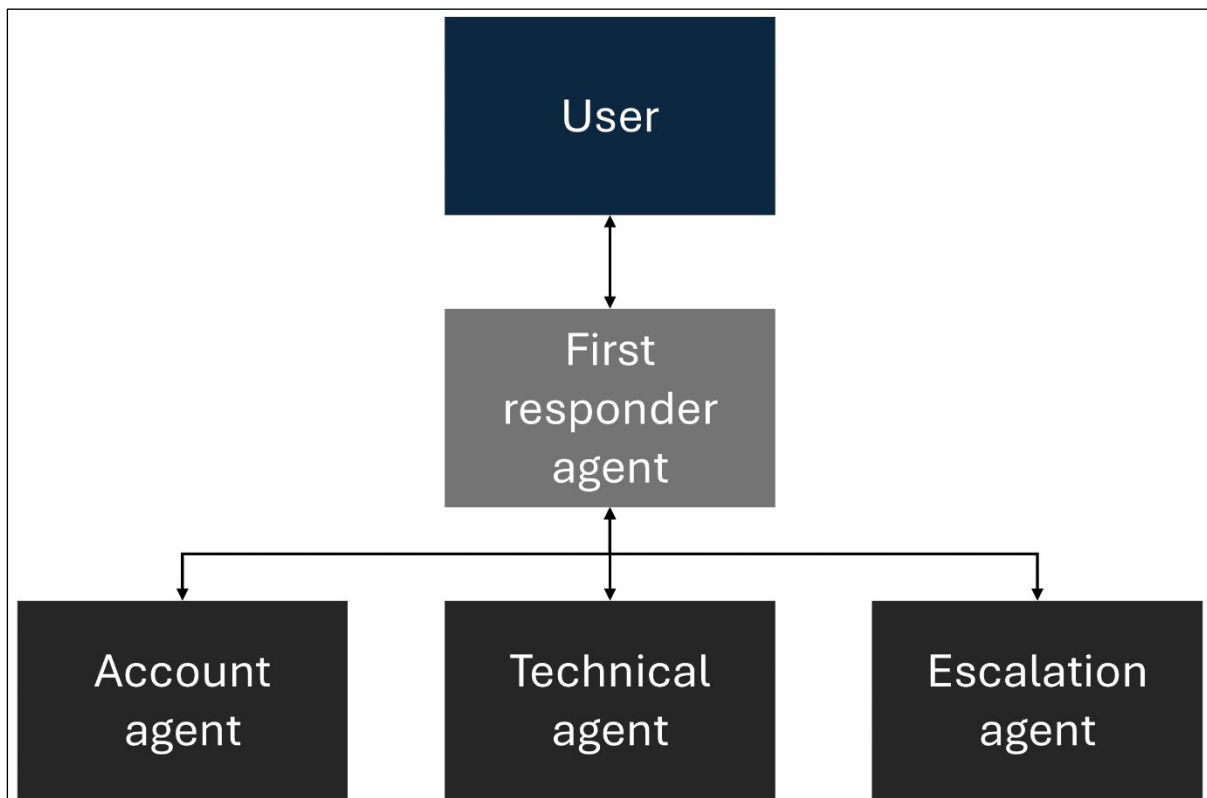


Chapter 2: Introduction to OpenAI Agents SDK



Habib / Default project

Playground **Dashboard** Docs API reference

DASHBOARD

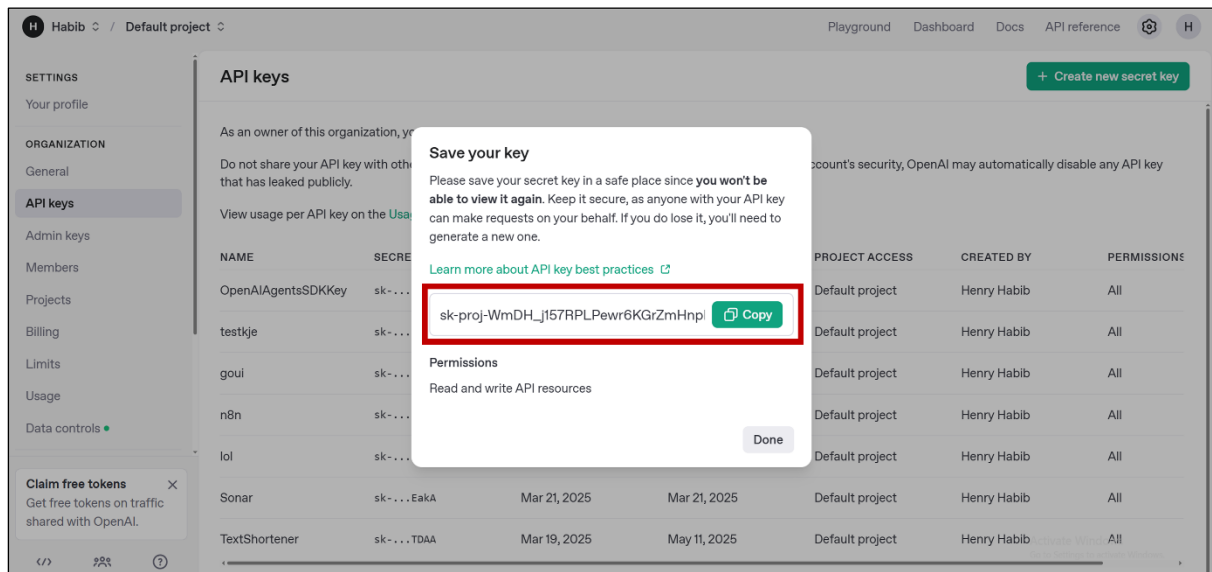
- Prompts
- Logs
- Traces**
- Assistants
- Batches
- Evaluations

Traces / Agent workflow trace_7b77fa7b76dc4a... Refresh Details

Customer service agent	2,810 ms
POST /v1/responses	1,643 ms
get_order_status	1 ms
POST /v1/responses	1,155 ms

Claim free tokens X
Get free tokens on traffic shared with OpenAI.

Chapter 3: Environment Setup and Developing Your First Agent



EXPLORER

✓ ROOT

- > .venv
- > Chapter3
- > Chapter4
- > Chapter5
- > Chapter6
- > Chapter7

⚙️ .env

co

Welcome To Colab

File Edit View Insert Runtime Tools Help

Q Commands + Code + Text ▶ Run all Copy to Drive

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Getting started

