ASHA Amrita: Revolutionizing Mental Health Support for Adolescents

Mental health is a vital aspect of our overall well being, and adolescents are particularly vulnerable to mental health challenges. The pressure to perform well academically, socially, and personally can take a toll on their emotional resilience. To address this critical issue, ASHA Amrita has been designed to provide personalized support and awareness for mental health, specifically targeting adolescents.

The Power of AI-Powered Interactions

ASHA leverages AI-powered chatbots to engage users in empathetic conversations, providing personalized advice and support. The chatbot remembers previous session interactions, ensuring continuity and building trust with the user. This empathetic approach helps adolescents feel comfortable opening up about their challenges, allowing the chatbot to provide tailored guidance and resources.

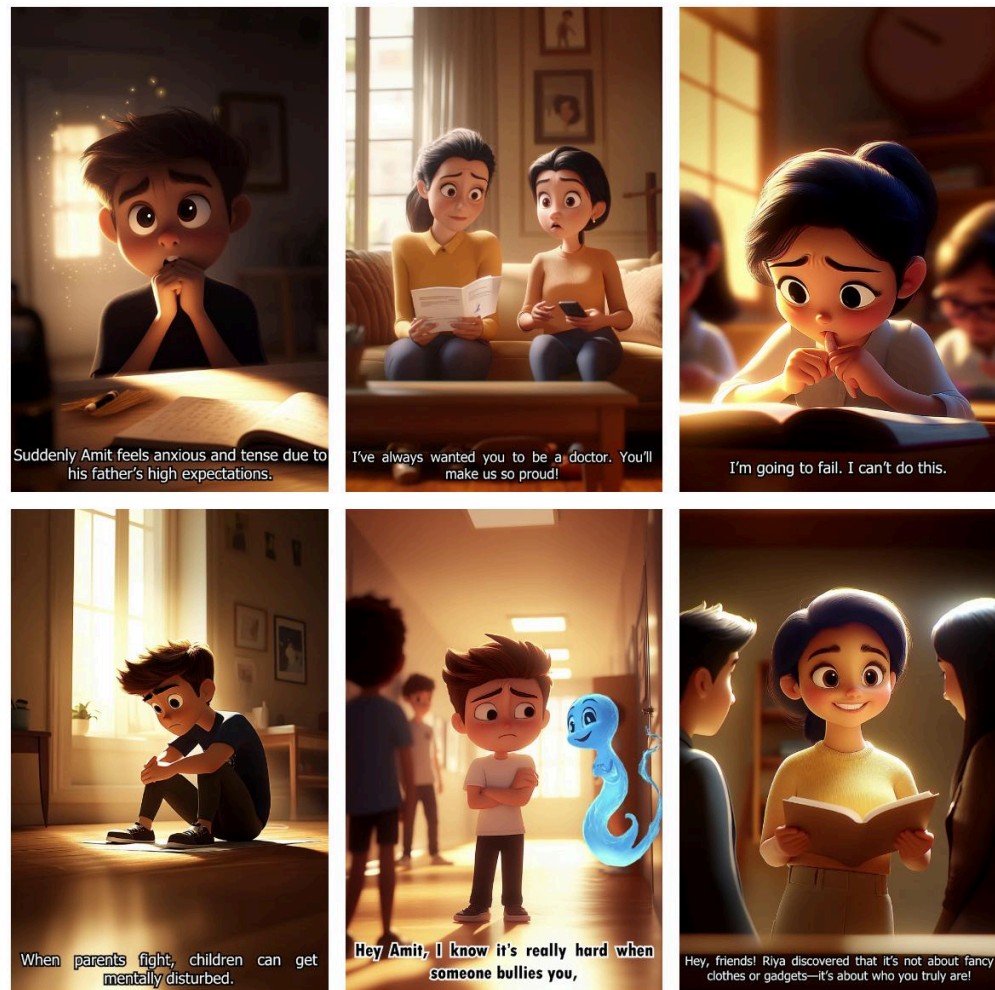# Interactive Reels for Mental Wellness

Figure 1: Reels addressing key issues like peer conflicts, exam stress, etc..

The process involves:

- **Conceptualization**: Identifying core mental health issues and crafting relatable stories.
- **Instructional Design**: Developing engaging, entertaining content with practical coping mechanisms.
- **Storyboarding**: Detailing visual and interactive components of each lesson.
- **AI Conversations**: The chatbot engages users empathetically, guiding them through emotional challenges and offering personalized advice.

In addition to AI-powered interactions, ASHA Amrita features interactive reels that provide personalized recommendations for mental wellness. These 60-second

videos cover a range of topics, from managing stress and anxiety to building emotional resilience. Available in multiple languages, including Hindi and English, these reels cater to a diverse audience, ensuring that adolescents from various backgrounds can access support.

Scene 1: (The Anxiety Moment)

- Voiceover of Asha (friendly): "*Hi it's me, Asha! During exams students often experience anxiety and stress, let us see Riya story*"
- Visual: A student is seated in a brightly lit classroom, staring nervously at a test paper. The clock ticks loudly, each second adding to the pressure.
- Visual: The student looks visibly stressed, sweating, tapping their pencil nervously, and biting their nails.
- Close-up: Zoom in on the student's anxious face—eyes wide, brow furrowed, showing panic and fear.
- Voiceover of girl (Internal Thought): "*I'm going to fail. I can't do this*."

Scene 2: (Asha Appears: The Calming Guide)

- Visual: The tension in the air suddenly shifts as calming music begins to play. A glowing Asha appears beside the student, floating gently in a mist of soothing light.
- Visuals: The clock sound fades away as the Asha waves their hand, bringing a sense of calm to the scene.

