Source Tracking Sheet - Mini Lab (SDE)

✅ **Basic Summary: What We're Doing**

Project:
We're working on the **AI Mentor Project** — specifically building a **Mini Lab for the SDE (Software Development Engineer) Track**.

Goal:
Our main goal is to **collect, structure, and organize high-quality learning content** for **each module** in a **consistent JSON format**.
Each module covers:

- **8 Segments** (like Introduction, Real-World Use Cases, Problem Types, etc.)

- **4 Learning Levels** (Beginner → Expert)

How We Do It:
We take **trusted sources** (Books, Blogs, Courses, YouTube, Podcasts, Research Papers, Industry Reports, Google Search) — then **simplify and format** them into structured files.

We make sure each source is:

- **Realistic and human-like**

- Properly documented in a **Source Tracking Sheet** (with module, source type, where we got it, and any useful link)

Big Picture:
Our work builds the **foundation dataset** that an AI Mentor will later use to guide real students step by step — with clear levels, quizzes, mini projects, and real-world context.

Complete Instructions:- https://tabby-driver-fde.notion.site/SDE-21a67f5ff62980fe99b8f26613693287?source=copy_link
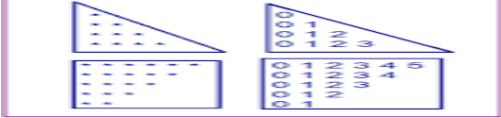
1. Module: Module 0: Designation Deep Dive (SDE Overview)

Source File	Source Type	Data Collected From	Link(s) / Reference
public_Source1_Book.json	Book	Cracking the Coding Interview	http://www.r-5.org/files/books/computers/overviews/cs-tools/Gayle_Laakmann-Cracking_the_Coding_Interview-EN.pdf
public_Source2_Course.json	Course	GeeksforGeeks, Medium	https://www.geeksforgeeks.org/software-engineering/software-engineering-introduction-to-software-engineering/
public_Source3_YouTube.json	YouTube	YouTube video by Gaurav Sen	https://www.youtube.com/watch?v=x9nkpgV-wcI
public_Source4_Podcast.json	Podcast	Podcast — Joma Tech (YouTube)	https://www.youtube.com/watch?v=mrHNSanmqQ4
public_Source5_Newsletter.json	Newsletter Or Article	Educative, *GitHub Octoverse Report*	https://www.educative.io/blog/how-to-become-a-software-engineer https://octoverse.github.com/
public_Source6_Search.json	**Search** (e.g., Google/SEO topics)	Coursera, Skill-lync	https://www.coursera.org/articles/software-engineer-career-path https://skill-lync.com/blogs/deep-dive-into-software-development

public_Source7_ResearchPaper	ResearchPaper	Research Paper from rxiv.org	https://arxiv.org/pdf/2311.11457
public_Source8_IndustryTrends	IndustryTrends	Fullscale, GFG	https://fullscale.io/blog/software-engineer-titles-hierarchy/

2. Module: Module 1: Competitive Programming Patterns

Source File	Source Type	Data Collected From	Link(s) / Reference
public_Source1_Book.json	Book	Competitive Programming Patterns	https://cses.fi/book/book.pdf
public_Source2_Course.json	Course	GeeksforGeeks	https://www.geeksforgeeks.org/best-courses-on-competitive-programming/
public_Source3_YouTube.json	YouTube	YouTube video by Ashish Pratap Singh	https://www.youtube.com/watch?v=DjYZk8nrXVY
public_Source4_Podcast.json	Podcast	Podcast **Fraz's** (YouTube)	https://www.youtube.com/watch?v=tTyqtk3V-h4
public_Source5_Newsletter.json	Newsletter Or Article	Inspired by Grokking the Coding	**Grokking the Coding Interview Patterns** https://www.geeksforgeeks.org/python/implementing-news-parser-using-template-method-design-pattern-in-python/

public_Source6_Search.json	**Search** (e.g., Google/SEO topics)	Google	 Competitive pattern printing
public_Source7_ResearchPaper	ResearchPaper	Research Paper	https://dl.acm.org/doi/10.1145/3725798.3725804
public_Source8_IndustryTrends	IndustryTrends	Hackerrank, GFG	https://www.hackerrank.com/research/developer-skills/2024

3. Module: Module 2: GitHub & Open Source Etiquette

Source File	Source Type	Data Collected From	Link(s) / Reference
public_Source1_Book.json	Book	The entire Pro Git book, written by Scott Chacon and Ben Straub	**https://git-scm.com/book/en/v2**
public_Source2_Course.json	Course	GeeksforGeeks, Medium	https://www.geeksforgeeks.org/software-engineering/software-engineering-introduction-to-software-engineering/
public_Source3_YouTube.json	YouTube	YouTube video by Gaurav Sen	https://www.youtube.com/watch?v=x9nkpgV-wcI
public_Source4_Podcast.json	Podcast	Podcast — Joma Tech (YouTube)	https://www.youtube.com/watch?v=mrHNSanmqQ4
public_Source5_Newsletter.json	Newsletter Or Article	Educative, *GitHub Octoverse Report*	https://www.educative.io/blog/how-to-become-a-software-engineer https://octoverse.github.com/

public_Source6_Search.json	**Search** (e.g., Google/SEO topics)	Coursera, Skill-lync	https://www.coursera.org/articles/software-engineer-career-path https://skill-lync.com/blogs/deep-dive-into-software-development
public_Source7_ResearchPaper	ResearchPaper	Research Paper from rxiv.org	https://arxiv.org/pdf/2311.11457
public_Source8_IndustryTrends	IndustryTrends	Fullscale, GFG	https://fullscale.io/blog/software-engineer-titles-hierarchy/