

In this assignment, you are supposed to build a fully functional, responsive web app that helps school students revise from their coursebooks. Use LLMs aggressively to move fast, but ensure your submission is a good representation of your skills.

## Scope

## A. Must-Have Features

## 1. Source selector

- A simple selector component to choose: All uploaded PDFs / Specific PDF.
- For testing, seed with some PDFs of NCERT Class XI Physics which you can find <u>here</u>
- o Allow user to upload their own PDF coursebook.

## 2. PDF viewer

Display the selected PDF alongside chat (in a tab or split view).

## 3. Quiz Generator Engine

- Generate MCQs (Multiple Choice Questions), SAQs (Short Answer Questions), LAQs (Long Answer questions) from the selected / uploaded PDFs.
- Render the quiz, capture user's answers, score their submissions, and store their attempts. Also provide explanations so user understands the topic better.
- Option to generate new set of questions.

## 4. Progress tracking

- Store user's strengths / weaknesses through quizzes.
- Tiny dashboard to manage and track user's learning journey

# BeyondChats

## **B. Nice-to-Have Features**

## 1. Chat UI (ChatGPT-inspired)

- a. To be used by students as their virtual teacher / teaching companion
- b. Left drawer: list of chats, main chat window, input box at bottom.
- c. New chat, switch chat
- d. Clean design; mobile responsive.

## 2. RAG answers with citations

- a. Ingest selected PDF(s): chunk + embed.
- b. Chatbot answers must cite **page numbers** and **quote snippets** (2–3 lines) from the source ("According to p. 23: '...'").

## 3. YouTube Videos Recommendor

a. Recommends educational videos from Youtube relevant to the selected / uploaded PDFs.

## What to Submit

- 1. **GitHub repo** with:
  - README .md (setup, how to run, how you built the project, what's done, what's missing, did you use any LLM tools? For what purposes?).
  - Verifiable commits so we can track your development journey from start to finish.
- 2. Live URL where we can test the implementation

## **Evaluation Criteria**

- 1. How much of the Scope has been covered successfully. (50%)
- 2. UI / UX (20%)
- 3. Responsiveness (10%)
- 4. Code quality (10%)
- 5. ReadMe (10%)

## **Note**

- 1. Deadline: 11:59 pm, 9 October (Thursday)
- 2. We understand that this is a large project and it may be difficult to do everything mentioned above in such a short time. But that's partly the aim of this assignment to understand which tradeoffs you made, what decisions you took, how you improvised, and finally what you were able to deliver.
- 3. You are expected to make heavy use of LLM coding tools to speeden up the pace.
- 4. BeyondChats team will not be responding to any messages asking for clarification regarding the assignment. Please use your judgement to make decisions.
- 5. All code you write will be your property. BeyondChats promises to not make use of any part of your submission unless we decide to select you for the position.
- 6. Looking forward to seeing you working alongside us.

#### **ALL THE BEST!**