

# DreamBalance

## AI-Powered Dream Journaling and Mental State Awareness Platform

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Github: [https://github.com/JANE7J/DreamBalance\\_v2](https://github.com/JANE7J/DreamBalance_v2)





# PROBLEM STATEMENT

Mental well-being is often ignored until stress and emotional imbalance start affecting daily life. Many students and young adults struggle to understand their mental state and stress patterns. Although dreams reflect subconscious emotions, they are rarely recorded or analyzed in a structured manner. Existing mental wellness tools often feel clinical or complex, creating a need for a simple, private, and reflective solution.



# MOTIVATION & SDG ALIGNMENT

- Increasing stress and emotional challenges among students and young adults
- Importance of early self-awareness in maintaining emotional balance
- Dreams act as indicators of subconscious mental states
- Aligned with SDG 3: Good Health & Well-being

# PROPOSED SOLUTION

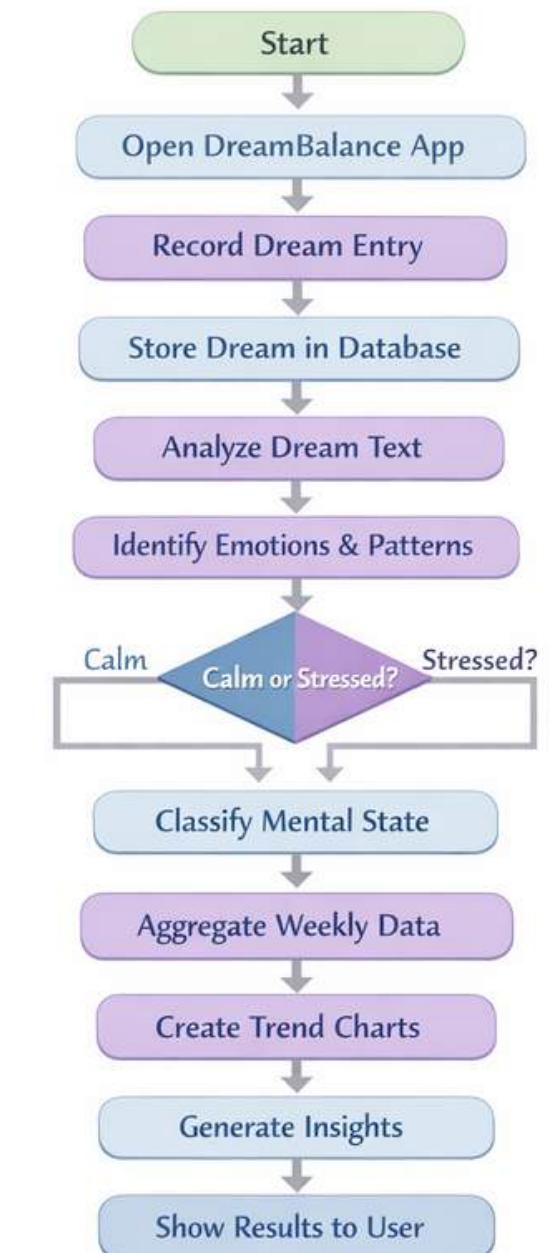
DreamBalance is a web-based AI application that helps users understand their mental state through dream journaling. Users can record their dreams regularly, and AI analyzes the entries to identify emotional patterns. The platform focuses on self-awareness and reflection rather than diagnosis, making mental wellness accessible and stigma-free.



# HOW THE SYSTEM WORKS

1. User records a dream entry
2. AI processes and analyzes the text
3. Emotional tone is identified
4. Mental state is classified as Calm or Stressed
5. Weekly trends are generated
6. AI insights and charts are displayed

## How the DreamBalance System Works



# KEY FEATURES

- Dream journaling interface for regular entries
- AI-based emotional and mental state analysis
- Calm vs stressed mental state classification
- Weekly trend visualization using charts
- AI-generated insights for self-reflection



