`cosmiq` — CruzHacks 2025 Project

This is the main project document for **cosmiq**, built during CruzHacks 2025.

🧠 General Idea

A smart, markdown-based note-taking app designed for students:

- A WYSIWYG markdown editor for writing school notes
- Instantly summarize content with a click
- Generate challenging quizzes with detailed explanations

🛠️ Tech Stack

- **React** – Frontend
- **Tailwind CSS** – Styling
- **Tauri** – Desktop backend with Rust
- **Gemini APIs** – AI-powered summarization & quiz generation

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🖥️ Frontend Pages

- **Home Page** - Interact with your local files system to access your directories
- **Edit Files Page** – Write and manage markdown notes
- **Summary Page** – Instantly generate cheat-sheets
- **Quiz Page** – Take dynamic quizzes based on your notes

💼 Backend Responsibilities

- File system interaction via Tauri
- Integration with Gemini APIs for AI-powered features

✨ Features

- Write notes, papers, or documentation
- Summarize notes to create study guides or cheat-sheets
- Generate dynamic quizzes in one click

🙍 Alex's Reflection

This project pushed me to learn Git in more depth—especially in a team setting where its power becomes clear. My primary focus was integrating the **Gemini API** to both summarize user notes and generate quizzes. I adapted to their new API format, which was a shift from the OpenAI-style APIs I usually use for academic research.

I also began learning React—my partner guided me a lot—and we used **Rust** for the backend. Rust feels like the Excalibur of programming languages: powerful, sharp, and a badge of true craftsmanship. Discovering that it shares traits with Python (my go-to language) was a nice surprise. This hackathon gave me the perfect opportunity to branch out. (Yes, that's a Git joke.)

🙍 Ethan Okamura's Reflection

Even though CruzHacks only lasted around 36 hours, I learned more than I have in a long time. Beyond technical skills, I improved my **time management**, **collaboration**, and **prioritization**. These are all lessons I can carry into my job at a small startup and my future career.

From a technical perspective, I dove into:

- **React**: Learned about hooks, routing, state management, and modular design
- **Tailwind CSS**: Reinforced my understanding of clean and effective UI/UX
- **Tauri with Rust**: Gained experience working with local file systems and API calls in a desktop environment
- **AI Integration**: Used AI for the first time! I was amazed by how accessible it was—just a few lines of code enabled powerful LLM functionality

CruzHacks gave me a foundation and the confidence to continue growing as an engineer. I'm leaving with a full heart and a head packed with new skills.