

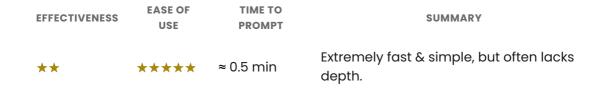
# **Prompt Engineering Guide**

Practical techniques & best practices to unlock generative AI in your business

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# General Prompting / Zero-shot



### What is Zero-Shot Prompting?

You ask the model a question or give an instruction **without** providing examples. You rely entirely on pre-training.

#### When to Use

- You need a fast answer or draft and don't care about exact style.
- The task is familiar to most models (e.g., writing an email, summarising text).
- You want to sanity-check an idea before investing time in better prompting.

Tracking Name	1_1_linkedin_post	
Goal	Write LinkedIn Post	
Prompt	Write a 200-word LinkedIn post announcing our new SaaS feature that helps small manufacturers track machine downtime.	
4o Output	Big news for makers, machinists, and every scrappy shop floor in between! A New Feature Alert: Machine Down	
Note	The prompt is not optimal because, as we learned in Lesson 1.2, ChatGPT sees tokens and can't count accurately. So, saying "write 200 words" is not optimal. A better prompt would be "write a short" or "write a skimmable"	

### One-shot & Few-shot Prompting

EFFECTIVENESS EASE OF USE TIME TO PROMPT SUMMARY

★★★★ ≈ 2 min Extra control with minimal effort.

### What is One-/Few-shot?

Include one or several examples to demonstrate the desired pattern.

#### When to Use

- Model output must match a specific voice or formatting template.
- Data is scarce but you have 1-3 high-quality examples to imitate.
- You're iterating quickly and can't afford lots of system instructions.

#### **Example**

Tracking Name

2\_1\_support\_ticket

Reply to support ticket

Below is one example customer-support reply in our tone.

Example → "Hi Anna, thanks for flagging the invoice glitch ... let me fix that for you today!" --- Now reply to a customer who reports: "The analytics dashboard won't load on Safari."

40 Output

Hi there, thanks for letting us know about the issue with the analytics dashboard on Safari − I'll dig into this and get it sorted for you!

# **System Prompting**

EFFECTIVENESS EASE OF USE TIME TO PROMPT SUMMARY

★★★★ ≈ 7 min Powerful steering, needs planning.

### What is System Prompting?

System prompting means giving the AI preset instructions that define its behavior, tone, and role before any user input.

#### When to Use

- You need a persistent rule set across an entire chat session (e.g., compliance, brand voice).
- Multiple team-members will interact with the same chat and need consistent behaviour.
- You want to lock in constraints the user shouldn't overwrite.

Name	3_1_policy_bot	
Goal	Answer Company Policy-Related Questions	
Prompt	System: You are our company's policy bot. Follow ISO-27001 wording exactly, never invent numbers, and answer directly without using unncessary words. User: "What does our policy say about data retention?"	
4o Output	Our policy states: "Retention periods for informa"	
Note	System prompts work best when used through the OpenAl API. In the normal chat, the system prompt will be forgotten if it leaves the context window.	

# **Role Prompting**

EFFECTIVENESS EASE OF USE TIME TO PROMPT SUMMARY

★★★★ ≈ 2 min Quickly sets expertise & tone.

### What is Role Prompting?

Telling the model to "act as" a persona (chef, lawyer, coach) to shape voice & expertise.

#### When to Use

- You want the model to leverage a specialised viewpoint (lawyer, recruiter, senior dev).
- Stakeholders expect domain-specific vocabulary or best practices.
- Cross-functional discussions need expert framing without hiring a consultant.

Name	4_1_saas_cfo_role	
Goal	Compare the payment fees of SaaS solutions.	
Prompt	You are a CFO with 15 years of SaaS experience. Assess whether switching from Stripe to Adyen would cut our payment fees by ≥1 %.	
4o Output	To assess whether switching from Stripe to Adyen would reduce your payment processing fees by at least 1%, let's approach this like a SaaS CFO with 15 years of experience, focusing on actual cost structures, volume thresholds, and business model fit. (+250 Words)	

# **Contextual Prompting**

EFFECTIVENESS EASE OF USE TIME TO PROMPT SUMMARY

★★★ ≈ 6 min Adds depth with background info.

### What is Contextual Prompting?

You embed relevant background snippets (facts, policy text, specs) right inside the prompt.

#### When to Use

- The model needs proprietary or time-sensitive context (metrics, meeting notes, roadmap).
- Answers must align with internal language or ongoing projects.
- You want to avoid follow-up questions by front-loading facts.

Name	5_l_ceo_ql_notice	
Goal	Write a draft of the churn reduction plan.	
Prompt	Context: Our Q1 churn rose to 6 %. Main causes: (1) missing Zapier integration, (2) price increase. Task: Draft three bullet-proof responses for the CEO's all-hands explaining the plan to bring churn back below 3 %.	
4o Output	1. Prioritizing Zapier Integration to Boost Retention We heard our users loud and clear: the missing Zapier integration has been a key blocker. Our product team has already fast-tracked its development. We're aiming to launch a ful (+ 200 Words)	

# Step-back Prompting

EFFECTIVENESS	EASE OF USE	TIME TO PROMPT	SUMMARY
***	***	≈ 8 min	Improves answers via reflection.