# APPLICATION SCREENSHOTS

The home screen of the DreamBalance app features a dark-themed interface. On the left, a sidebar includes a "DreamBalance" logo, navigation tabs for "Journal" (which is selected) and "Analytics", and a user profile section with a blue circular icon containing a white letter "W" and the name "wendy". Below the profile is a "Logout" button. The main content area is titled "Your Dream Journal" with the subtitle "Track and reflect on your subconscious". It features a purple "Log New Entry" button. A calendar for January 2026 is centered, with the date "January 12" highlighted in purple. To the right of the calendar, a list of dream entries is shown, each with a title, a small description, and a truncated dream log. The first entry is "Body felt light" (Refreshed), followed by "Genuine happy" (Happy) and "Cute" (Peaceful).

A modal window titled "Log Dream for" is displayed over the application. It has a "Dream Title" field containing "Body felt light". Below it is a "Describe your dream" text area with the following content:

I felt like I had finally taken a deep, satisfying breath. My mind was clear, my body felt light, and everything seemed gently reset. I woke up feeling refreshed and ready for the day.

Below the text area is a question "How did you feel after waking up?" followed by a grid of six mood buttons. The "Refreshed" button is highlighted in purple, while the others—"Happy", "Peaceful", "Tired", "Anxious", "Confused", "Sad", "Scared", and "Energized"—are in a standard grey. At the bottom of the modal are "Cancel" and "Update Dream" buttons.

# APPLICATION SCREENSHOTS

DreamBalance

Journal

Analytics

## Analytics Overview

Insights generated from your logged dreams

**AI Insight**  
Your emotional patterns are mixed this month.

- Maintain a balanced routine
- Monitor emotional changes
- Ensure regular sleep hours

**Mood Distribution**  
Based on all logged dreams

Mood State	Percentage
Calm State	52%
Stress State	48%

w wendy

**21**  
INDEX

**Mental Sustainability Index**  
Measures how consistently you engage in dream journaling and self-reflection over time.

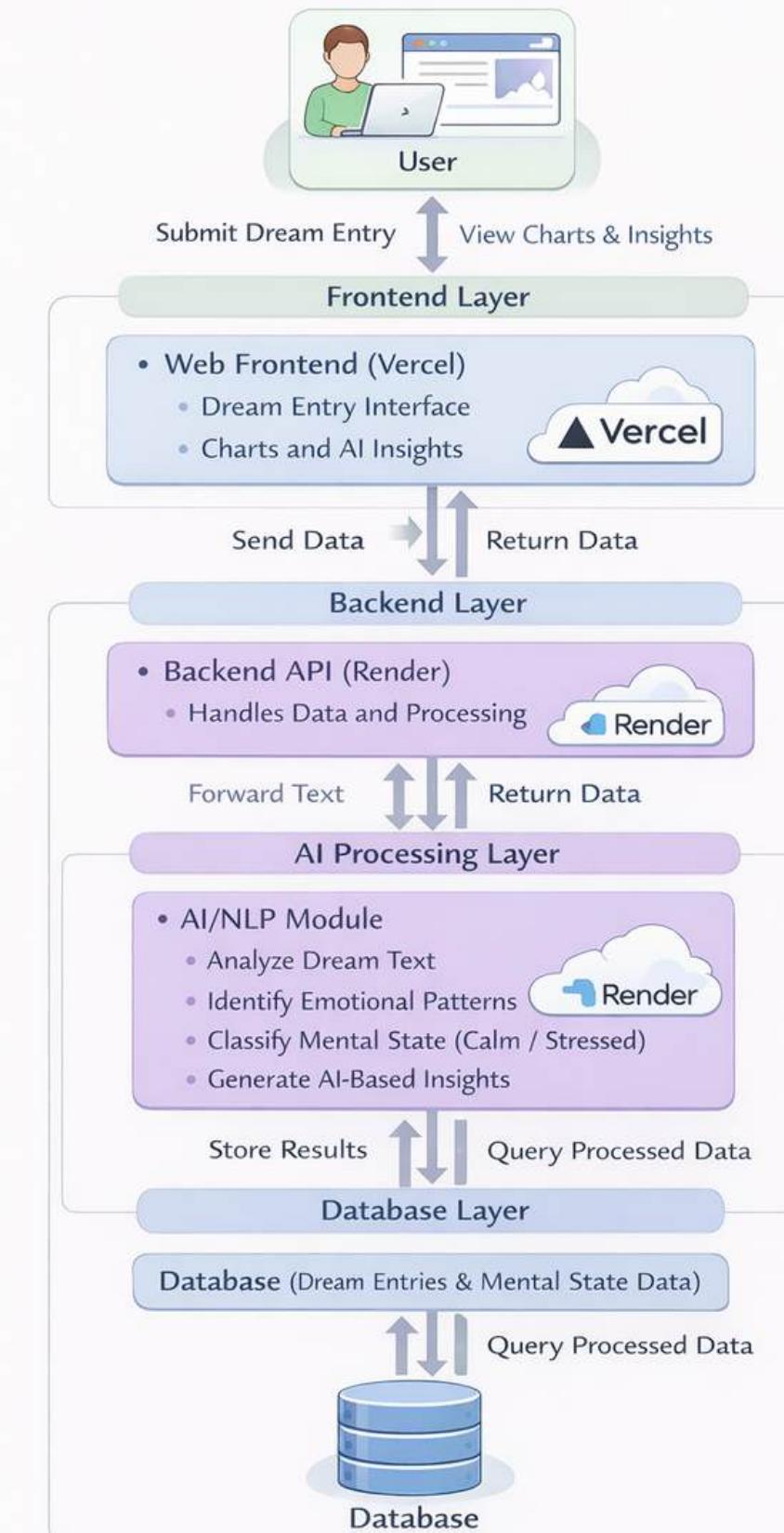
**Emotion Frequency**  
Dreams logged in the last 7 days

