glean

The starter's guide to AI prompting for software engineers

A quick and comprehensive guide to writing great prompts for engineering workflows

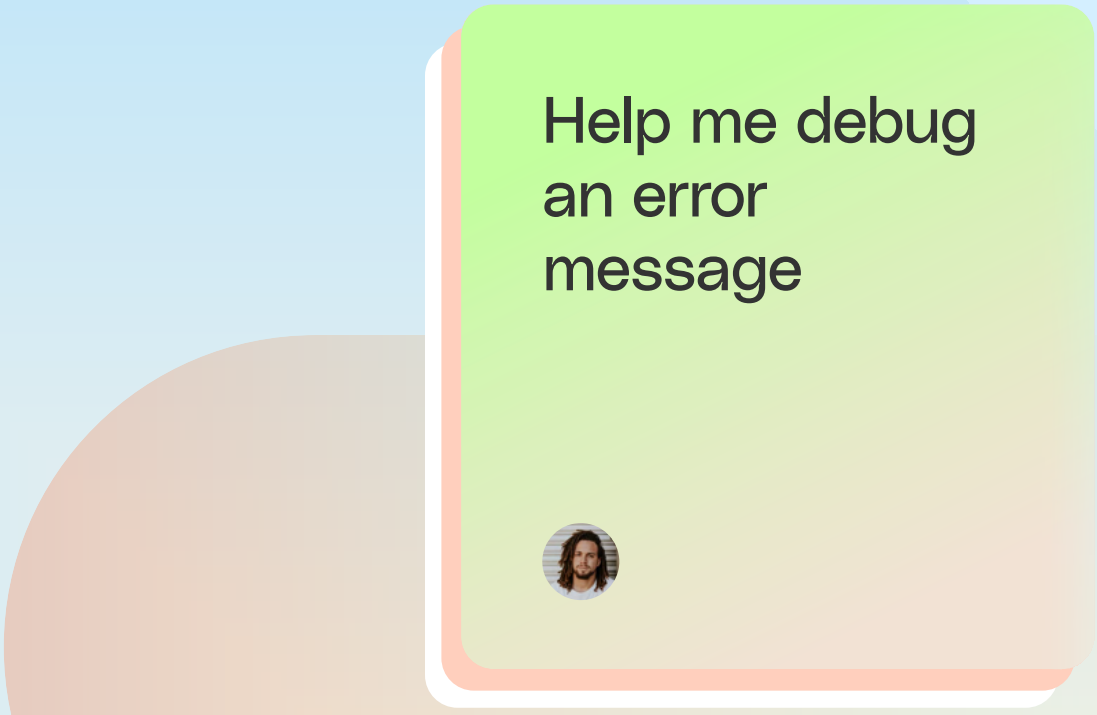


Table of Contents

1 Leveraging the power of AI 3

2 Writing a great prompt 4

3 Everyday prompts for engineering workflows 9

4 Conclusion 15

1 Leveraging the power of AI

Recent advancements in AI have made it a promising tool for unlocking the value of your organization's knowledge and maximizing the potential of your workforce. With the power of large language models combined with advanced information retrieval, days of manually searching through onboarding documentation, struggling through the code review process for pull requests, and debugging issues from scratch are over. Now, you can simply ask your questions or requests and receive immediate answers without spending the day sifting through documents or consulting colleagues.

However, effective use of enterprise AI tools relies upon clear and comprehensive directions written out by the user. While AI platforms like Glean are very capable of helping workers create, discover, organize, summarize, and accelerate all manner of workflows, effective instructions are needed to make that possible.

Prompts are effectively that – instructions made in conversational, natural language that contain all the right components needed to help the AI produce the user's desired result. While writing the perfect prompt is always a work in progress, we've compiled a handy guide to help you get started with writing great prompts that'll help your AI assistant deliver the answers you need to do your best work.

