Overview

This project is a prototype of an AI-powered journaling companion. As a 'companion', this tool differs from traditional digital journals by offering insights into the user's writing and providing a thoughtful reflection that validates user input while also acknowledging the genuine emotions expressed in the entries. This journal is also meant to help reduce decision fatigue and make it easier for people to get started journaling and implement it as a daily habit in their lives.

Project Goals & Guiding Questions

- Project Goals:
  The goal of this project is to maximize the effectiveness of journaling by giving users unique prompts and by helping them reflect meaningfully on what they've written.

  This prototype aims to:
  - Use AI to reduce decision fatigue by generating unique prompts based on preselected moods and topics
  - Provide empathetic AI reflections that helps the user gain insights into their journal entries and help them process emotions.
  - Encourage daily journaling

- Guiding questions: The following questions helped scope the project

  - **Does the prototype need to be a mobile app or is a website acceptable as well?**
    - The prototype is delivered as web application for faster iteration and easier access to the demo.
  - **Can we add a public demo link alongside the GitHub repository, or should this remain limited access?**
    - Deliverables include a public demo link , GitHub repository, design documentation, and video presentation.
  - **Should I add guardrails/AI intervention around sensitive content or is it strictly a reflective journaling tool?**
    - This project uses OpenAI's built-in moderation and has constrained the response to not give advice to the users. The reflections are to help the user discover patterns in their thinking while being mindful of sensitive content.
  - **When you say "All analysis is done on-device to ensure absolute privacy," is it okay to store a user's journal entries locally?**
    - Journal entries and AI-generated responses are not persisted on the backend. The data exists on the local session and local storage.
  - **Should the product focus more on product design and user experience than on technical complexity, or should I aim for a balance of both?**
    - This project intentionally balances both.

Current Features

- AI prompt generation: User can choose a mood from a set of 12 tags ranging from positive to negative emotions and from a range of 11 topics. The selected mood and topics are used to generate a prompt related to it.
- AI journal reflection: The User can write a journal entry based on their own prompt or one generated by the AI. An AI reflection is generated from the input from the journal entry. The reflection tries to describe what the user is feeling, identifies an overarching theme, and offers a compassionate response.

Technical Stack

1. Next.js (Typescript)
2. Tailwind
3. Shadcn
4. OpenAI: gpt-4o-mini

I selected OpenAI's gpt-4o-mini for this project because balances speed, quality of response, as well as cost. This model does well at creating empathetic but grounded responses which is important in responding to journal entries without prying or giving unnecessary advice.

I chose to use Next js because it is a powerful framework to ship websites fast, and it works well with UI libraries like tailwind and shadcn. These libraries make it more efficient to style the frontend.

Future features and enhancements

To promote users journaling as a daily habit, I would include a streak counter. Other ideas for future enhancements include adding a feature to upload images, a feature for users to use voice to type, and a way to keep track of previous entries.