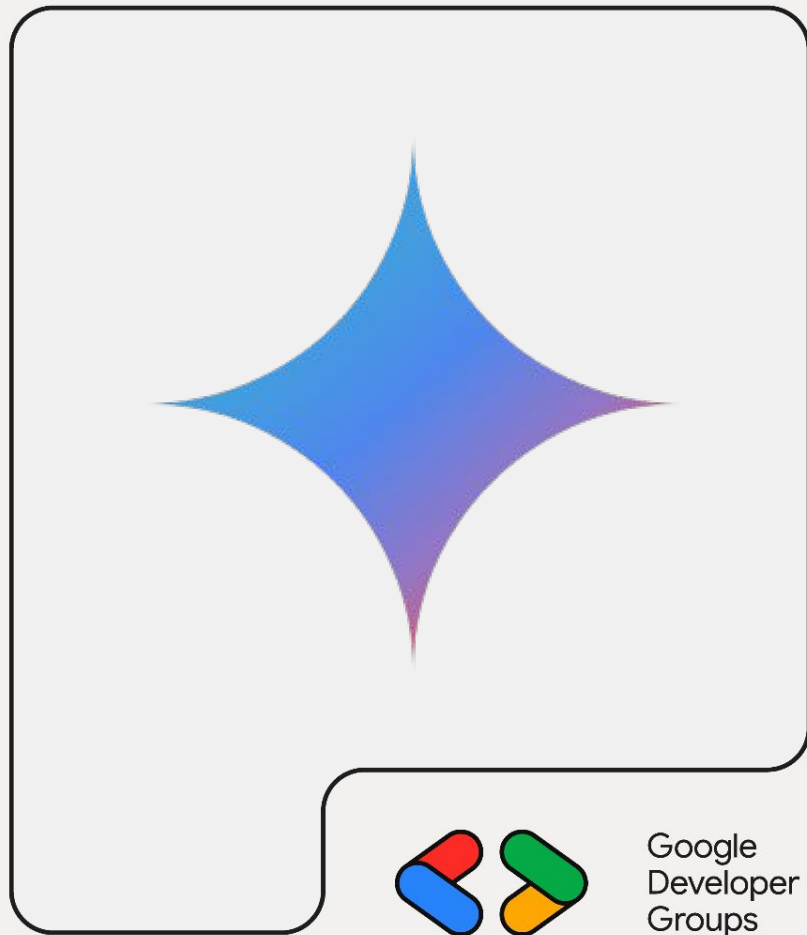
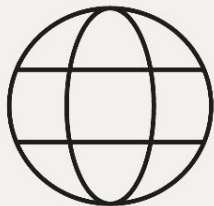


Gemini in Action: Building Smarter Applications

Dagmawi Esayas (aka Dagmawi Babi)