2 Writing a great prompt

Enterprise AI platforms such as Glean provide users with powerful tools with nearly endless possibilities for accelerating everyday work. Glean works for users across the entire organization as well, connecting with all the enterprise applications you love and use most – such as Slack, Salesforce, Zendesk, ServiceNow, Google Workspace, Jira, along with over a hundred other applications. By deeply understand all the data, people, processes, and context specific to your work, Glean's Work AI platform is capable of performing tasks such as:

- Summarizing documents
- Researching for and creating new content
- Catching up on Slack
- Preparing for meetings with customers
- Learning about your codebase
- Triaging customer support requests

Glean also recently introduced next-generation prompting with a set of advanced prompting capabilities that expand the use of Glean's Work AI platform to new users, use cases, and surfaces.

In this guide, we'll explore some best practices for prompting, along with various examples of how to use Glean in your daily workflows.

How does prompting work?

What exactly happens when you enter a prompt into Glean? The Glean uses a technique known as Retrieval Augmented Generation (RAG) to answer questions and complete tasks using your company's data.

Given a prompt, it does the following:

1. Retrieve information from relevant documents in the Glean index (RAG)
2. Use a large language model (such as GPT-4o, Claude, or Gemini) to process the retrieved information and generate a response to the prompt

The first step is absolutely crucial to achieving your desired result. To ensure its success, you'll need to make sure that your prompt is clear, comprehensive, and informative.

What are the keys to a great prompt?

The perfect prompt for each situation and the desired result will often look different. However, there are a few factors that are always good to keep in mind:

1 Format your output

Picture exactly what you're looking for, then describe the output layout as succinctly and clearly as possible. Don't leave anything up to the AI's imagination! Always include the structure of the final output in your prompt. For example, try to include phrases like:

- Write 5 paragraphs...
- Generate 10 bullet points...
- Create a table...
- Draft an email...
- Draft a FAQ...
- Draft an outline for 10 slides...
- Draft a short LinkedIn post...
- Create a meeting summary with action items...

Have a more complex output format that's difficult to put into words? You can instead point Glean to an example document containing that specific format and request results in a manner specific to the example provided.

2 Audience and tone

If you're creating a new piece of content, it'll need to be formulated appropriately according to the audience and occasion it's intended for. Include a specific audience and tone in the prompt for best results when it comes to generating content:

- Write this for a non-technical audience
- Write this for an executive review
- Write an empathic response to an angry customer email
- Make it casual and use emojis

Better yet, have an example for Glean regarding the exact language and tone to strive for? Provide it in the prompt for a more accurate result!

3 Specify a timeframe

Precision is critical to generating the best possible results. It's key to ensuring the accuracy of the retrieval process, particularly when the pool of potential files is considerably large.

For example, rather than asking Glean to look for "recent" documents, provide a specific timeframe to reference:

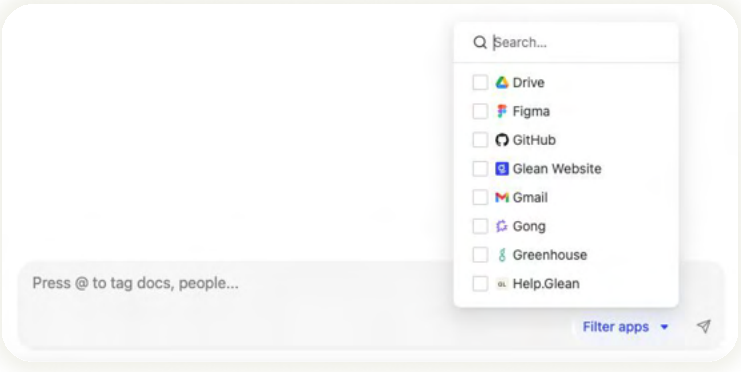
- ...from the past week
- ...from the past month
- ...since Jan 1, 2024
- ...between June and December 2023

This will great improve the quality of your results by narrowing the pool of information down to what's most relevant.