Data science

Machine learning

More Resources

Featured examples

+ Section

Welcome to Colab!

Access Popular LLMs via Google-Colab-AI Without an API Key

Users with Colab's paid plans have free access to most popular LLMs via google-colab-ai [getting started with google colab ai](#).

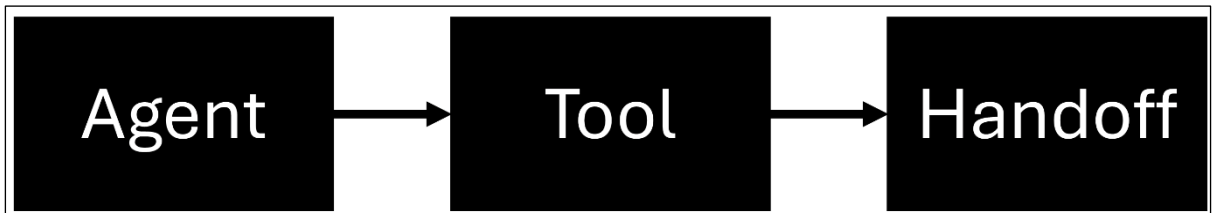
```
from google.colab import ai
response = ai.generate_text("What is the capital of France?")
print(response)
```

Explore the Gemini API

The Gemini API gives you access to Gemini models created by Google DeepMind. Gemini multimodal, so you can reason seamlessly across text, images, code, and audio.

How to get started?

- Go to [Google AI Studio](#) and log in with your Google account.
- [Create an API key](#).
- Use a quickstart for [Python](#), or call the REST API using [curl](#).