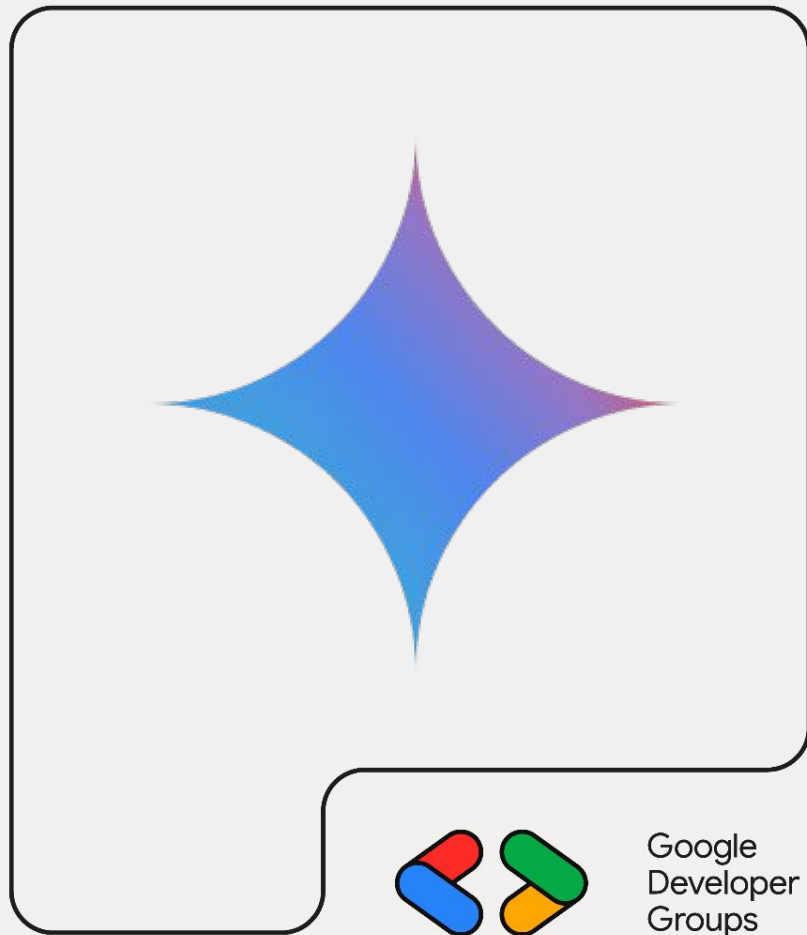


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Gemini in Action: Building Smarter Applications

Dagmawi Esayas (aka Dagmawi Babi)



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Who is this guy?



Google Developer Groups



**Full Stack Dev
Content Creator
Creative Developer
Podcast Host
Freelancer**

also a weirdo at times



Google Developer Groups



Why should I listen to him?



Google Developer Groups



I built ...

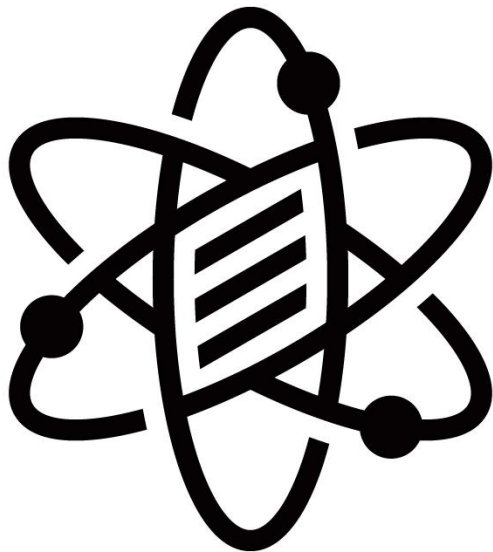
ScholArxiv

“One of the best, open source, beautiful, absolutely perfect, just mind blowing research paper exploring apps out there.”

– someone probably said this



Google Developer Groups



I built ...

ScholArxiv

And

Almost got sued!



Google Developer Groups

Hello! Just wanted to give you a heads up - "arXiv" is a registered trademark and cannot be used without authorization. arXiv and Cornell's legal team is enforcing this trademark. Right now, ScholArxiv is currently using the arXiv name without authorization. You can see best practices for the use of the arXiv name and logo here: info.arxiv.org/brand/brand-guidelines. We would encourage you to change your brand name as soon as possible. A quick tip: changing the capitalization to emphasize the word "scholar" may be enough to comply with this request (for example, SCHOLARxiv). Thank you for your understanding!

