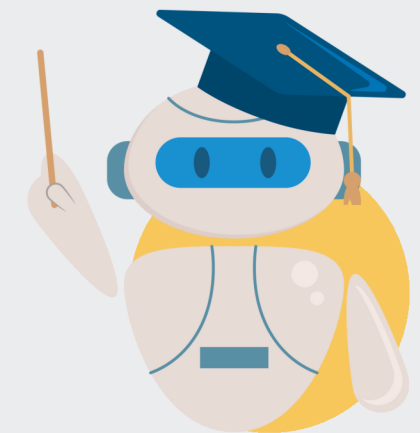# Prompting

What is Prompt Engineering?

Prompt Engineering is the art of talking to an AI in a clear, specific, and smart way to get the best possible answer. Think of it like giving instructions to a very smart assistant you get what you ask for, so ask well.
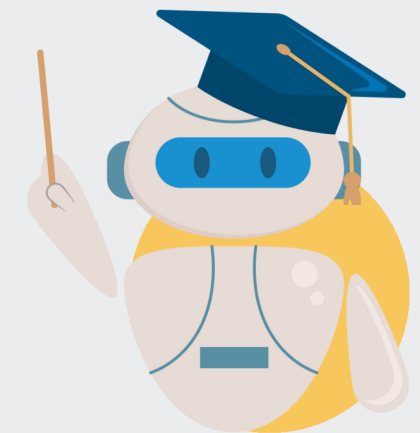
Why Prompting Matters

A prompt is simply your message to the AI—a sentence, question, or instruction. The clearer your message, the better the result.

- Vague prompt ➜ Confused AI
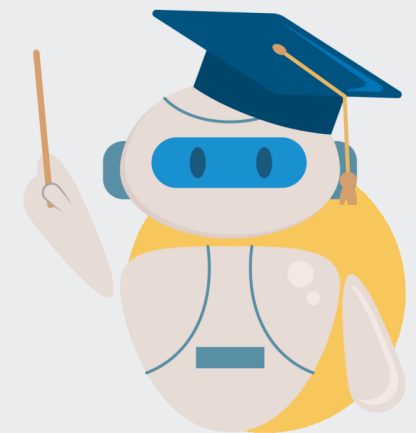- Clear + Specific prompt ➜ Accurate and helpful AI

Prompting

The 5-Step Formula to Write a Perfect Prompt

- 1. Text: Say what you want clearly. Use action words like "explain," "summarize," "list," "fix," etc.
- 2. Context: Share background info (project, topic, goal).
- 3. References: Give examples or styles you like.
- 4. Evaluation: Check if the output meets your standard.
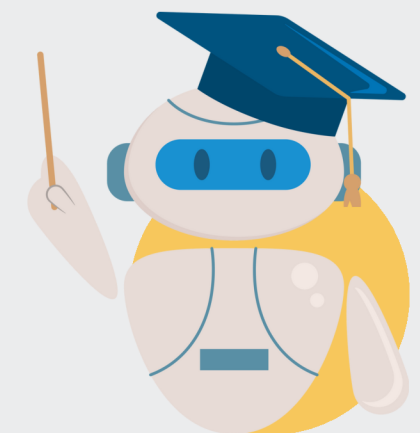- 5. Iteration: Refine and improve the prompt step-by-step.

Best Practices & Hacks for Better Prompts
- 1. Be Clear
- Bad: "Help me" ● Good: "Help me fix my CSS layout. My flex items are not centered."
- 2. Be Specific
- Bad: "Tell me about AI" ● Good: "Explain what AI is, with 2 examples and in 3 sentences."
- 3. Add Context
- Tell the AI what you're working on. ● Example: "I'm making a landing page with Tailwind CSS, but the navbar overlaps the hero section."
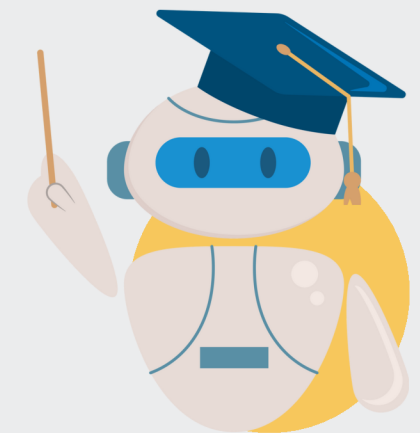
4. Ask One Thing at a Time
● Split big prompts into smaller chunks. ●
Better flow, better results.