H Habib / Default project Playground Dashboard Docs API reference H

DASHBOARD

Prompts

Logs

Traces

Assistants

Batches

Evaluations

Claim free tokens

Get free tokens on traffic shared with OpenAI.

< Traces / Agent workflow

trace_7b77fa7b76dc4a...

Refresh Details

Customer service agent

2,810 ms

POST /v1/responses

1,643 ms

get_order_status

1 ms

POST /v1/responses

1,155 ms

H Habib / Default project

PlaygroundDashboardDocsAPI referenceH

DASHBOARD

Prompts

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Fine-tuning

Storage

Claim free tokens
Get free tokens on traffic shared with OpenAI.

< Traces / Agent workflow

trace_7b77fa7b76dc4a

Customer service agent

POST /v1/responses

get_order_status

POST /v1/responses

Span details

Input85t

User

What's the status or my order? My Order ID is 200

Output17t

Function Call

Arguments

get_order_status({
 "orderId": 200
})

Output

No output

H Habib / Default project

PlaygroundDashboardDocsAPI referenceH

DASHBOARD

Prompts

Logs

Traces

Assistants

Batches

Evaluations

Fine-tuning

Storage

Claim free tokens
Get free tokens on traffic shared with OpenAI.

< Traces / Agent workflow

trace_7b77fa7b76dc4a

Customer service agent

POST /v1/responses

get_order_status

POST /v1/responses

Span details

get_order_status

Function1msspan_cb9c8c49...

Properties

CreatedJun 22, 2025, 6:30 PM

Function call

get_order_status({
 "orderId": 200
})

Output

Delayed

H Habib / Default project

PlaygroundDashboardDocsAPI referenceH

DASHBOARD

Prompts

Logs

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Assistants

Batches

Evaluations

Fine-tuning

Storage

Claim free tokens
Get free tokens on traffic shared with OpenAI.

< Traces / Agent workflow

trace_7b77fa7b76dc4a

Customer service agent

POST /v1/responses

get_order_status

POST /v1/responses

Span details

User

What's the status or my order? My Order ID is 200

Function Call

Arguments

get_order_status({
 "orderId": 200
})

Output

Delayed

Output29t

Assistant

Your order with ID 200 is currently delayed. If you have any further questions or need assistance, feel free to let me know!

H Habib / Default project

PlaygroundDashboardDocsAPI referenceH

DASHBOARD

Prompts

Logs

Traces

Assistants

Batches

Evaluations

Fine-tuning

Storage

< Traces / Agent workflow

trace_3d11eafff38f49f5...

RefreshDetails

Customer service agent1,785 ms

POST /v1/responses1,776 ms

Handoff > Customer Retention Agent0 ms

Customer Retention Agent1,892 ms

POST /v1/responses1,892 ms

Claim free tokens

Get free tokens on traffic shared with OpenAI.

Chapter 4: Agent Tools and MCPs

Habib

Default project

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Storage

Usage

Claim free tokens

Get free tokens on traffic shared with OpenAI.

Traces / Agent workflow

trace_aeed44dfc474e...

CryptoTracker

POST /v1/responses

get_crypto_prices

POST /v1/responses

Span details

Properties

Created

Jul 6, 2025, 3:09 PM

Function call

get_crypto_prices({
 "crypto": {
 "coin_ids": [
 "bitcoin",
 "ethereum"
]
 }
})

Output

{'bitcoin': {'usd': 108575}, 'ethereum': {'usd': 2534.56}}

Habib

Default project

Dashboard

Prompts

Logs

Traces

Assistants

Batches

Evaluations

Fine-tuning

Storage

Usage

Traces / Agent workflow

trace_60bf5f0cd0c84...