Breathing exercises:

Asha (Gently) : "*Hey, take a deep breath.*"
  - The student follows Asha's advice, breathing slowly, and visibly begins to relax. There is a light ball going up and down his chest imitating the flow of breath.

Figure 2: Reels Script Sample

This figure showcases a sample script for ASHA Amrita's interactive reels, demonstrating the engaging and interactive nature of the content.

Interactive Avatar Chatbot

ASHA's AI chatbot acts as a supportive "genie," guiding stressed students through video content that provides calming and educational advice. The platform is designed to:

- Provide Personalized Wellness Journeys: Tailoring mental health advice based on the user's emotional state.
- Track User Progress: By recalling past conversations, the chatbot creates a sense of continuity and empathy in every interaction.

AI Interaction Functionalities

ASHA's AI offers more than just conversation; it is designed to be empathetic, remembering past interactions to offer continuous support. When users revisit the platform, the chatbot recalls previous sessions, providing advice based on their emotional journey. The AI adapts to their changing mental state, offering personalized coping mechanisms and encouragement through dynamic video content.

Platform Components

| Component	Description
AI-Assisted Counseling	Guides users through identifying their stress and offers coping mechanisms.
Full-Stack Architecture	Robust backend with API calls, secure user data storage, and video recommendation services.
Stress Identification	Uses a stress ontology to categorize and assess stress levels across various domains.

Table 1: Platform Components

## Case Studies: Personalized Support for Real-Life Challenges

ASHA Amrita's AI chatbot has been successful in providing personalized support and guidance to adolescents. Here are three case studies that demonstrate the effectiveness of the platform.

- **Case Study 1: Peer Issues**
  Example: A student struggles with peer conflicts. ASHA recalls previous discussions and offers guidance on how to address the issue calmly, suggesting real-life steps and reinforcing the student's emotional growth.
- **Case Study 2: Coping with Exam Stress**
  Example: A user feels anxious before exams. ASHA offers coping strategies, such as breaking study sessions into chunks and using relaxation techniques. It provides a calming video to ease anxiety.

Case Study 1: Addressing Peer Issues
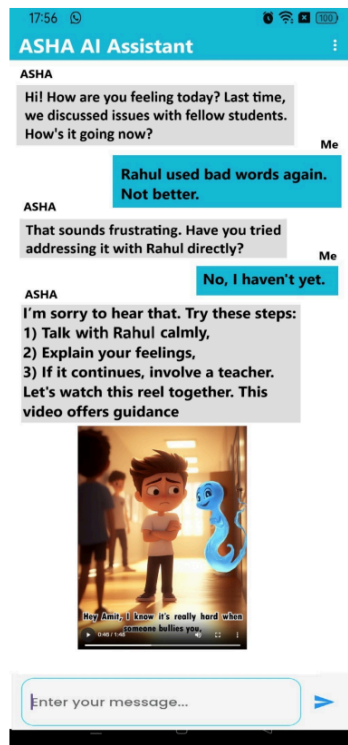
Case Study 2: Coping with Exam Stress
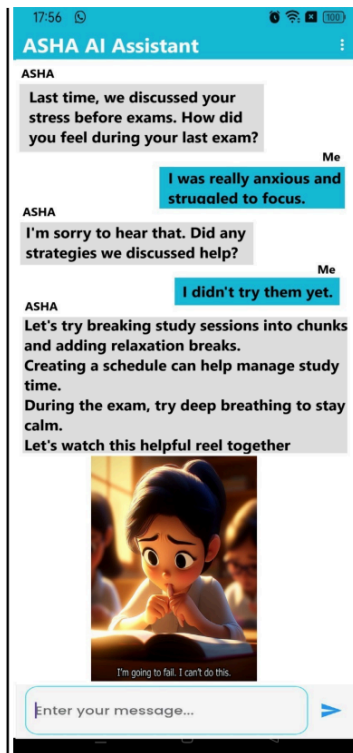
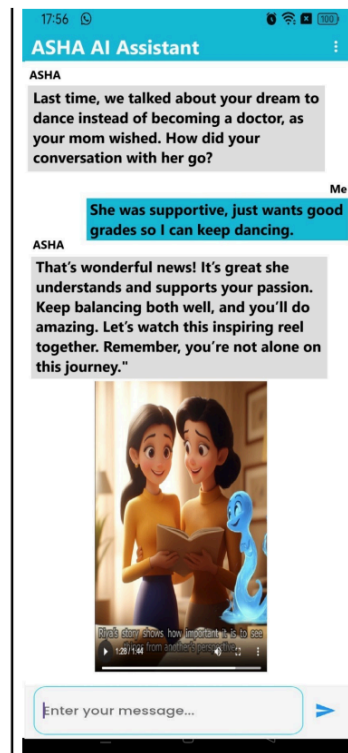**Case Study 3: Supporting Individual Aspirations**

Figure 3: Case Study Addressing Peer Issues, Coping with Exam Stress, Supporting Individual Aspirations

- **Case Study 3: Supporting Individual Aspirations**
  Example: A student shares their dream of becoming a dancer, despite parental pressure to pursue medicine. ASHA encourages the student's aspirations, balancing their academic and personal goals, and offers motivational content.

Empowering Adolescents

ASHA Amrita's AI-powered chatbot not only offers personalized mental health support but also empowers students with tools to manage stress, navigate peer relationships, and pursue their passions. Through interactive reels, empathetic conversations, and tailored coping strategies, the platform offers a compassionate path to mental wellness for adolescents in India.

By addressing the unique challenges faced by this demographic, ASHA Amrita aims to promote emotional resilience, positivity, and hope. As the mental health landscape continues to evolve, ASHA Amrita is poised to make a meaningful impact in the lives of adolescents.