Oct 18, 2024, 9:05 PM

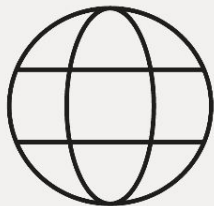
You accepted the request

So much eyebrow 🤔



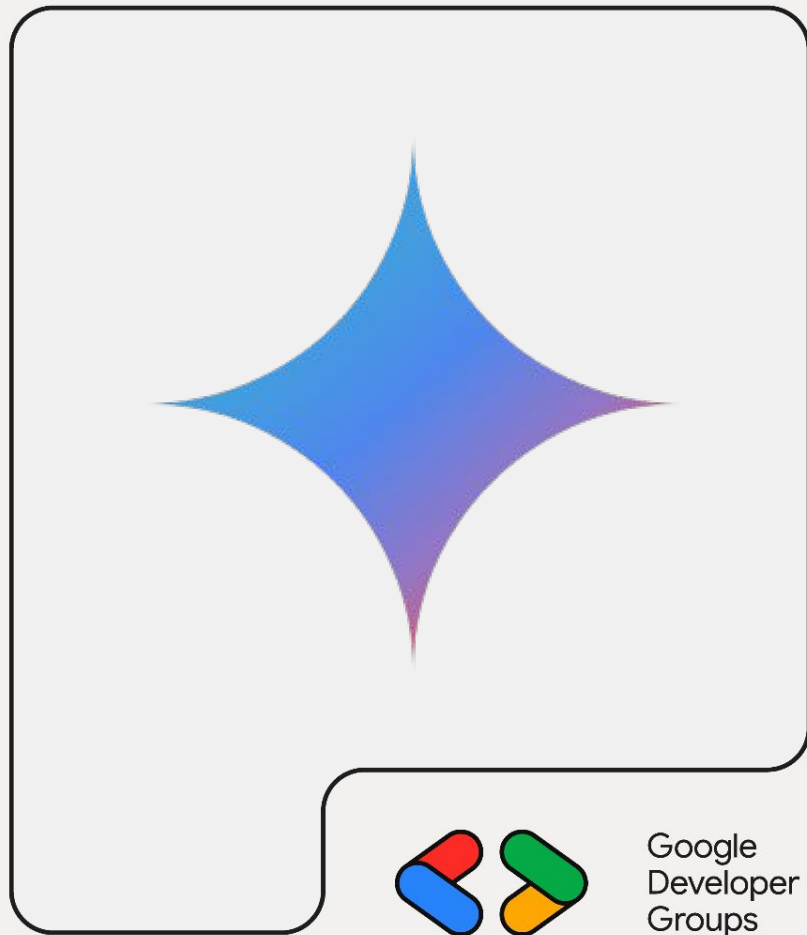
Google Developer Groups



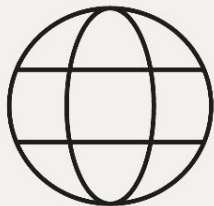


Gemini in Action: Building Smarter Applications

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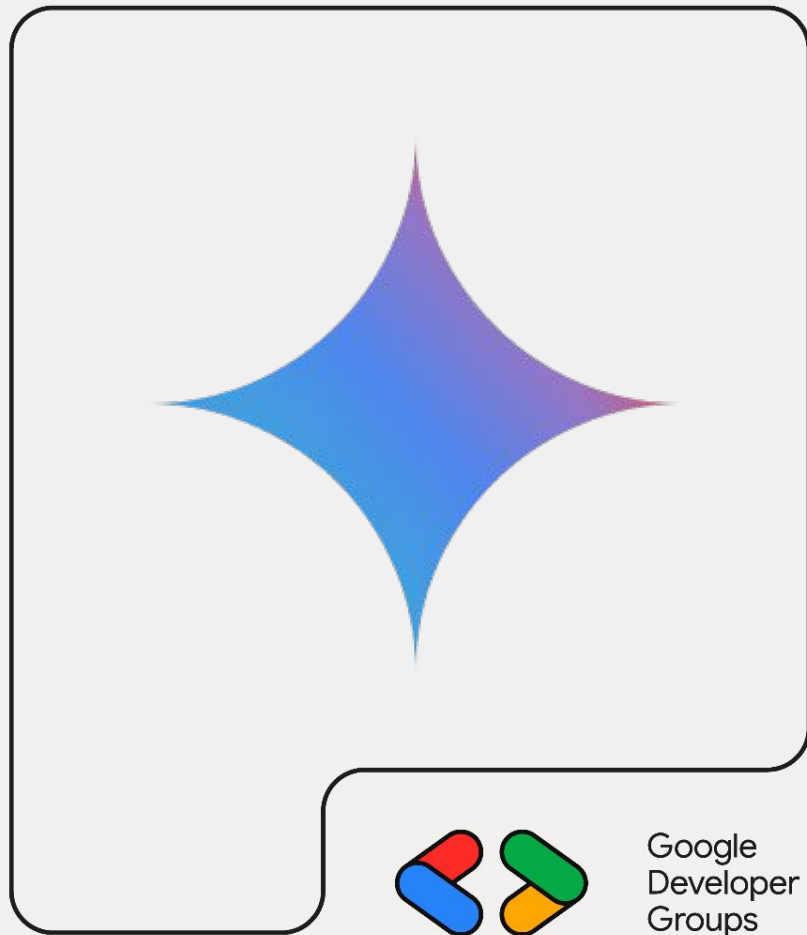


