

AI-Powered Journaling Companion

By Daniella Michel

Why am I making this project?

To help people turn journaling into a consistent, meaningful habit by removing “blank page” anxiety and giving them personalized, emotionally intelligent insights that make self-reflection easier and more rewarding.

Who is this project for?

- Individuals focused on mental wellness who want a tool to help them understand their
- emotional patterns.
- People new to journaling who need guidance and encouragement to get started.
- Busy professionals who want a quick and effective way to de-stress and process their
- day.

What is gonna make it valuable?

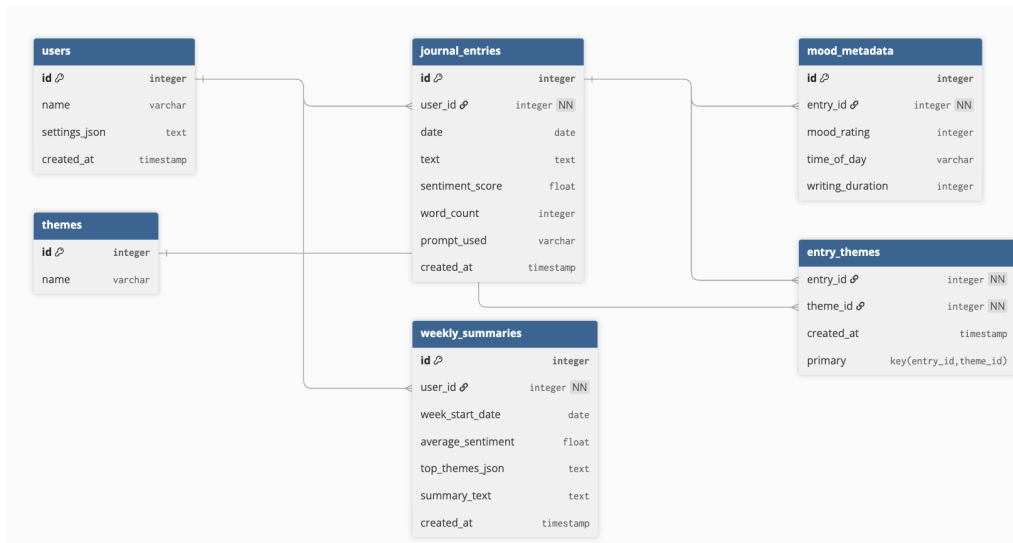
It gives people an easier way to journal by offering helpful prompts, tracking their mood over time, and showing simple insights that help them understand their patterns. It feels personal, private, and effortless to use — which makes people actually stick with it.

What should the User be able to do?

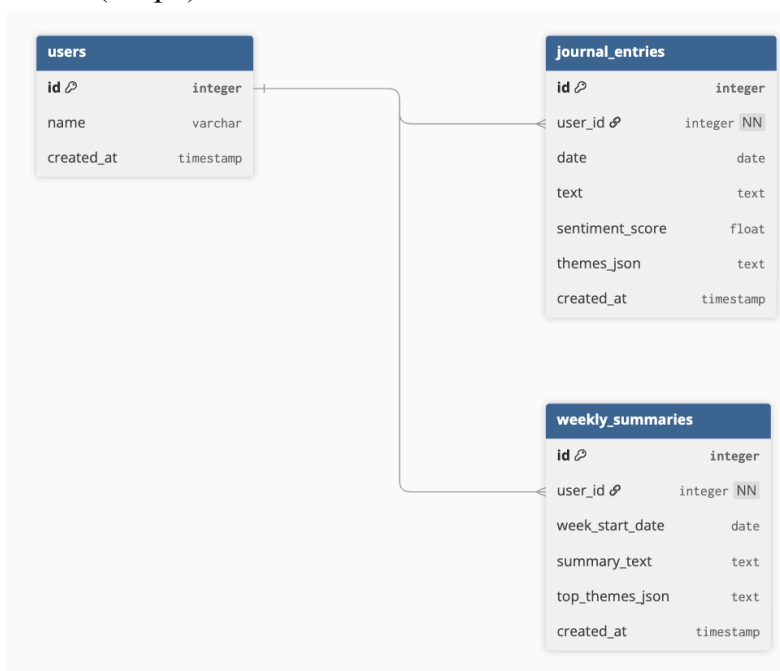
- Write a journal entry in a simple, calming editor
- Get a personalized prompt to help them start writing
- Save entries and view them later
- See their mood trend over time through a simple chart
- View weekly insights summarizing themes and emotional patterns
- Browse past entries in a clean, organized list
- See themes or keywords the AI detects in their writing
- Keep everything private with on-device or local storage