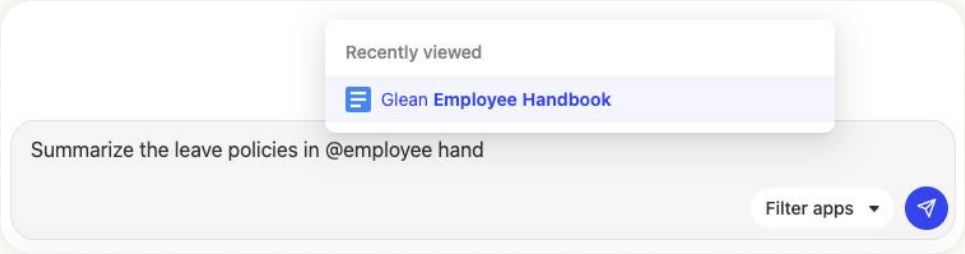
4 Specify your sources

Have a specific source in mind for the information you want? Narrow down the set of documents that Glean searches by either listing directly which apps to search in the prompt or by selecting one through the "Filter apps" selector in the Glean Chat composer:

- Search only #marketing or #engineering
- Search Gong calls with a specific customer account
- Search Jiras that mention a specific project



Better yet, if you've recently interacted with a document, type @ followed by the document's name into Glean to tag it directly through a popup! You can also paste in the URL of the document.



Glean enables users to be as specific as they'd like when creating prompts through our Prompt Builder, which allows anyone to easily create input fields by enclosing information in [[**double brackets**]]. It's easy to specify certain details, like so:

- Find Gong calls with [[**customer**]] from the past month
- Find Slack conversations from last week involving our rollout of [[**feature**]]
- Find our go-to-market presentation for [[**Q3**]]

So what does this all look put together? Let's say you're looking to get caught up on a long but critical Slack thread after a few days out of office, all in time for an early morning meeting. Here's what you might input as an ideal prompt:

I am catching up to a long Slack thread: [[Slack Thread URL]]

Give me a summary of the major topics that were discussed.

For each topic:

1. Write a 3 sentence summary of the discussion
2. Summarize the most recent resolution as of this week. If it has not been resolved, then summarize the remaining open questions and next steps.
3. List the people involved in the discussion.

3

Everyday prompts for engineering workflows

It's easy to get started with prompting and see real results right away. In this section, we'll explore some applicable prompts for every engineer across an organization, along with how and when to best apply them.

Enable comprehensive and expedited onboarding processes

Onboarding new engineers is often difficult, time-consuming, and expensive. Glean can help engineers new to a company or to a project get context on an area of code by understanding design goals, architecture decisions, code structure and organization, and which team members are knowledgeable and authoritative.

You can prompt Glean to explain code in simple terms, explaining its purpose and key functionality using plain language.

Analyze and describe the code snippet it in a way that's easy to understand using relevant documentation, issues and wikis: [[Code snippet]]	Explain the code's functionality, purpose, and its main components. Minimize the use of technical jargon and offer clear explanations for any technical terms used. The goal is to assist an engineer in gaining a basic understanding of the code's functionality at a high level.

Get a jumpstart on new products or systems with automated prototyping assistance

Struggling to get started with writing new code from scratch? Engineers can describe the specifications and requirements of a product or system, and Glean can provide visual or interactive prototypes based on the given description.

I'd like to start writing code for this feature: [[Feature name]]

First, search for only the feature name itself (without any extra keywords) to find any wikis, documents, or code files that are relevant.

Then display the ones that would be most helpful for someone getting started on this project. First prioritize getting started guides and documentation, followed by potentially relevant code files. Provide a link to each of these files.