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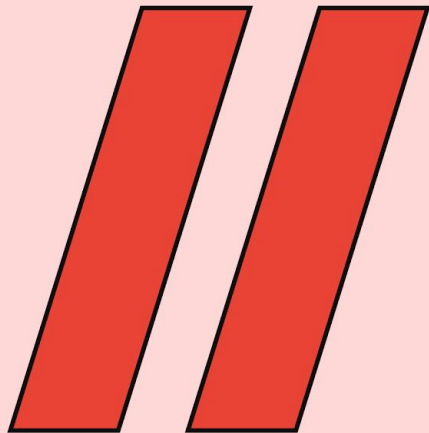
Gemini in Action: Building Smarter Applications

Dagmawi Esayas (aka Dagmawi Babi)



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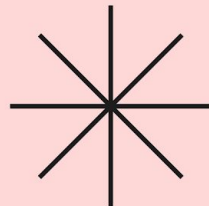
AI
@DevFest



Google
Developer
Groups

How to integrate an LLM into your apps

GEMINI – GROK – GPT-4o
Sonnet – LLaMA – Abebech

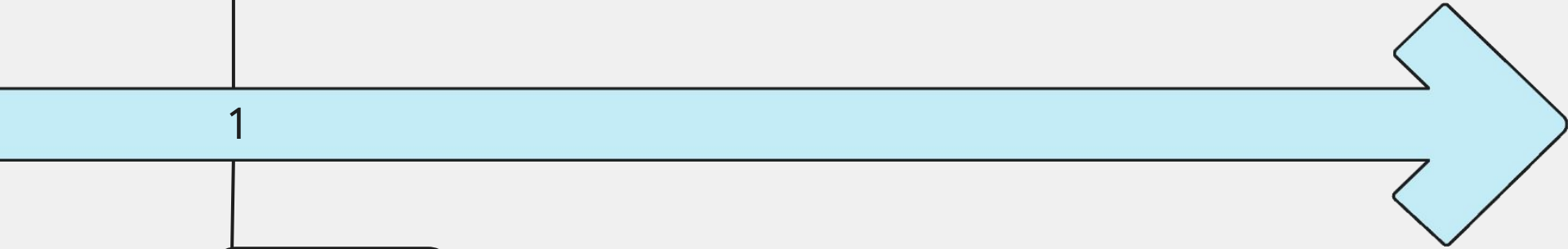


How to integrate an AI API into your apps?

Get an
API Key

1

Understand
the limits

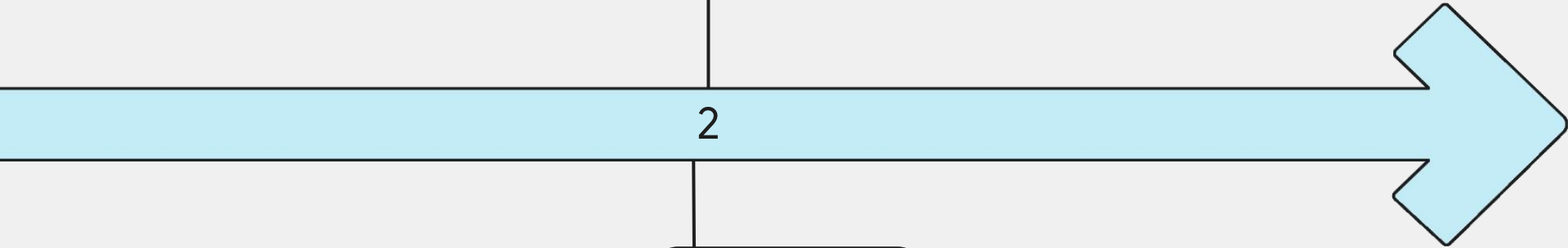


How to integrate an AI API into your apps?