Emotion	Frequency
Anxious	2.0
Confused	2.0
Energized	1.0
Peaceful	3.0
Refreshed	5.0
Sad	2.0
Scared	2.0

# TECHNOLOGY STACK & DEPLOYMENT

- **Frontend:** Web-based user interface for dream entry and visualization
- **Backend:** Handles data storage, processing, and AI inference
- **AI Component:** Text analysis for emotional pattern detection
- **Deployment:**
  - Frontend hosted on Vercel
  - Backend hosted on Render

Technology Stack & Deployment – DreamBalance





## OUTCOMES & EVALUATION METRICS

- Number of dream entries recorded
- Weekly mental state summaries generated
- User engagement with charts and AI insights
- Improved mental self-awareness through reflective usage

These metrics help evaluate the effectiveness of the platform in promoting mental awareness.

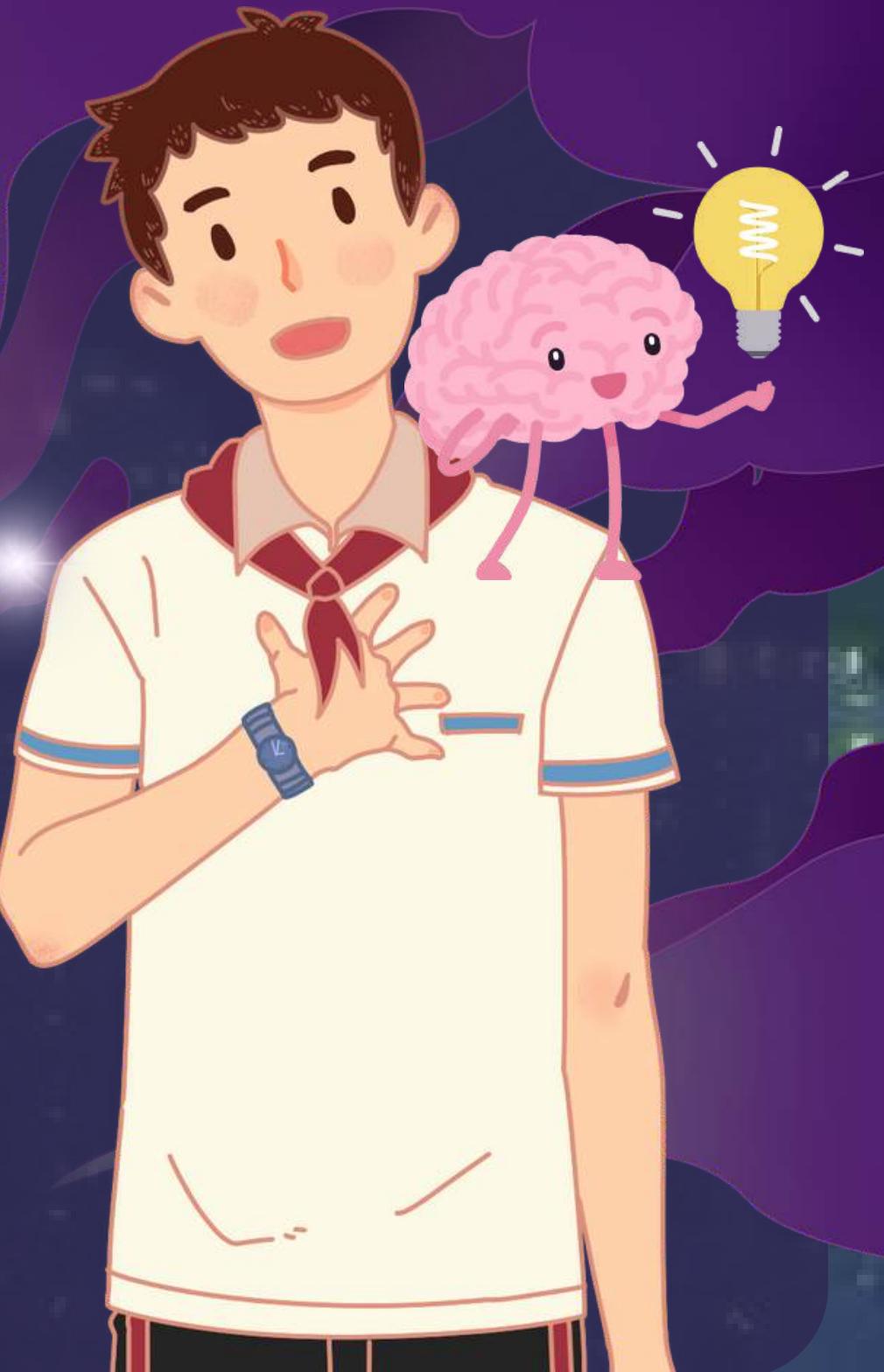
A stylized illustration of a woman with dark hair tied back, wearing a red robe, sitting at a desk. She is looking down at a blue laptop screen, holding a pink mug with steam rising from it. Above her hangs a glowing orange lamp with a yellow glow. The background is dark purple with abstract white shapes.

# PROJECT RESOURCES & LINKS

- **Live Application:**  
Frontend (Vercel): <https://dreambalance-frontend.vercel.app/>
- **Backend API:**  
Backend (Render): <https://dreambalance-backend.onrender.com/>
- **GitHub Repository:**  
Source Code (GitHub): [https://github.com/JANE7J/DreamBalance\\_v2](https://github.com/JANE7J/DreamBalance_v2)

# FUTURE SCOPE

- **Context-aware dream interpretation:** Identify recurring emotional themes in dreams and provide reflective explanations based on user patterns.
- **Life-event and emotion correlation:** Optionally link dream emotions with life events such as exams or deadlines to understand possible stress influences.
- **Reflective AI prompts for self-awareness:** Generate thoughtful prompts that encourage users to reflect on their emotional state and mental well-being.
- **Deeper emotional pattern analysis:** Analyze long-term dream data to highlight emotional trends and changes over time.



# CONCLUSION

DreamBalance demonstrates how Artificial Intelligence can be applied responsibly to support mental well-being through self-awareness and reflection. By combining dream journaling, AI-based analysis, and visual insights, the platform offers a simple and private approach to understanding mental states over time.





THANK YOU