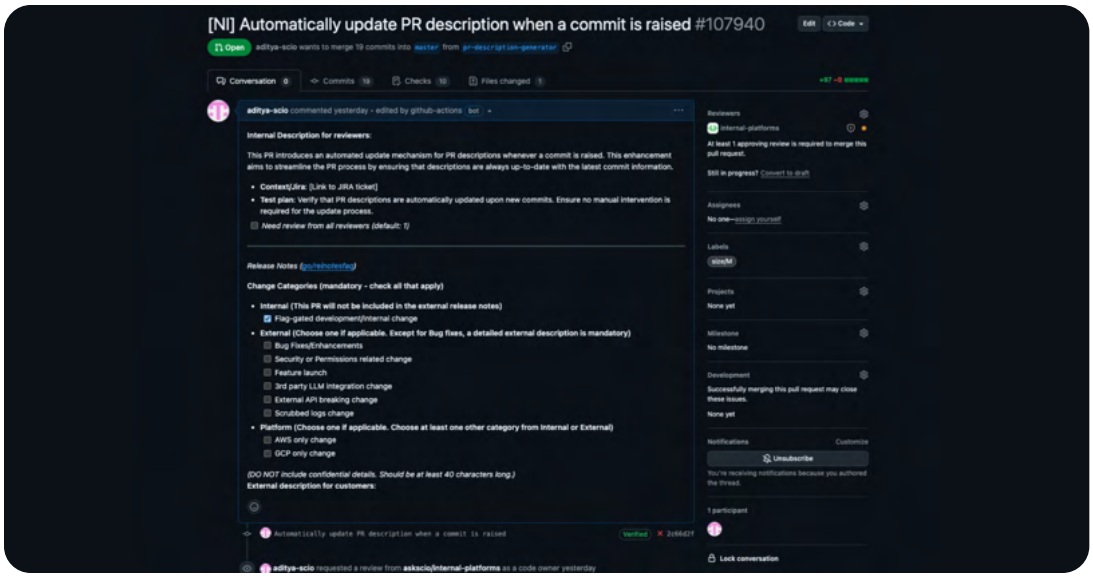
Accelerating code review through automated summarization and context search

Glean can help in reviewing code by summarizing pull requests and identifying key contributors and changes. It can also generate PR descriptions or review code per coding guideline in Github.

Users can ask Glean to summarize a pull request and provide details on the changes and their impact.

Summarize this pull request:
[[GitHub pull request URL]]

Include the following in the summary:
1. What is the motivation for the change?
2. What is the impact on our infrastructure or product?
3. Are the changes covered by unit tests?
4. Are there open items requested by the reviewers?



Debug errors with ease by acquiring immediate access to relevant documentation

Glean can assist in resolving technical queries or troubleshooting issues by providing immediate access to technical documentation and support articles. This functionality is crucial for maintaining operational efficiency.

Users can request Glean to identify the cause of an error message and report back on how best to resolve the issue.

When I run the following code:"'[[Code snippet]]"'I am getting the following error message:"'[[Error message]]"'

Please suggest the cause of the error and how I might fix the code.

Tackle incident management with confidence and context

Glean can assist in incident management by providing immediate access to relevant documentation, support articles, and past similar incidents. It can also help in identifying the root cause of incidents based on changed code, past data, and logs.

Analyze and debug a production issue:

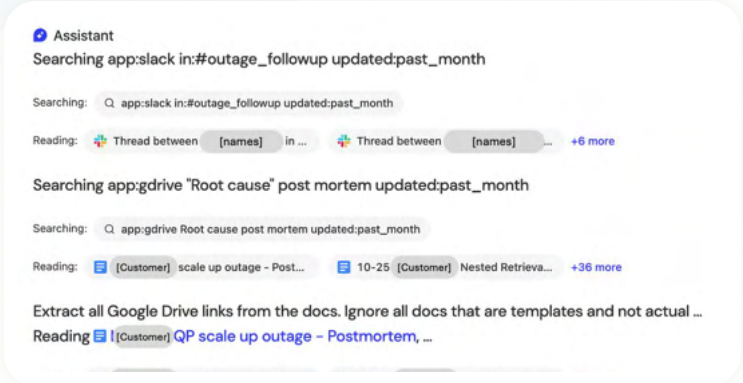
1. Read [[Issue]]
2. Search: Find relevant documents related to the error and possible playbooks.
3. Think: From the list of possible playbooks, select ONE playbook that can most likely help resolve the error.
4. Search: Based on error message, search for tickets with the same issue.
5. Respond: Provide 3 similar past issues.