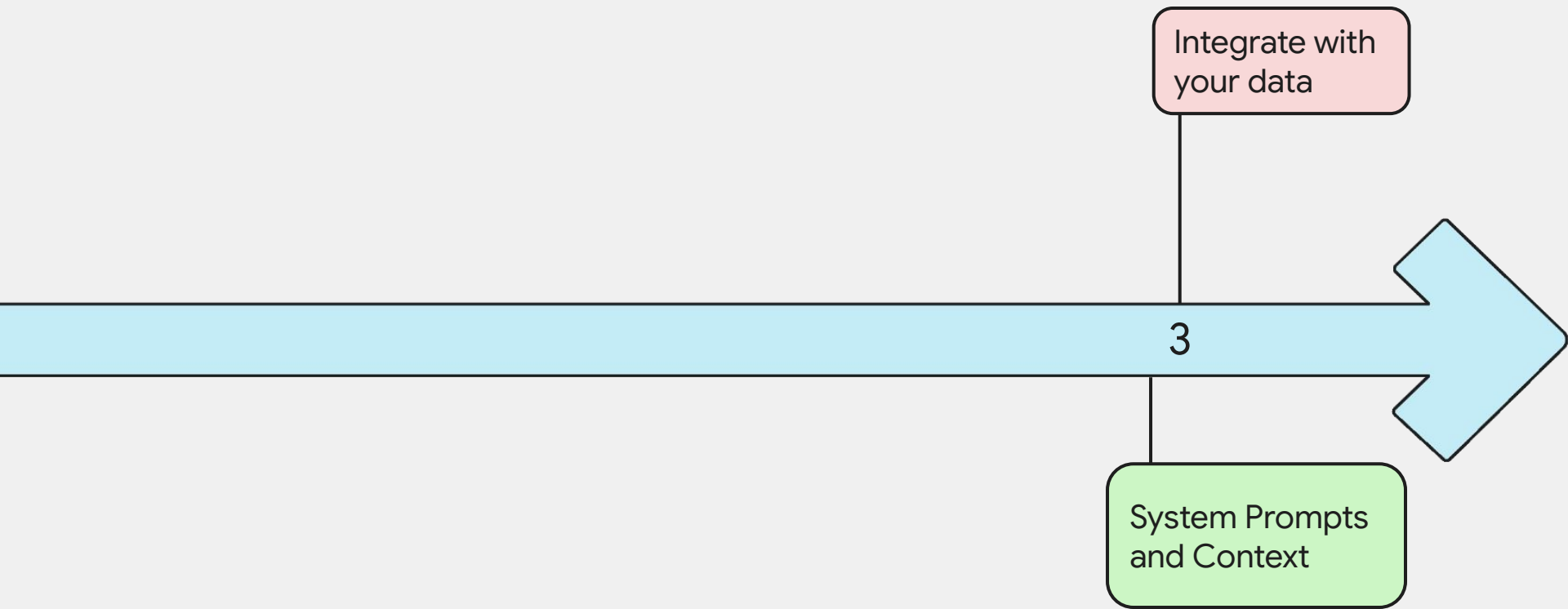
Use OpenAPI
Package

2

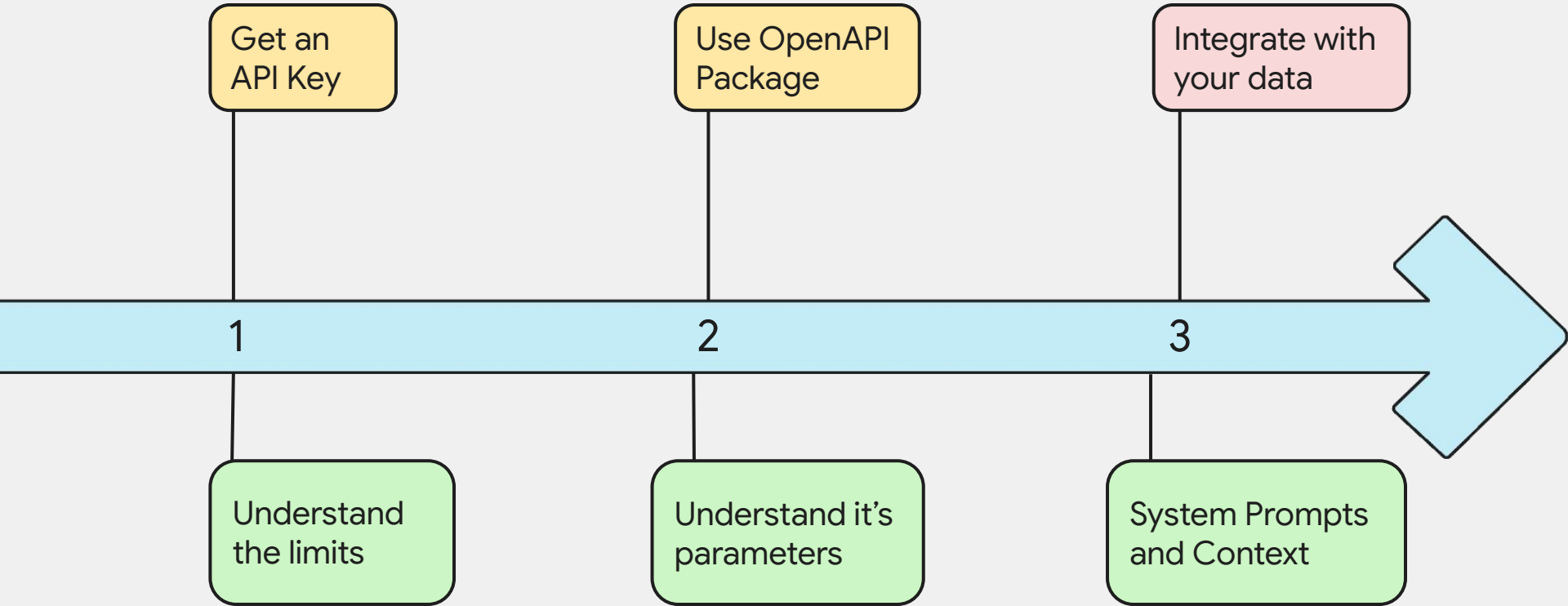
Understand it's
parameters



How to integrate an AI API into your apps?



How to integrate an AI API into your apps?



Steps

(1)

Visit Google's AI Studio (ai.google.dev)

(2)

(3)

(4)

(5)

Get started with the Gemini API

Google AI Studio is the fastest way to start building with Gemini, our next generation family of multimodal generative AI models.

[Sign in to Google AI Studio](#)

Try the 2 million token context window

Explore what is possible with the 2 million token context window.

[Try it out](#)

Get a Gemini API Key

Grab your API key and start integrating Gemini models into your apps.

[Get your API key](#)

Prompt Gallery

Visit our prompt gallery for examples of what's possible with Gemini models.

[Explore the Gallery](#)

Steps

(1)

Visit Google's AI Studio (ai.google.dev)

(2)

Get your API key

(3)

(4)

(5)

- Get API key
- Create new prompt
- New tuned model
- My library
 - Untitled prompt
 - View all
- Prompt Gallery

- Developer documentation
- Developer forum
- Gemini API for Enterprise

API keys

Cloud projects are subject to the [Google Cloud Platform Terms of Service](#), and use of Gemini API and Google AI Studio is subject to the [Gemini API Additional Terms of Service](#).

Remember to use API keys securely. Don't share or embed them in public code. Use of Gemini API from a billing-enabled project is subject to [pay-as-you-go pricing](#).

Quickly test the API by running a cURL command





[API quickstart guide](#)

```
curl \
  -H "Content-Type: application/json" \
  -d '{"contents":[{"parts":[{"text":"Explain how AI works"}]}]}' \
  -X POST "https://generativelanguage.googleapis.com/v1beta/models/gemini-1.5-flash-latest:generateContent?key=YOUR_API_KEY"
```

Use code with caution.

Create API key

Your API keys are listed below. You can also view and manage your project and API keys in Google Cloud.

Project number	Project name	API key	Created	Plan	
...9101	ScholArxivWeb 	...x77o	Oct 5, 2024	Free of charge Set up Billing View usage data	
...0621	Alexandria 	...X2PU	Aug 24, 2024	Free of charge Set up Billing	

Steps

(1)

Visit Google's AI Studio (ai.google.dev)

(2)

Get your API key

(3)

Install OpenAI Package

(4)

(5)

OpenAI TypeScript and JavaScript API Library

npm v4.73.1 minzipped size 28.3 kB JSR 4.71.1

This library provides convenient access to the OpenAI REST API from TypeScript or JavaScript.

