

Problem and Solution Proposal: Making AI-Driven Note-Taking Accessible and Affordable

Introduction and Background

As a Computer Science sophomore at **BITS Pilani** and previously a research intern at the **University of Oxford** in **AI & Deep Learning**, I've always been passionate about using technology to solve real-world problems. One challenge I personally faced was balancing note-taking while focusing in class and understanding material effectively. This led to inefficient and lengthy notes, which became a problem during exam preparation.

After talking to many other students, I realized this is a widespread issue. Students globally struggle to manage and revise notes effectively, which impacts their learning. There are **~1.8 billion** students in the world, and I'm sure many of them face the same problem. Upon exploring potential solutions, I discovered several AI-powered note-taking tools. However, their high pricing, slow generation time, and low accuracy made them impractical, especially for students in countries where affordability is a key concern.

Project Idea

This inspired me to create **BuildMyNotes.ai**—an **affordable, fast, AI-powered** note-taking solution designed to help students, not just in countries like India, but globally. The core motivation is to democratize access to advanced educational tools, enabling students of all financial backgrounds to benefit from AI-driven note-taking.

Why I Chose This Problem

This problem resonates deeply with me because it is a challenge I've experienced firsthand, and I see many students facing the same difficulties. As students, we often don't have the financial resources to afford existing **ultra-accurate** AI tools, which is why creating a **cost-effective** alternative is so crucial. I believe that education should be inclusive, and that high-quality tools shouldn't be out of reach due to economic barriers. This passion drives my conviction to solve this problem.

Problem Solving

Existing AI note-taking apps are expensive, slow, and often inaccurate. These platforms typically cost – **\$13 to \$15 per month** (around 1200 INR), which is exorbitant. The time they take to generate notes is frustratingly long, and their accuracy in summarizing lecture/video content is often subpar.

BuildMyNotes.ai, however, offers the **same service** for **less than \$4.99** per month (around 399 INR), with faster, more accurate note generation. We focus not only on **affordability** but also delivering **quality** and **efficiency**.

In-Depth Analysis and Technical Solution

To address both cost and efficiency, **BuildMyNotes.ai** uses a combination of **Deepgram's Automatic Speech Recognition (ASR)** for accurate transcription and **GPT-4o mini**, a lightweight **Large Language Model (LLM)**, for summarizing content into concise notes.

The solution's uniqueness lies in its **caching and retrieval system**:

- **Centralized Note Storage:** When a user generates notes, they are saved in a centralized cloud storage system and indexed with keywords for easy future retrieval.
- **Smart Retrieval System:** If another user queries the same lecture or topic, BuildMyNotes.ai retrieves the pre-generated notes instead of **regenerating** them. This drastically reduces unnecessary API calls, saving computational resources, hence significantly cutting costs.

Cost Efficiency

For a 2-hour lecture, BuildMyNotes.ai generates notes at an operational cost of approximately just **37 rupees**, covering ASR, GPT-4o mini, and cloud storage. Once notes are stored, further retrieval incurs **NO** additional API costs, further reducing operational expenses. This efficiency allows us to provide a high-quality service at less than **one-third** the cost of our competitors.

Why Other Solutions are Expensive

Competitors such as TurboLearn.ai, Mindgrasp.ai, and Coconote charge **\$13–\$15 per month** which is unaffordable for most students. These platforms use resource-intensive models like **GPT-4**, which increases their operational costs. Additionally, they often suffer from slow note generation and low accuracy in summarizing complex content. Their **lack of caching** means they process the same lectures repeatedly for different users, further driving up costs and slowing response times. **BuildMyNotes.ai** avoids these inefficiencies through the use of **GPT-4o mini**, which is both cost-effective and optimized for faster, more accurate summarization.

User Experience

We prioritize an intuitive, user-friendly experience. With **BuildMyNotes.ai**, students can quickly upload a lecture video or URL, and within **just 2-3 minutes**, receive concise, structured notes. The platform also offers customization options for note detail levels, real-time processing, and integration with popular tools like Google Drive, and easy note sharing via WhatsApp and Instagram."

Conclusion

By focusing on affordability, speed, accuracy, and efficiency, **BuildMyNotes.ai** addresses a widespread problem in a practical and sustainable way. My passion for this project stems from both personal experience and a desire to make education more inclusive. **BuildMyNotes.ai** aims to transform how students manage their learning, providing the **best possible** AI-driven tools that are both **accessible** and **affordable** to support their academic success globally.