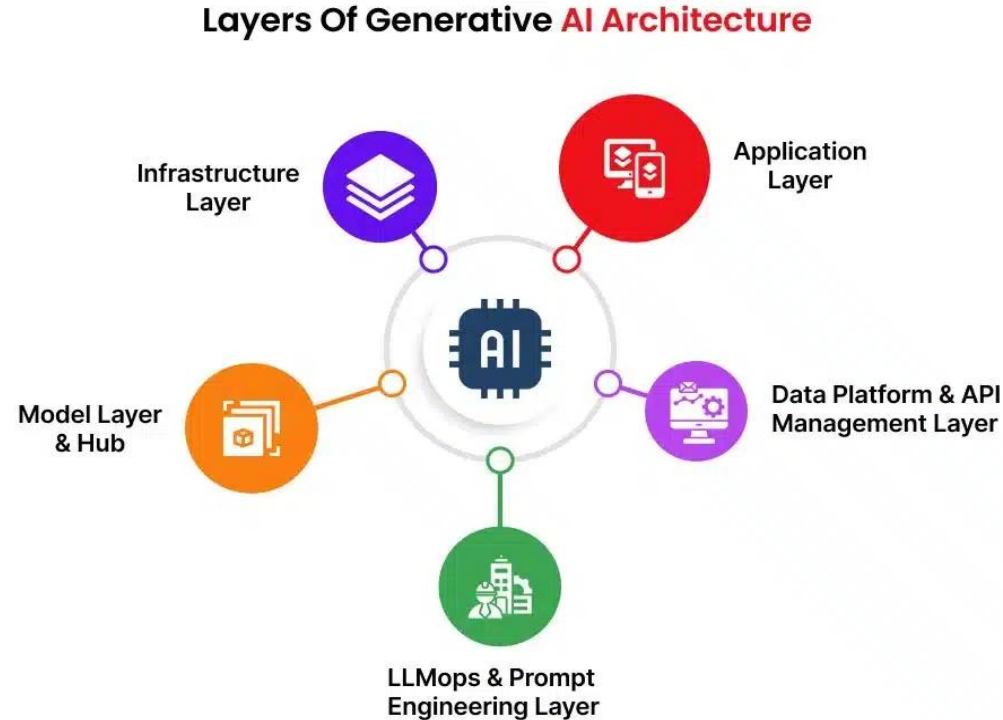# Wireframes/Mock diagrams of the proposed solution (optional) :

Architecture diagram of the proposed solution :

Layers Of Generative AI Architecture

- Infrastructure Layer
- Application Layer
- Model Layer & Hub
- Data Platform & API Management Layer
- LLMops & Prompt Engineering Layer

Technologies to be used in the solution:

- **Generative AI:** Google Cloud **Vertex AI**

- **Conversational AI:** Google Cloud **Dialogflow CX**

- **Backend: Firebase** (Firestore, Functions, Hosting, Authentication)

- **Data & Analytics:** Google **BigQuery**

- **Frontend:** React (Web), Flutter (Mobile)

Estimated implementation cost (optional):

•The solution can be built on Google Cloud's generous free tiers for low initial costs.

•The cost model is highly scalable, with fees only increasing based on usage (e.g., number of API calls, database reads/writes).

THE COST OF GENERATIVE AI

36 CENTS
Cost of a single ChatGPT query

$700,000
The cost per day for OpenAI to operate ChatGPT

X10
The cost to run an AI query compared to traditional search

6 BILLION
The annual cost for Alphabet to integrate AI into Google Search

$200 MILLION
Cost to develop an AI model from scratch

Add as per the requirements for the hackathon:

- **impact:** Mindful aims to create a significant social impact by making mental wellness accessible and destigmatized for millions.
- **Next Steps:** Full implementation of multilingual support and mobile apps.
- **Long-term Goal:** Partner with NGOs and educational institutions to integrate professional help.

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Thank you