

## Hackathon Problem Statement

### Phase 1 (First 4 Hours): AskMyNotes — Subject-Scoped Study Copilot (Web App)

Build a web application named **AskMyNotes** with the following functional requirements:

1. **Three-Subject Setup**
  - The user must be able to create **exactly three (3) subjects**.
  - The user must upload notes for each subject (**PDF/TXT minimum; multiple files allowed per subject**).
2. **Subject-Scoped Q&A**
  - The user must be able to **select one subject at a time** and ask questions in a chat interface.
  - The system must answer **strictly using only the notes of the selected subject**.
3. **Grounded Responses with Transparency**
  - Every answer must include:
    - **Citations** to the uploaded notes (file name + page/section/chunk reference),
    - a **confidence level** (High/Medium/Low),
    - the **top supporting evidence snippets** used to form the answer.
4. **Strict “Not Found” Handling**
  - If the notes do not contain sufficient information to answer a question, the system must respond:  
**“Not found in your notes for [Subject]”**  
(no guessing or fabricated information).
5. **Study Mode**
  - For the selected subject, the system must generate:
    - **5 multiple-choice questions (MCQs)** with correct option and a brief explanation, and
    - **3 short-answer questions** with model answers, with **citations for all generated content**.

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### Phase 2 (Second 4 Hours): Twist Reveal — Voice-Based Teacher Conversation

Extend **AskMyNotes** with a teacher-like spoken interaction experience, while preserving all Phase 1 constraints:

1. **Voice Interaction**
  - The user must be able to ask questions using **voice** and receive answers in **voice**, scoped to the selected subject.
2. **Multi-Turn Conversation**

- The system must support **follow-up questions** within the same session (e.g., “give an example”, “simplify it”, “compare it with the previous concept”) by maintaining context from the recent conversation.

### 3. All Phase 1 Requirements Remain Mandatory

- Subject scoping
- Citations + evidence snippets
- Confidence level
- The exact refusal behavior: “**Not found in your notes for [Subject]**” when unsupported