Provide steps on how to resolve the issue from the selected playbook. Provide the names and emails of up to 3 experts to help resolve the issue.

Automate summarization of ongoing tickets and incidents

Compile a summary of all your open Jira tickets or incidents including links, any recent commentsm or requests directed at you. This functionality is crucial to understanding trends and areas of the product that need more proactive improvement.

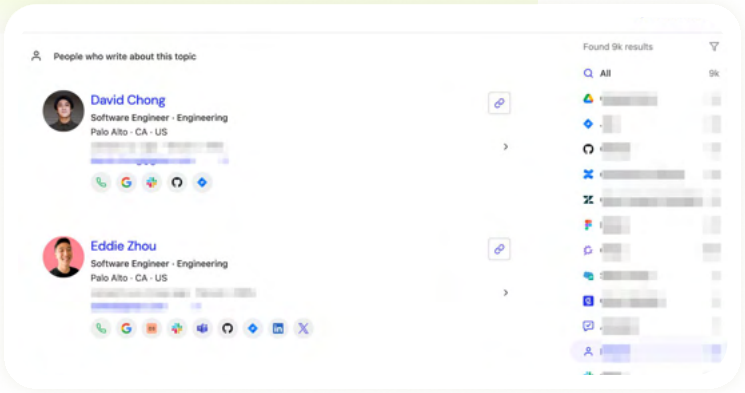
Summarize the status of all open Jira tickets assigned to me in bullets. Include links to all tickets. Summarize any new comments or asks directed to me.



Instantly locate the right subject matter expert to follow up with

Glean can identify subject matter experts within the organization, making it easier for engineers to find and consult with the right people for any situation or project.

Who is the main point of contact working on [[Topic]]?



Adjust code to match approved style guides

Ensuring code is aligned with approved style guides is important for consistency and readability. Users can ask Glean to review a code snippet and suggest improvements to align it with specified style guidelines.

Read my company's coding style guide:
[[Coding style guide URL]]

Suggest how I can improve the following code to match the style guide:
"""
[[Code snippet]]
"""

Research and summarization for code requirements

Glean can help engineers better understand the requirements for an area of code they are working on by helping summarize design docs/PRD inputs, analyze discussions on requirements in Slack/email/Confluence, or even search for customer dialogue in Gong calls related to the feature area.

Summarize the design document: [[Document URL]]	Organize the summary into sections including: context, goals, design, key metrics, launch and roll-out plan.

4 Conclusion

Although AI platforms are growing only more powerful by the day, users can get stuck utlizing very simple use cases – and those looking to go beyond often discover the reality that prompt engineering is hard work. It takes considerable effort to ensure that the results of the process are well-defined. Clear and comprehensive prompts are critical to ensuring that.

While leveraging AI for work may initially seem daunting, we hope this guide helps you get started with a foundational grasp of what it takes to write great prompts for software engineering workflows. You now have the means to prompt and automate everyday work, faster than ever before. The capabilities of Glean's next-generation prompting suite are endlessly explorable, customizable, and sharable, and there's no better time to get started than today!

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Work AI for all.

Looking to get started with your own prompts and explore the full capabilities of AI? Glean provides next-generation generative AI capabilities that'll help you and your teams easily accelerate day-to-day workflows.

Get a demo of Glean today, and join other leaders that have chosen Glean as their enterprise AI work platform of choice.

Get a demo