### What is Step-back Prompting?

You ask the model to reflect on its answer ("Take a step back and check for missing points").

#### When to Use

- Problems feel stuck; you want the model to zoom out and re-frame them.
- The team is prone to tunnel vision and needs fresh alternatives.
- Risky decisions demand a "devil's-advocate" angle before commitment.

Name	6_1_hiring_rust	
Goal	Identify blind spots in hiring senior Rust developers remotely.	
Prompt	First: restate our hiring challenge in your own words. Then: list three assumptions we might be missing about hiring senior Rust developers remotely. Finally: propose one unconventional sourcing channel.	
4o Output	Our core challenge is competing for a small pool of senior Rust talent who value autonomy & OSS reputation more than salary. Missing assumptions: 1) Time-zone overlap may not be a top concern; 2) Rust devs congregate on niche Discord servers, not LinkedIn; 3) Remote-first companies must showcase compiler-level problems to attract them. Unconventional channel: sponsor the next "Rust Gamedev" jam and invite participants.	

# Chain of Thought (CoT)

EFFECTIVENESS EASE OF USE TIME TO PROMPT SUMMARY

★★★★ ≈ 7 min Shows reasoning step-by-step.

### What is Chain of Thought?

You instruct the model to "think step by step" and reveal its reasoning before the final answer.

#### When to Use

- Complex reasoning with multiple logical steps (pricing models, forecasts).
- You need transparency for audit or learning purposes.
- Accuracy matters more than speed.

Name	7_1_arr_calc
Goal	Determine required paying users for €2 M ARR.
Prompt	Think step-by-step: calculate how many paying users we need to reach €2M ARR if ARPU is €28 and churn is 3% monthly. Show your math, then state the final number.
4o Output	Reasoning Users required ≈ 6,430.

# **Self-Consistency**

	EFFECTIVENESS	EASE OF USE	TIME TO PROMPT	SUMMARY
****	**	≈ 12 min	Runs prompt multiple times & picks	
	^^^^	^^	12 111111	consensus.

### What is Self-Consistency?

Ask the model multiple times (with slight randomness) and choose the majority/best answer to reduce variance.

#### When to Use

- Critical tasks where a single wrong detail is costly (legal clauses, financial calcs).
- You can afford a few extra seconds for higher reliability.
- You want an internal check without manual review.

Name	8_1_aws_cost_cut
Goal	Cut AWS bill by 20% reliably.
Prompt	Generate three independent solutions for optimising our AWS bill by 20%. Afterward, compare them and return the single plan most likely to succeed, explaining why in 100 words.
4o Output	Chosen plan: Rightsize under-utilised EC2, migrate to Graviton instances, and adopt S3 Intelligent-Tiering — expected 22% savings. (100-word rationale)

# Tree of Thoughts (ToT)

EFFECTIVENESS EASE OF USE TIME TO PROMPT SUMMARY

★★★★ ≈ 15 min Explores multiple reasoning branches.

### What is Tree of Thoughts?

The model generates and evaluates several reasoning branches, then selects the best path.

#### When to Use

- Open-ended strategy design with branching options (product roadmap, market entry).
- Exploring trade-offs where each choice influences the next.
- You want to visualise or score alternatives before discussion.

Name	9_1_feature_tree		
Goal	Select the next big product feature.		
Prompt	Goal: Decide our next big feature.  Step 1 – Ideate three broad feature concepts.  Step 2 – For each, branch into two implementation styles.  Step 3 – Score every branch on dev effort (1-5) and revenue upside (1-5).  Return the tree in indented bullet format and highlight the highest total-score branch.		
4o Output	(Indented tree with scores) selected branch: "Usage-based Billing → Modular add-on"		

# Prompt Engineering – Best Practices (1/2)

### 1. Provide Examples

Few-shot examples act as mini teaching moments, giving the model a clear pattern and drastically improving accuracy.

### 2. Design with Simplicity

Keep prompts concise and unambiguous. If it confuses you, it will confuse the model. Prefer clear action verbs like *Summarise*, *Classify*, *Rewrite*.

### 3. Be Specific About the Output

Spell out length, style, or format. Specific instructions help the model focus on what matters.

#### 4. Use Instructions over Constraints

Positive "do" instructions are clearer than long "don't" lists. Reserve constraints for safety or compliance needs.

# Prompt Engineering – Best Practices (2/2)

### 5. Experiment & Iterate

Try different wording, ordering, and prompt types. Small tweaks often yield big improvements.

#### 6. Mix Up Few-shot Classes

For classification, vary example order to avoid over-fitting and improve generalisation.

### 7. Adapt to Model Updates

New model versions can change behaviour. Test your prompts regularly and adjust to leverage new capabilities.

#### 8. Collaborate & Document

Compare prompts with peers and keep a simple spreadsheet of versions, results, and feedback for future reference.