## Flashcard Genius — Setup Instructions

#### 1. Download the Project Files

• Save and unzip the project folder "FlashGenius".

#### 2. Open the Project in VS Code

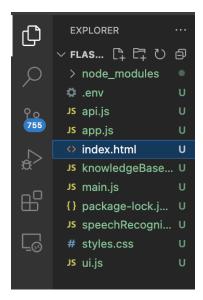
- Open Visual Studio Code.
- Go to File → Open Folder.
- Select the project folder "FlashGenius"

#### 3. Install "Live Preview" Extension (if not installed)

- Click the **Extensions** icon (Ctrl+Shift+X).
- Search Live Preview (by Microsoft).
- Click Install.

#### 4. Open and Preview index.html

• In the Explorer sidebar, click on index.html



• Click the "Live Preview" button at the top-right (a small plug ( icon)



- The project will open in a new tab inside VS Code.
- You can either preview the project directly within VS Code or copy the URL from the Live Preview tab and open it in your browser.

### **5. Test Normal Flashcard Generation (Typing Input)**

Locate the "Enter Topic or Material" text field.

Type: Prompt Engineering or anything you want

Adjust the settings:

- Number of Cards: Select 10 cards from the dropdown.
- Difficulty Level: Select Intermediate.

Leave Synthetic Data and Knowledge Library toggles OFF for now.

Click the Generate Flashcards button.

Verify that a set of flashcards is generated below.

Test Flashcard Actions:

- Click the **Download** button to download the flashcards.
- Click the **Share** button to copy the flashcards to clipboard.
- Confirm that downloading and sharing work correctly.

#### 6. Test Multimodal Integration (Speech Input)

- Click the **Speak** button (microphone icon) near the topic field.
- Clearly say:
  - → Differences between Deep Learning and Machine Learning or any topic like transformers in ai
- Wait for the system to:
  - o Transcribe your speech.
  - Auto-fill the topic field.
  - Auto-generate flashcards without clicking anything else.
- Click the **Listen** button (speaker icon) after flashcards are generated.
- Confirm that the flashcards are read aloud using text-to-speech.
- (Optional) Adjust your device's microphone/speaker settings if needed.

# 7. Upload a document (e.g., a Quantum Physics text) into the Knowledge Library.

- Click on the Knowledge Library tab.
- Upload a document (example: a Quantum Physics text file) into the Knowledge Library.
- Make sure to toggle ON the Use Knowledge Library switch.
- Go back to the Enter Topic tab.
- In the topic field, type: Quantum Physics (or anything relevant to your document).
- Click Generate Flashcards.
- Confirm that the flashcards are grounded in the uploaded document content, not generic.
- Confirm that flashcards are based on uploaded content.

#### 8. Test Synthetic Data Generation

- In the topic field, type: Transformers.
- Toggle Use Synthetic Data to ON.
- Click Generate Flashcards.
- Confirm flashcards are generated normally.

#### After Generation:

- Look under each flashcard.
- Two new buttons should appear:
  - Variations button:
    - Click it.
    - See alternative phrasings and reworded versions of the flashcard.

■ Purpose: Help the user learn the same concept from different linguistic perspectives.

#### Examples button:

- Click it.
- See real-world examples, practical scenarios, and visual flowcharts where the concept is applied.
- Purpose: Bridge the gap between theory and real-world practice.