**MindWave** — AI-Powered Mental Health Tracker

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## **Project Overview**

MindWave is a mental health tracking web application designed to help users monitor their mood, express their thoughts through journaling, and receive AI-generated mental health insights and recommendations. By leveraging AI analysis and visual data trends, the app aims to promote self-awareness and mental well-being.

## **Problem Statement**

Many individuals struggle with understanding their mental health patterns and managing stress, anxiety, or depression. There is a need for a simple, interactive platform that helps users reflect on their mental state, track their emotional trends over time, and receive personalized suggestions for improvement.

## **Goals**

* Enable users to log their daily mood.
* Allow users to write personal journals describing their day or feelings.
* Analyze journal entries using AI to detect sentiment, stress, anxiety, and depression levels.
* Provide actionable recommendations based on AI analysis.
* Visualize mood and mental health trends through interactive graphs.
* Optionally, send reminders to encourage consistent tracking.

## **Core Features**

1. **User Authentication:** Sign up / Login functionality via Supabase Auth.
2. **Mood Logging:** Daily mood selection.
3. **Journal Logging:** Text input for users to express their thoughts or feelings.
4. **AI Analysis:** Use an n8n agent connected to the Google gemini API to analyze journal entries for:

* Sentiment (positive, neutral, negative)
* Stress level
* Anxiety level
* Depression level
* Mental health improvement suggestions

1. **Data Visualization**

* Mood trend graph (line chart over days/weeks)
* Stress/Anxiety/Depression trend graph (multi-line chart)
* Overall Mental Health Score graph (area chart)

1. **AI Recommendations:** Display personalized tips such as:

* Relaxation Techniques
* Breathing Exercises
* Physical Activities
* Hydration Recommendation

1. **Reminders (Optional):** Send daily or weekly reminders to users via email or WhatsApp to log mood and journal entries.
2. **Data Export (Optional)**
   1. Ability to export logged data and analysis as a PDF report.

## **Success Metrics**

* Daily active users
* Frequency of mood and journal logs
* Number of AI analyses completed
* User retention and engagement rates over time

## **Technology Stack**

* **Frontend:** Next.js, React, shadcn/ui for UI components, Recharts/Chart.js for data visualization.
* **Backend/Automation:** n8n workflows for AI processing and reminders.
* **AI Processing:** Google Gemini API for text analysis.
* **Database:** Supabase for authentication and data storage.
* **Deployment:** Vercel for the frontend.

## **Target Audience**

* Individuals interested in self-care and mental health awareness.
* Students and professionals experiencing stress or anxiety.
* Anyone seeking to monitor and improve their mental well-being.