Data & Schema: What information do I need to store? How it relates to the other data? What those relationships look like?

Before narrowing down (scope):



After narrowing down (scope):



Scope: Do I absolutely need this for my app to function, or can I go without it?

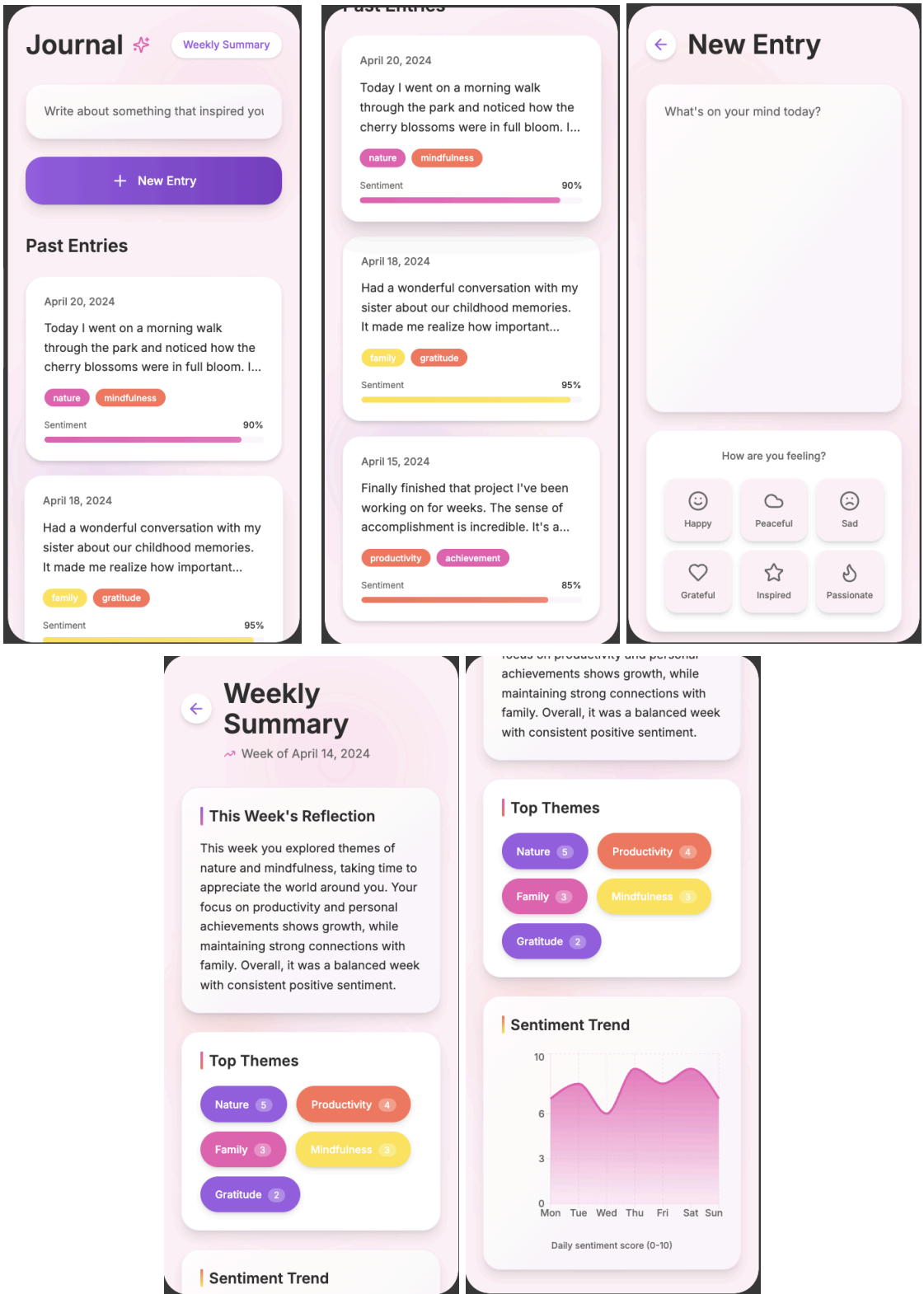
Mood Metadata - This would be helpful for the summaries by the end of the week or month, but can still be done with out