It is generated from our [OpenAPI specification](#) with [Stainless](#).

To learn how to use the OpenAI API, check out our [API Reference](#) and [Documentation](#).

Installation

```
npm install openai
```

Installation from JSR

```
deno add jsr:@openai/openai  
npx jsr add @openai/openai
```

These commands will make the module importable from the `@openai/openai` scope:

You can also **import directly from JSR** without an install step if you're using the Deno JavaScript runtime:

```
import OpenAI from 'jsr:@openai/openai';
```

Install

```
> npm i openai
```

Repository

github.com/openai/openai-node

Homepage

[github.com/openai/openai-node#read...](https://github.com/openai/openai-node#readme)

Weekly Downloads

2,356,933



Version

4.73.1

License

Apache-2.0

Unpacked Size

2.74 MB

Total Files

906

Issues

69

Pull Requests

6

Last publish

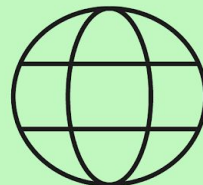
4 days ago

Web
@DevFest



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npm i openai

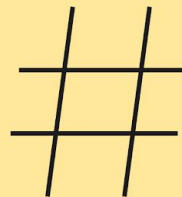


Mobile
@DevFest



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```
dart pub add openai
```



Steps

(1)

Visit Google's AI Studio (ai.google.dev)

(2)

Get your API key

(3)

Install OpenAI Package

(4)

Understand Limits and Parameters

(5)

Gemini 1.5 Flash →

Gemini 1.5 Flash-8B

Gemini 1.5 Pro

Gemini 1.0 Pro

Text Embedding 004

Gemini 1.5 Flash

AVAILABLE NOW

Our fastest multimodal model with great performance for diverse, repetitive tasks and a 1 million context window. Now generally available for production use.

Free of charge

The Gemini API “free tier” is offered through the API service with lower rate limits for testing purposes. Google AI Studio usage is completely free in all [available countries](#).

RATE LIMITS

15 RPM (requests per minute)
1 million TPM (tokens per minute)
1,500 RPD (requests per day)

INPUT PRICING

Free of charge

OUTPUT PRICING

Free of charge

CONTEXT CACHING

Free of charge, up to 1 million tokens of storage per hour

TUNING PRICE

Input/output prices are the same for tuned models. Tuning service is free of charge.

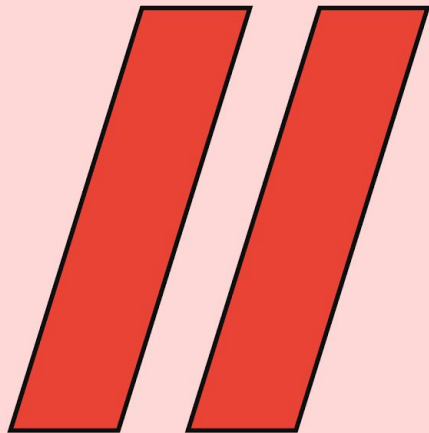
GROUNDING WITH GOOGLE SEARCH

Not available

Steps

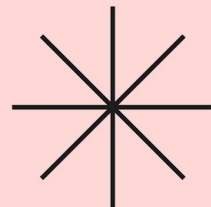
- 1 Visit Google's AI Studio (ai.google.dev)
- 2 Get your API key
- 3 Install OpenAI Package
- 4 Understand Limits and Parameters
- 5 Dagm is so cool

AI
@DevFest

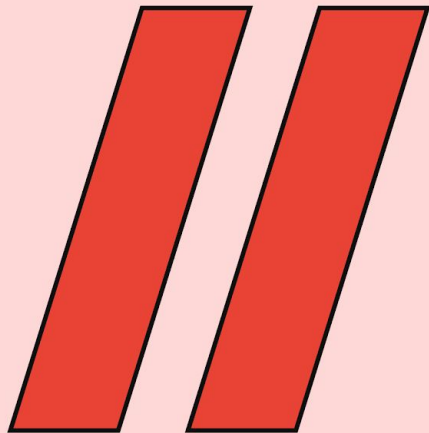