5. Use constraints when giving the instruction
● "Keep the answer under 100 words." ●
"Return the answer in Arabic language"

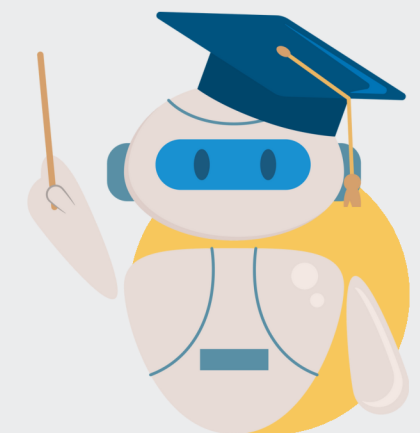**Advanced Prompting Techniques**

Prompt Chaining uses the output from one prompt as input for the next.

● Step 1: "Summarize this article."

● Step 2: "Turn that summary into a tweet thread." Chain-of-Thought Prompting Ask the AI to think step-by-step.

 ● Prompt: "Explain how to solve this math problem step-by-step." Meta Prompting Let the AI guide itself.

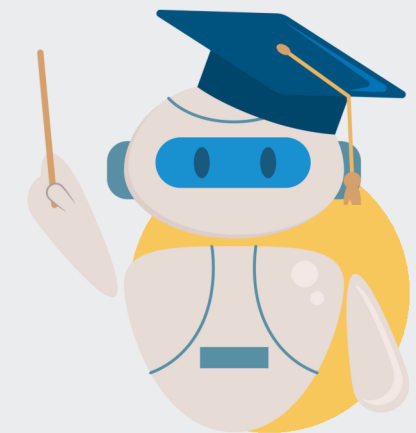 ● Prompt: "Ask me questions to figure out the best title for my blog."

Choose the Right AI for the Job

- **AI Model Best For GPT-4:** Reasoning, creativity, writing

- **Claude:** Ethical questions, formal tasks
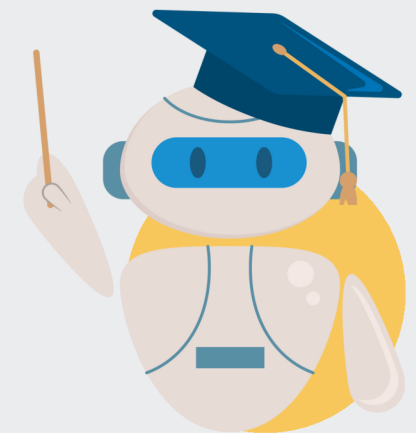
- **Gemini:** Fast tasks, current web data

Common Mistakes to Avoid

- Too general: "Tell me something."

- Too long: 5 questions in 1

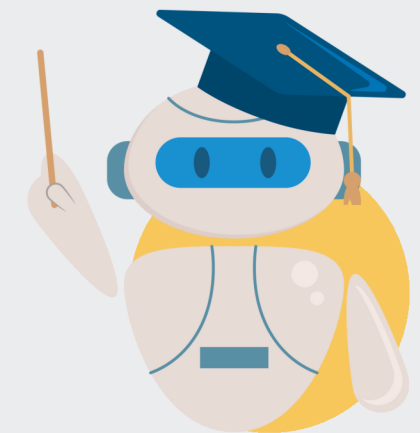- No context: "Fix my code" (but you didn't give the code)

Final Tips to Master Prompting

- Practice often. The more you prompt, the better you get.

- Refine your prompt if the result isn't perfect.

- Stay curious: test prompts, styles, and questions.

Fun Prompt Starters

- "Explain [topic] like I'm 10."

- "What's a creative idea for a pottery brand logo?"

- "Give me 3 startup ideas for students."

- "Help me write a LinkedIn post for my new job."