CustomerSupportAgent

5,016 ms

POST /v1/responses

1,797 ms

POST /v1/responses

1,721 ms

get_customer_orders

0 ms

get_order_information

0 ms

get_order_information

1 ms

get_order_information

0 ms

POST /v1/responses

1,487 ms

Habib

Default project

Dashboard

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Evaluations

Fine-tuning

Storage

Usage

Storage

Files

Vector stores

+ Create

DroneFiles

0 KB

7/8/2025, 5:41 AM

vs_686ce7bc2ad081918f297d962afae95

MEMORIESTWO

2 KB

5/23/2025, 8:40 PM

vs_683115602e408191960a249fbc34028d

MEMORIES

9 KB

5/23/2025, 3:54 PM

vs_6830d277fd04819184d47a413c4e93c8

VECTOR STORE

DroneFiles

ID

vs_686ce7bc2ad081918f2

Estimated usage

0 KB hours

so far this month

GB per day

Size

0 KB

H Habib / Default project

PlaygroundDashboardDocsAPI reference

DASHBOARD

Logs

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Storage

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Help

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FilesVector stores

Create

DroneFiles7/8/2025, 5:41 AM

0 KB -
vs_686ce7bc2ad081918f297d962afae95

MEMORIESTWO5/23/2025, 8:40 PM

2 KB -
vs_683115602e408191960a249fbc34028d

MEMORIES5/23/2025, 3:54 PM

9 KB -
vs_6830d277fd04819184d47a413c4e93c8

VECTOR STORE

DroneFiles

ID

vs_686ce7bc2ad081918f2

Estimated usage

so far this month

GB per day

Size

0 KB

Last active

Jul 8, 2025, 5:43 AM

Expiration policy

Never

Add files



Span details

Code Interpreter

Code

```
# Define the variables
principal = 800000 # Loan principal in dollars
annual_interest_rate = 0.06 # Annual interest rate in decimal
loan_term_years = 30 # Loan term in years

# Calculate the monthly interest rate
monthly_interest_rate = annual_interest_rate / 12

# Calculate the number of payments (months)
number_of_payments = loan_term_years * 12

# Calculate the monthly payment using the formula
monthly_payment = principal * (monthly_interest_rate * (1 + monthly_interest_rate)
** number_of_payments) / \
    ((1 + monthly_interest_rate) ** number_of_payments - 1)
```



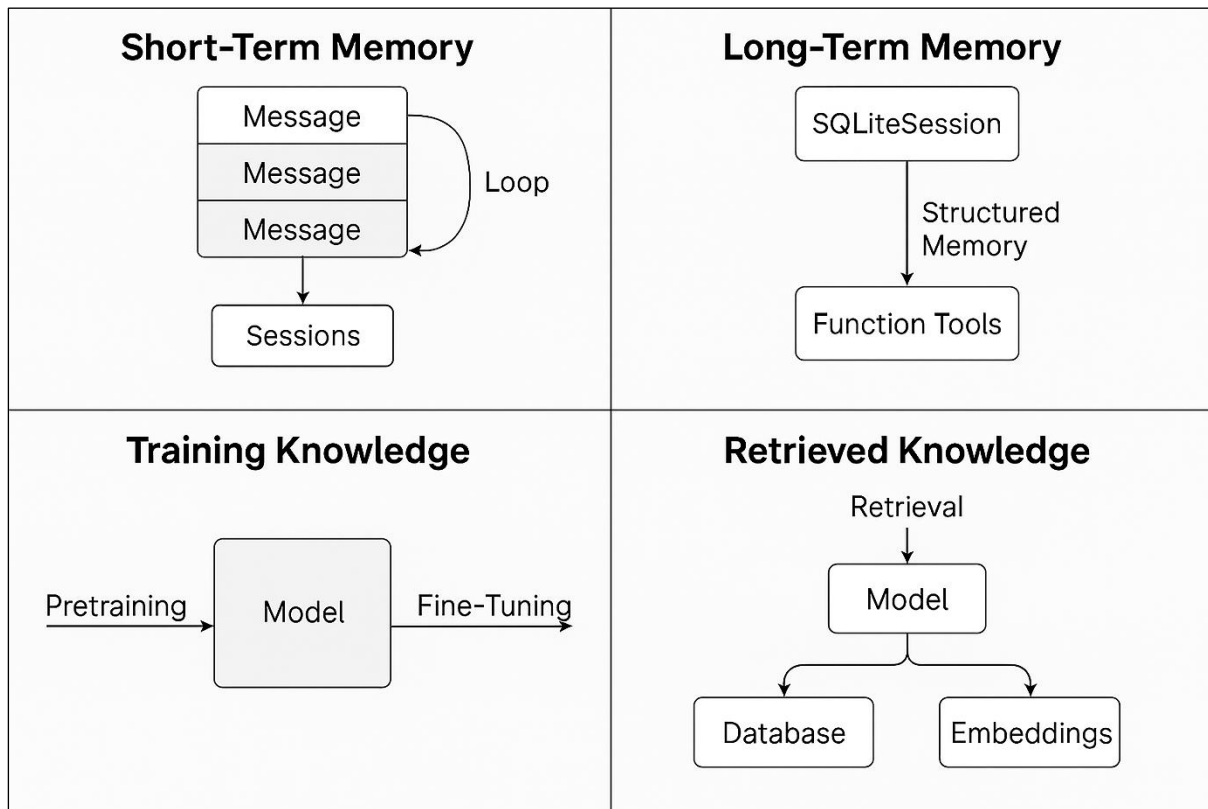
[Traces](#) / [Agent workflow](#) `trace_93662acc0fc64...`

