

## **Project Short Proposal (AI-Powered Virtual Therapist) Sakoon AI**

### **Team Members**

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### **Problem Statement**

Pakistan faces a critical shortage of trained mental-health professionals: with fewer than 0.5 psychiatrists and psychologists per 100,000 people against a rapidly growing population, the vast majority of citizens—especially in rural and low-literacy communities—lack timely access to quality counseling. Language diversity (English, Urdu, Punjabi ,Sindhi ,Pashto, Balochi), widespread stigma around mental health, and limited digital literacy further compound barriers to care. Traditional clinic-based models cannot scale to meet these needs, leaving millions underserved and at risk.

### **Proposed Solution: “Sakoon AI” Features**

#### **1. AI-Powered Virtual Therapist**

- A conversational agent that conducts assessments, offers coping strategies, and guides users through evidence-based exercises—available 24/7 without appointment.

#### **2. Multilingual AI with True-Empathy Voice Interface**

- Supports major regional languages and dialects via natural-sounding, empathetic text-to-speech and speech-to-text, reducing literacy barriers.

#### **3. AI Model Avatar Personalization**

- Customizable visual persona: users choose appearance, voice style, and even backstory to build rapport and increase engagement.

#### **4. Emotionally Aware Conversation**

- Real-time sentiment analysis and emotion detection allow the system to adapt its tone, pacing, and therapeutic approach to the user's current mood.

#### **5. Adaptive Lesson Pathways**

- Learning modules and psycho-education content dynamically adjust to each user's engagement patterns and progress, ensuring relevant pacing and challenge.

#### **6. Psycho-Education & Engagement Modules**

- Interactive lessons on mental-health topics (stress management, mindfulness, problem solving), gamified quizzes, and reflections to reinforce learning.

#### **7. Habit & Behavior Tracking**

- Daily mood check-ins, activity logs, and personalized reminders help users build healthy routines; data visualizations show progress over time.

#### **8. Cultural & Contextual Adaptivity**

- Content and examples grounded in local customs, social norms, and community realities—ensuring relevance and reducing cultural stigma.

By leveraging an AI-driven avatar and voice-first interface, Sakoon AI can bridge geographic, linguistic, and literacy divides—offering scalable, empathetic mental-health support to millions who currently have no access to a psychologist or counselor.

#### **Tech Stack**

- MERN Web
- React Native App
- Machine Learning
- Artificial Intelligence
- NLP