

Practical 12 : NotebookLM Project

Aim To create revision notes using NotebookLM.

Objectives

- To generate study guide
- To create flashcards

Materials Required

- NotebookLM

Procedure

- **Create NotebookLM project** – Start a new project in NotebookLM to organize your materials and AI-generated outputs in one workspace.
- **Upload two resources** – Add two documents or sources to the project so the AI can analyze and reference them.
- **Generate study guide** – Use NotebookLM's tools to create a structured study guide summarizing key concepts from the uploaded resources.
- **Generate flashcards** – Automatically produce flashcards that highlight important facts, terms, or ideas for easier review.
- **Review accuracy** – Carefully check the summaries and flashcards to ensure all information is correct and reflects the original resources.
- **Take screenshots** - Capture screenshots of the study guide and flashcards to document your work or include them in your submission.

OUTPUT :

a) Combine Study Guide

The screenshot shows the NotebookLM interface with the title "Mastering JavaScript Object Notation and Data Interchange". The Sources panel on the left lists a PDF source titled "JavaScript JSON only.pdf". The Chat panel in the center contains a message from the AI: "create a coombine study guide using all sources". Below this, the AI provides a comprehensive overview of JSON, its syntax, and its application in web development. The Studio panel on the right shows various options like Audio Overview, Video Overview, Mind Map, Reports, Flashcards, Quiz, Infographic, and Slide deck, with "JSON Flashcards" listed under Flashcards.

This study guide provides a comprehensive overview of **JSON (JavaScript Object Notation)**, its syntax, and its application in web development based on the provided sources.

1. Understanding JSON

- **Definition:** JSON is a **plain text format** used for storing and transporting data ¹. Its name stands for JavaScript Object Notation ¹.
- **Origin:** The format was originally specified by **Douglas Crockford** ².
- **Purpose:** It is designed to make it easy to send and store data between computers ¹. Because it is text-only, it is a **language-independent** format; code for reading it can be written in any programming language ¹ ².
- **Compatibility:** JSON is syntactically identical to the code used to create JavaScript objects, allowing JavaScript programs to convert JSON into native objects with ease ² ³.

2. Core Syntax Rules

b) Flashcards

The screenshot shows the NotebookLM interface with the title "Mastering JavaScript Object Notation and Data Interchange". The Sources panel on the left lists a PDF source titled "JavaScript JSON only.pdf". The Chat panel in the center contains a message from the AI: "generate flashcard for quick revision". Below this, the AI generates three flashcards: "Flashcard 1: Basics", "Flashcard 2: Syntax Requirements", and "Flashcard 3: Conversion Functions". Each flashcard contains a question and an answer. The Studio panel on the right shows various options like Audio Overview, Video Overview, Mind Map, Reports, Flashcards, Quiz, Infographic, and Slide deck, with "JSON Flashcards" listed under Flashcards.

generate flashcard for quick revision

JSON Revision Flashcards

Flashcard 1: Basics

- **Question:** What does **JSON** stand for and what is its primary purpose?
- **Answer:** JSON stands for **JavaScript Object Notation** ¹. It is a **plain text format** used for **storing and transporting data** between computers ¹ ². While derived from **JavaScript syntax**, it is **language-independent**, meaning code to read it can be written in any programming language ¹ ³.

Flashcard 2: Syntax Requirements

- **Question:** What is the critical syntax difference between **JSON names** and **JavaScript object names**?
- **Answer:** In **JSON**, all **names (keys)** must be enclosed in **double quotes** (e.g., `"firstName": "John"`) ⁴. In standard **JavaScript**, names do not require these quotes ⁴.

Flashcard 3: Conversion Functions

c) Concept Map / Explanation

The screenshot shows the NotebookLM application interface with the title "Mastering JavaScript Object Notation and Data Interchange".

Sources: A sidebar on the left contains a "Sources" section with a "Add sources" button, a "Try Deep Research" button, a search bar, and a "Select all sources" checkbox. It also lists a "JavaScript JSON only.pdf" file.

Chat: The central area is a "Chat" window with a placeholder "create a concept map or explanation of the topic". Below it, a text block explains that JSON is a plain text format designed for storing and transporting data, derived from JavaScript, and is language-independent. It defines three structural components: Name/Value Pairs, JSON Objects, and JSON Arrays.

Studio: On the right, the "Studio" panel offers various tools: "Audio Overview", "Video Overview", "Mind Map", "Reports", "Flashcards", "Quiz", "Infographic", and "Slide deck". A specific "JSON Flashcards" item is listed under the "Flashcards" section.

A footer note at the bottom of the Chat window reads: "NotebookLM can be inaccurate; please double-check its responses."