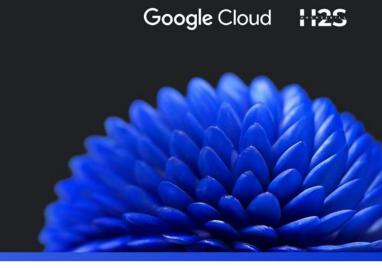


## Gen Al Exchange Hackathon



Team Name: Kanyarasiiii

Team Leader Name: MANIGANDLA SURYA CHARAN

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

## Brief about the prototype:

**MindfulSpace** is a comprehensive youth mental health awareness platform specifically designed for young people aged 13-25. This full-stack web application combines cutting-edge AI technology with empathetic design to create a supportive digital environment for mental health support.

#### **Key Features:**

- Al-Powered Chat System Integrated Google Gemini Pro API with youth-specialized prompts for personalized mental health support
- Smart Rate Limiting Intelligent usage tracking (50 requests/hour) with visual indicators and graceful fallback systems
- Youth-Focused Design Modern, accessible interface with dark/light themes and advanced CSS animations
- Mood Tracking & Analytics Local storage-based mood tracking with trend analysis and visual statistics
- Wellness Activities Interactive breathing exercises and mindfulness tools for stress management
- Mental Health Resources Curated library of crisis support and educational content for young people.

#### **Technical Implementation:**

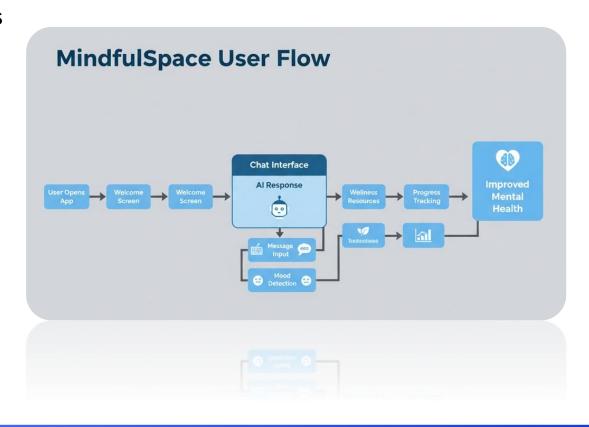
- Frontend: React 18 with responsive design, PWA support, and advanced UI components
- Backend: Express.js REST API with file-based JSON storage and comprehensive middleware
- Al Integration: Multi-tier response system (Gemini Pro → Server → Local fallbacks)
- Specialized Intelligence: Recognizes academic stress, social anxiety, family conflicts, and identity concerns

#### Impact & Innovation:

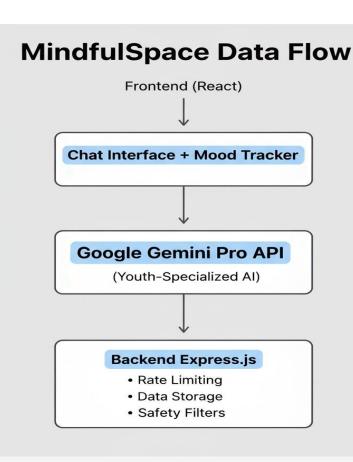
- Addresses critical gap in youth mental health technology
- · Promotes mental health awareness and reduces stigma
- Provides 24/7 accessible support with age-appropriate language
- Combines professional AI capabilities with peer-relatable communication

- How different from existing solutions?
- Youth-Specialized AI First platform with AI trained specifically for 13-25 age group mental health
- Smart Fallback System Multi-tier responses (Gemini Pro ightarrow Server ightarrow Local) ensuring 24/7 availability
- Transparent Rate Management Educational approach to API usage with visual tracking
- Accessibility-First Design Dark/light themes, mobile-responsive, reduced motion support
- **6** How will it solve the problem?
- Immediate Access No appointments, waiting lists, or barriers to entry
- Age-Appropriate Language Understands academic stress, peer pressure, identity struggles
- Stigma-Free Environment Private, anonymous support that normalizes mental health conversations
- Comprehensive Support Al chat + mood tracking + wellness tools + crisis resources in one platform
- **★** Unique Selling Proposition (USP)
- Youth Mental Health Specialization Only platform designed specifically for young people's mental health needs
- Sustainable Al Architecture Smart resource management with educational component about digital wellness
- Empathetic Technology Combines cutting-edge AI with human-centered emotional safety design
- Community Impact Promotes mental health literacy and creates a generation comfortable seeking support

## List of features

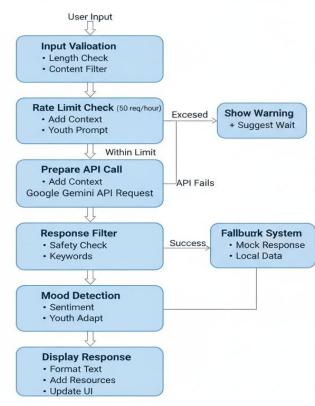


## List of features



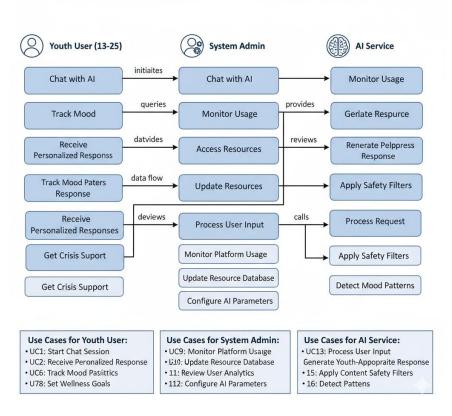
## List of features

#### MindfulSpace Chatbot Process Flow

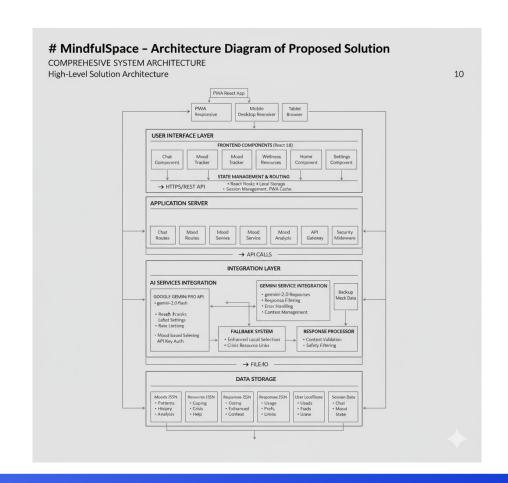


## Use-case diagram

#### MindfulSpace Use Case Diagram



## Architecture diagram



## Technologies to be used in the solution:

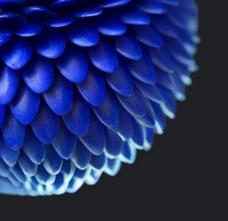
- ✓ Modern Tech Stack React 18, Node.js, Express.js
- Al Integration Google Gemini Pro with custom youth prompts
- Security Focus Multi-layer protection and rate limiting
- Mobile-First PWA with offline capabilities
- Scalable Architecture Cloud deployment ready
- Privacy-Focused Local storage, no data tracking
- Youth-Specialized Age-appropriate Al filtering

### **Future Technology Roadmap:**

Shows planning for scalability:

Phase 2: Database migration, Redis caching, WebSocket

**Phase 3**: Custom ML models, voice integration, native apps



# Gen Al Exchange Hackathon

Thank you