Agent	Time	Progress
Agent	18.46 s	
POST /v1/responses	3,236 ms	
LocationAgent	3,334 ms	
LocationAgent	3,333 ms	
POST /v1/responses	3,332 ms	
LocationAgent	3,638 ms	
LocationAgent	3,637 ms	
POST /v1/responses	3,637 ms	
POST /v1/responses	1,168 ms	
DistanceCalculatorAgent	9,683 ms	
DistanceCalculatorAgent	9,683 ms	
POST /v1/responses	9,682 ms	
POST /v1/responses	730 ms	

2.2 Flight Safety

- **Maximum Altitude:** Do not fly the drone above 60 feet (20 meters) to avoid potential conflicts with manned aircraft.

Chapter 5: Memory and Knowledge



Dashboard interface showing the 'Storage' section. The 'Storage' section is highlighted in the sidebar. The main content area displays a list of storage items under the 'Vector stores' tab. A '+ Create' button is visible in the top right corner.

Storage

Files Vector stores

DroneFiles 7/8/2025, 5:41 AM

0 KB --
vs_686ce7bc2ad081918f297d962afae95

MEMORIESTWO 5/23/2025, 8:40 PM

2 KB --
vs_683115602e408191960a249fbc34028d

MEMORIES 5/23/2025, 3:54 PM

9 KB --
vs_6830d277fd04819184d47a413c4e93c8

VECTOR STORE

DroneFiles

ID vs_686ce7bc2ad081918f2

Estimated usage 0 KB hours · \$0.1 / so far this month GB per day

Size 0 KB

H Habib / Default project

Dashboard Docs API reference H

Create

Chat

Audio

Images

Assistants

Manage

Usage

API keys

Logs

Storage

Batches

Optimize

Evaluations

Features

< Traces / Agent workflow trace_c17a2eef40254a48

USConstitutionTool

POST /v1/responses

Span details

File Search

Searched files

USConstitution.txt USConstitution.txt USConstitution.txt

USConstitution.txt USConstitution.txt USConstitution.txt

USConstitution.txt USConstitution.txt USConstitution.txt

USConstitution.txt USConstitution.txt USConstitution.txt

USConstitution.txt USConstitution.txt USConstitution.txt

USConstitution.txt USConstitution.txt USConstitution.txt

USConstitution.txt USConstitution.txt

"How old do senators need to be?"

