DreamHack

"Uncover the echoes of your mind"

-Utkarsh Dubey

-Rajsekhar Singh

-Zenith Rastogi

-Snehansh Jena

Problem Statement

- A major percentage of India's population, especially Gen-Z, is experiencing a lot of emotional stress and despair, leading to an increasing need for psychologists and mental health experts.
- A psychologist's primary role is to compile and organize your thoughts that helps dismiss mental block.
- This app aims to visually log your dreams, provide AI-powered interpretations through Jungian analysis, and offer visuals through AI powered image generation models.

Solution

- Our proposed solution is DreamHack, a revolutionary mobile and web application designed to serve as a smart journal and personal interpreter for your subconscious mind. It transforms the fleeting, often confusing experience of dreaming into a clear, insightful, and visually engaging opportunity for self-discovery.

How DreamHack Addresses the Problem –

- DreamHack directly addresses the widespread problems of high stress and the lack of accessible tools for genuine self-exploration.
- It Translates the Subconscious :- By transforming abstract dream narratives into structured, understandable analysis, DreamHack acts as a personal translator for the mind. It addresses the core problem of our disconnect from our inner selves, turning a source of confusion into a source of clarity and insight.

- It Reframes Anxiety into Growth :- Many people experience stress from confusing or disturbing dreams.
- DreamHack reframes this anxiety by presenting it as an opportunity for understanding. The "Dreamscape" feature is critical here, as it turns even a difficult dream into a beautiful and intriguing piece of art, promoting positive engagement rather than fear.
- It Democratizes Self-Exploration :- DreamHack breaks down the primary barriers to traditional therapy—cost, scheduling, and social stigma. It provides an immediate, private, and affordable first step for anyone curious about their mental and emotional world, empowering them to proactively manage their well-being.

.

Technology & Approach

- Programming Languages:

1. Python(For the AI/ML backend)
2. JavaScript(For the user-facing web and mobile applications)

- Frameworks:

1. Frontend: React Native (for iOS/Android) and Next.js (for a web version).
2. Backend: Flask (Python) to serve the AI models and manage APIs.

- AI Models:

1. Interpretation: A fine-tuned Large Language model trained on a corpus of Jungian psychology texts, mythological stories, and symbol encyclopaedias.
2. Visuals: A generative image model to create the dreamscapes.

Key Functionalities

- Main Features

1. Simple Text Input: A basic form to enter a dream.
2. Instant AI Analysis: Core feature to interpret the dream's meaning.
3. AI-Generated Dream Art: Creates a unique visual for the dream.
4. Basic Results Display: Shows the text and image results.

- Additional Features (Full App)

1. User Accounts & Dream History: Save and review past dreams securely.
2. Advanced Pattern Tracking: A dashboard to find recurring symbols and themes.
3. Voice Logging & Emotion Tagging: More ways to input and categorize dreams.
4. Personalized AI: An AI that learns a user's unique symbolism over time.

Additional information

- System Architecture Flow :-

1. User's Browser (Frontend): The starting point where the user interacts with the app.

2. Streamlit Web App (Backend): The browser connects to our central application server.

3. Backend Processing: The Streamlit app sends requests out to two external services:

4. It sends the dream text to the OpenAI API for the Jungian analysis.

5. It sends a prompt to the Stable Diffusion API for the "Dreamscape" image generation

- User Journey Flowchart :-

1. Start: A user opens the DreamHack web page.

2. Input: The user types their dream into the provided text box.

3. Action: The user clicks the "Analyze" button.

4. Process: The app's backend sends the text to the AI for interpretation and image generation.

5. Output: The app's interface updates to display the returned text analysis and the visual "Dreamscape" image.

6. End: The user's journey is complete.