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Demo time :)



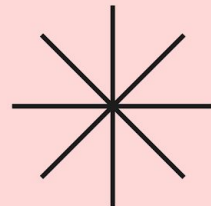
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What is the world doing with LLMs right now?

Rabbit R1



The Rabbit R1 Dream



Google Developer Groups



Just in time for this talk
I asked them to send me
one Rabbit R1



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rabbit inc. 🌟



rabbit inc. 🌟

@rabbit_hmi

rabbit brings the future of human-machine interface. order r1, your pocket companion, now.

Joined January 2023 · 75.9K Followers



Followed by Ian Koos, Matthi Schmid, and 30 others you follow

RABITTTTT
SEND ME ONE RABBIT

Wed 1:46 AM



rabbit support - Where can I buy rabbit r1?

They said no :(

Sorry.



Google Developer Groups

rabbit inc. 🐰



RABITTTTT
SEND ME ONE RABBIT

Wed 1:46 AM



rabbit support - Where can I buy rabbit r1?

From rabbit.tech

hi Dagmawi 🐰



we don't currently have a review program for our devices so we wouldn't be able to send you one for free, but if you're interested in getting an r1 you can always order one from our website.

if you pay through PayPal for example they also have a financing option available.

or you could maybe ask for it as a birthday present from a family member at some point? 🎁

here's a list of all countries we currently ship to:

Wed 1:49 AM



Codenight Weekly Digest: 003

This recap summarizes key discussions,...



NOV 21



Codenight Weekly Digest: 001

This week in CodeNight, the community...

NOV 21



Codenight

odenight Weekly igest : 004

Codenight Weekly Digest #004

Shipping, Scaling, and Side Projects



NOV 24

Most Popular

[VIEW ALL](#)

Codenight Weekly Digest: 003

NOV 21



Codenight Weekly Digest: 001

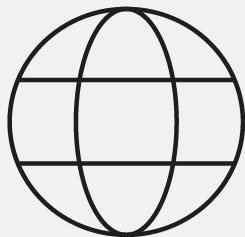
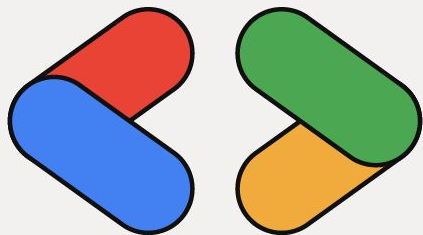
NOV 21



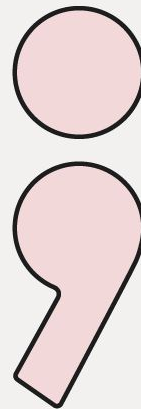
Codenight Weekly Digest: 002

NOV 21





Finally...



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Remember how I built

ScholArxiv

And

Almost got sued!



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Oct 18, 2024, 9:05 PM

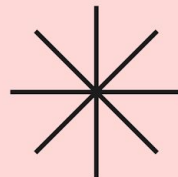
You accepted the request



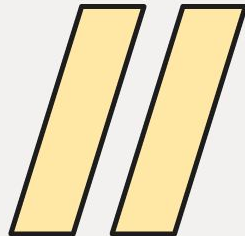
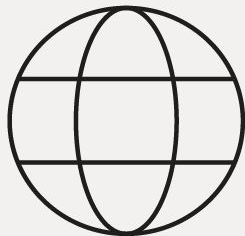
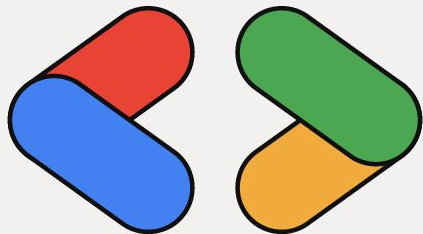
Sneak Peak :)



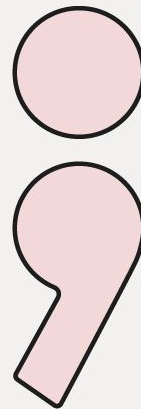
Google
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AI
@DevFest



Thank You So Much!
You've been so lovely.



Google
Developer
Groups