

# Summer Training TR-103

## Prompt Engineering

### Day-11 Report

The eleventh day of the training introduced Notebook LM, a personal AI tool by Google DeepMind, designed for working with user-uploaded content.

#### Introduction to Notebook LM:

Notebook LM, formerly known as Project Tailwind, is an advanced AI-powered tool developed by Google DeepMind. It is designed to function as a Personal RAG (Retrieval-Augmented Generation) system, enabling users to interact directly with their own uploaded documents rather than relying on external or internet-based data.

- **Key Features and Concepts:**

1. **Contextual Responses:** The AI responds based solely on the user's files, ensuring privacy and tailored outputs.
2. **Smart Summarization:** Given a set of documents (e.g., 12 research papers), Notebook LM can efficiently summarize and generate key insights.
3. **Interactive Querying:** Users can ask specific questions about their uploaded content and receive accurate responses.

#### Studio Column

The Studio column in Notebook LM provides enhanced tools for interacting with notebook content. It consists of two primary components: Audio Overview and Notes.

- **Audio Overview:** Generates a spoken summary of the notebook. Users can play, pause, and navigate the audio. It also includes an Interactive mode (BETA) for dynamic listening
- **Notes:** The Notes section allows users to capture and organize key insights from the notebook. It includes the following features:
  1. **Add note:** Allows users to manually create and save custom notes.
  2. **Study guide:** Generates a structured guide based on the uploaded documents.
  3. **FAQ:** Produces a list of frequently asked questions and corresponding answers.
  4. **Timeline:** Creates a chronological sequence of events or content based on the material.
  5. **Briefing doc:** Summarizes the key points into a concise and readable document.

## **Application and Practical Use:**

Participants explored the practical applications of creating different notebooks, each organized around a specific theme or project. This structure supports better document management and focused knowledge extraction. Moreover, by interacting with and prompting Notebook LM using user-specific content, participants learned how this process inherently contributes to the creation of a Supervised Learning Dataset. This allows for future model training or fine-tuning based on curated human-AI interactions.

## **Upload Sources:**

Notebook LM offers multiple options for uploading content, enabling users to build notebooks from a variety of input types. These flexible upload methods support diverse workflows and ensure compatibility with commonly used formats.

Users can upload multiple files from different sources into a single notebook. The available upload options include:

- Google Drive: Allows direct access to files stored in the user's Google Drive.
  - Google Docs – Imports text documents.
  - Google Slides – Imports presentation files.
- Link: Enables content addition via URLs.
  - Website – Adds material from a web page.
  - YouTube – Extracts content from a YouTube video link.
- Paste Text: Permits manual entry of content directly into the notebook.
  - Copied Text – Supports pasting raw or copied text into the interface.