Education & Learning / Memory Systems

Structure flashcards by subject, difficulty, and review priority — knowledge compartmentalization for efficient spaced repetition.
Difficulty: Intermediate
Model: GPT-4 / Claude / Gemini
Use Case: Flashcard Creation, Study Organization
Updated: June 2026
Why This Prompt Exists
Disorganized flashcard decks are unusable. Without tagging, learners waste time reviewing what they already know or skipping what they don’t. Most decks are flat lists.

You get:

- reviewing cards you already know (wasted time)
- skipping cards you don’t know (avoidance, not learning)
- no priority system (all cards treated equally)
- inconsistent card quality (some too easy, some too hard)
- no tracking of which cards are mastered

But organized decks have structure:

- subject hierarchy: topic → subtopic → concept
- difficulty rating: easy / medium / hard
- review priority: high / medium / low (based on upcoming exams)
- mastery level: new / learning / known / mastered
- card type: term-definition / Q&A / diagram / application

Without organization, flashcards are inefficient.
This prompt organizes flashcards into structured, searchable decks.

The Prompt

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Assume the role of a flashcard system designer who organizes decks for efficient learning.

Your task is to structure flashcards by subject, difficulty, and priority.

Generate:

1. DECK STRUCTURE

**Subject:** [course/topic name]
- Subtopics: [list of major subtopics]
- Total cards: [X]
- Review interval system: [SM-2 / SM-5 / Custom]

2. CARD METADATA TEMPLATE

{
  "id": "FS-001",
  "subject": "",
  "subtopic": "",
  "front": "",
  "back": "",
  "card_type": "term_definition|q_and_a|diagram|application|cloze",
  "difficulty": "easy|medium|hard",
  "priority": "high|medium|low",
  "mastery_level": "new|learning|known|mastered",
```

```
  "next_review": "",
  "review_count": 0,
  "last_score": null
}
```

3. SUBJECT HIERARCHY

Level	Name	Card Count	Mastered
Subject	[course name]	X	X%
Subtopic 1	[name]	X	X%
Subtopic 2	[name]	X	X%
Concept	[name]	X	X%

4. DIFFICULTY CALIBRATION

Difficulty	Success Rate	Review Frequency	Card Characteristics
Easy	90-100%	Least frequent	Simple term-definition
Medium	70-90%	Moderate	Multi-part, application
Hard	50-70%	Most frequent	Complex, requires synthesis
Leech	<50%	Flag for review	Reword or break into parts

5. PRIORITY RULES

Priority	Criteria	Scheduling
High	Upcoming exam (within 7 days), previously failed	Review

daily |
| Medium | Upcoming exam (7-30 days), medium difficulty | Review every 2-3 days |
| Low | Distant exam (>30 days), easy, mastered | Review weekly |

6. DECK INVENTORY TABLE

Card ID	Front (truncated)	Subtopic	Difficulty	Priority	Mastery	Next Review
FS-001	[first 50 chars]	[name]	E/M/H	H/M/L	[level]	[date]

7. REVIEW QUEUE BY PRIORITY

High Priority (review today)
- [Card ID] - [front preview] - difficulty: [X] - last score: [X]

Medium Priority (review within 2 days)
- [Card ID] - [front preview] - difficulty: [X] - last score: [X]

Low Priority (review weekly)
- [Card ID] - [front preview] - difficulty: [X] - last score: [X]

8. COMMON FLASHCARD MISTAKES

Mistake	Why It Fails	Correct Approach

Too much information per card	Overwhelming, hard to recall	One fact per card
Vague front	Can't trigger recall	Specific question or term
No priority system	Wasted review time	Tag by priority
Same review for all cards	Inefficient	Space by difficulty
No mastery tracking	Re-reviews known cards	Mark when mastered

9. CARD DESIGN GUIDELINES

Card Type	Front Example	Back Example	Best For
Term-Definition	"Mitochondria"	"Powerhouse of the cell, produces ATP"	Vocabulary
Q&A	"What are the three stages of cellular respiration?"	"Glycolysis, Krebs cycle, ETC"	Processes
Cloze	"The powerhouse of the cell is the [...]"	"mitochondria"	Fill-in-blank
Application	"If a cell has no mitochondria, what can't it do?"	"Produce ATP via aerobic respiration"	Understanding

INPUTS:

Subject/course:
[PASTE SUBJECT]

Topics/subtopics:
[PASTE LIST]

Number of cards:

```
[PASTE NUMBER]

Exam date (if applicable):
[PASTE DATE OR "NONE"]

Card type preference:
[TERM-DEFINITION / Q&A / CLOZE / APPLICATION / MIXED]

RULES:
- One fact per card (more is overwhelming, harder to recall)
- Use specific front phrasing (triggers precise recall)
- Tag every card with difficulty (easy/medium/hard) based on
performance
- Set priority based on exam proximity (high for upcoming exams)
- Track mastery level (new → learning → known → mastered)
- Space reviews by difficulty (hard = more frequent, easy = less)
- Flag leech cards (<50% success) for rewording or breakdown
```

How To Use It

- One fact per card — more than that is overwhelming and harder to recall.
- Use specific front phrasing — triggers precise recall, not vague recognition.
- Tag every card with difficulty — easy/medium/hard based on your performance.
- Set priority based on exam proximity — high priority for upcoming exams (within 7 days).
- Track mastery level — new → learning → known → mastered; don't waste time on mastered cards.
- Space reviews by difficulty — hard cards need more frequent review than easy cards.
- Flag leech cards (<50% success) — reword or break into smaller cards.

Example Input

Subject/course: "Medical Terminology - Cardiovascular System"

Topics/subtopics: "Heart anatomy, blood vessels, common conditions, diagnostic tests"

Number of cards: "75"

Exam date: "In 14 days"

Card type preference: "MIXED (term-definition, Q&A, application)"

Why It Works
Disorganized decks waste time. Without tagging, learners review what they already know and skip what they don't.

This framework improves outcomes by forcing:

- subject hierarchy (topic → subtopic → concept)
- difficulty calibration (easy/medium/hard based on success rate)
- priority assignment (high/medium/low based on exam proximity)
- mastery tracking (new → learning → known → mastered)
- card design guidelines (one fact per card, specific front phrasing)

Failure modes this prevents:

- reviewing known cards (wasted time)
- skipping unknown cards (avoidance, not learning)
- no priority system (all cards treated equally)
- inconsistent card quality (some too easy, some too hard)
- no mastery tracking (re-reviewing mastered cards)

This improves on: Flat flashcard lists. Organized decks enable efficient, targeted review.

Related to: MS-01 (Spaced Repetition) for timing; MS-03 (Retrieval Practice) for recall methods.

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See also Retrieval Practice Designer