Entry Themes - Personalizes them, but may be too overwhelming for users. This could be in some kind of upgrade within a subscription or something

Word Count - This can be computed at any time, but also seems to not be very useful for analysis or something a user would care to see (they could copy and paste to a word counter if need be). Could be an upgrade for a subscription, but may not be the reason pay for a subscription

Prompt Used - Similar to Entry Themes, having prompts may be too overwhelming for users and give them too many options before even jumping into what they need to journal.

The MVP:



[Figma link to full-screen view](#)

Tech Stack:

Frontend (Client): React + Vite

- Display past entries, themes, and sentiment bars
- Provide a writing screen for new entries
- Show weekly summaries
- Send new journal text to the backend
- Render theme tags + sentiment percentages returned by AI

Backend(API/Server): Node.js + Express

- Receive new journal entries
- Call AI to generate:
 - sentiment score
 - themes
 - weekly summary text
- Save entries and summaries to the database
- Fetch entries for the dashboard
- Fetch weekly summaries

AI: OpenAI

- Sentiment analysis
- Theme extraction
- Weekly reflection summaries

Success Metrics:

User Engagement: The app encourages users to journal daily by providing a clean, intuitive interface, emoji-based mood tracking, and immediate AI boost for each entry, making reflection feel interactive, less of a chore and rewarding.

Insightfulness: AI-generated sentiment (mood being positive or negative) scores, theme extraction, and weekly summaries help users identify recurring emotional patterns and themes, turning raw journal entries into actionable self-reflection for a positive change in mental health.

Privacy and Trust: All AI processing occurs on a backend the user controls, with no API keys or sensitive data exposed in the frontend, and the interface is private, non-judgmental, and designed for personal reflection only to be seen by the user and never repeated.

AI Application: NLP and sentiment analysis are used to analyze each entry's emotional tone and themes, providing the user with empathetic and personalized feedback, as well as weekly summaries that guide meaningful self-awareness for mental clarity and tranquility.

Things Learned / Focused On:

- **Weeklysummary.tsx:** on client vs server side
 - src/app/WeeklySummary.tsx: Display the weekly summary, trigger a request for the summary, render loading / text
 - /api/weekly-summary: receive entries, talk to OpenAI, return a string summary
- **Creating a backend instead of calling OpenAI from the frontend:**
 - keeps all AI logic in a secure Node.js server so your API key stays private
- **App.tsx / handleSaveEntry:**
 - call AI backend for sentiment & themes, merge AI results with entry, update state & display entry

Future Enhancements:

- **Trash bin to delete entries**
 - Allow users to remove unwanted journal entries, with an optional “undo” or recovery feature for safety
- **Folders for entries (based on destination, mood, etc.)**
 - Organize journal entries by categories such as mood, theme, or destination, making it easier to browse and reflect on past content.
- **User Accounts**
 - authentication (email, Google, or OAuth) so multiple users can maintain private journals and access their data securely
- **Writing prompts**
 - AI can suggest prompts based on past entries (“You felt stressed last week, how did you manage it?”)