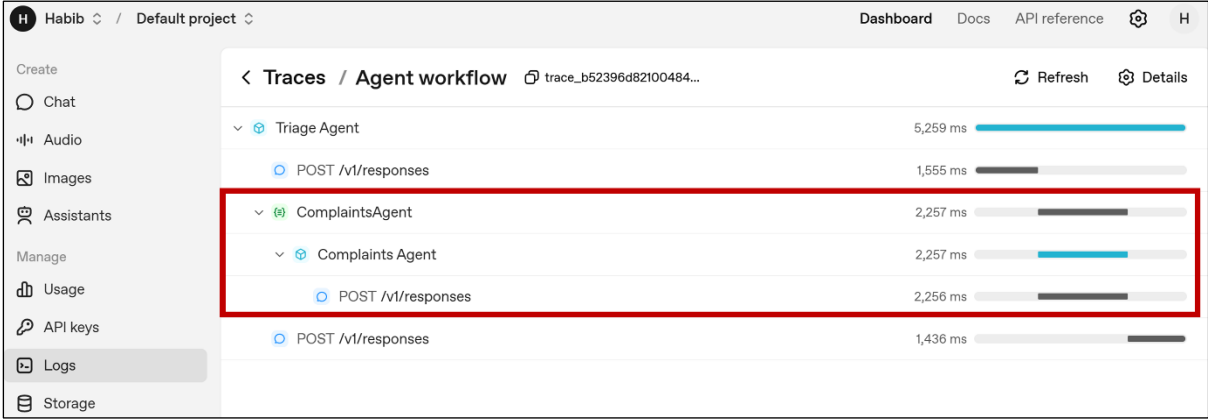
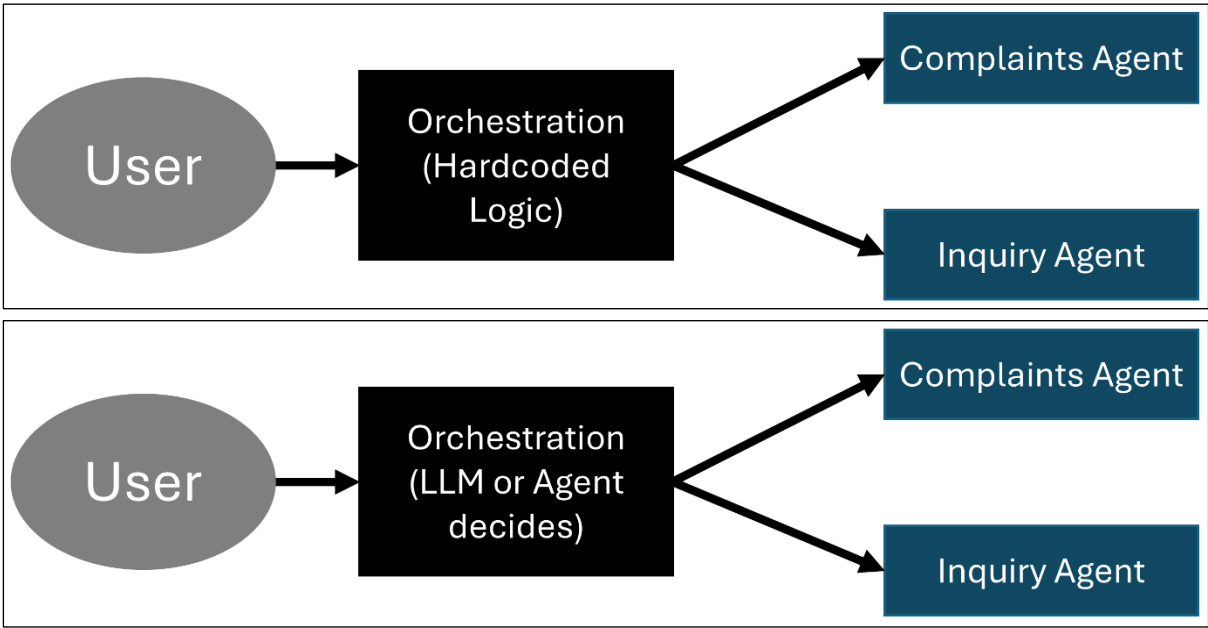
Assistant

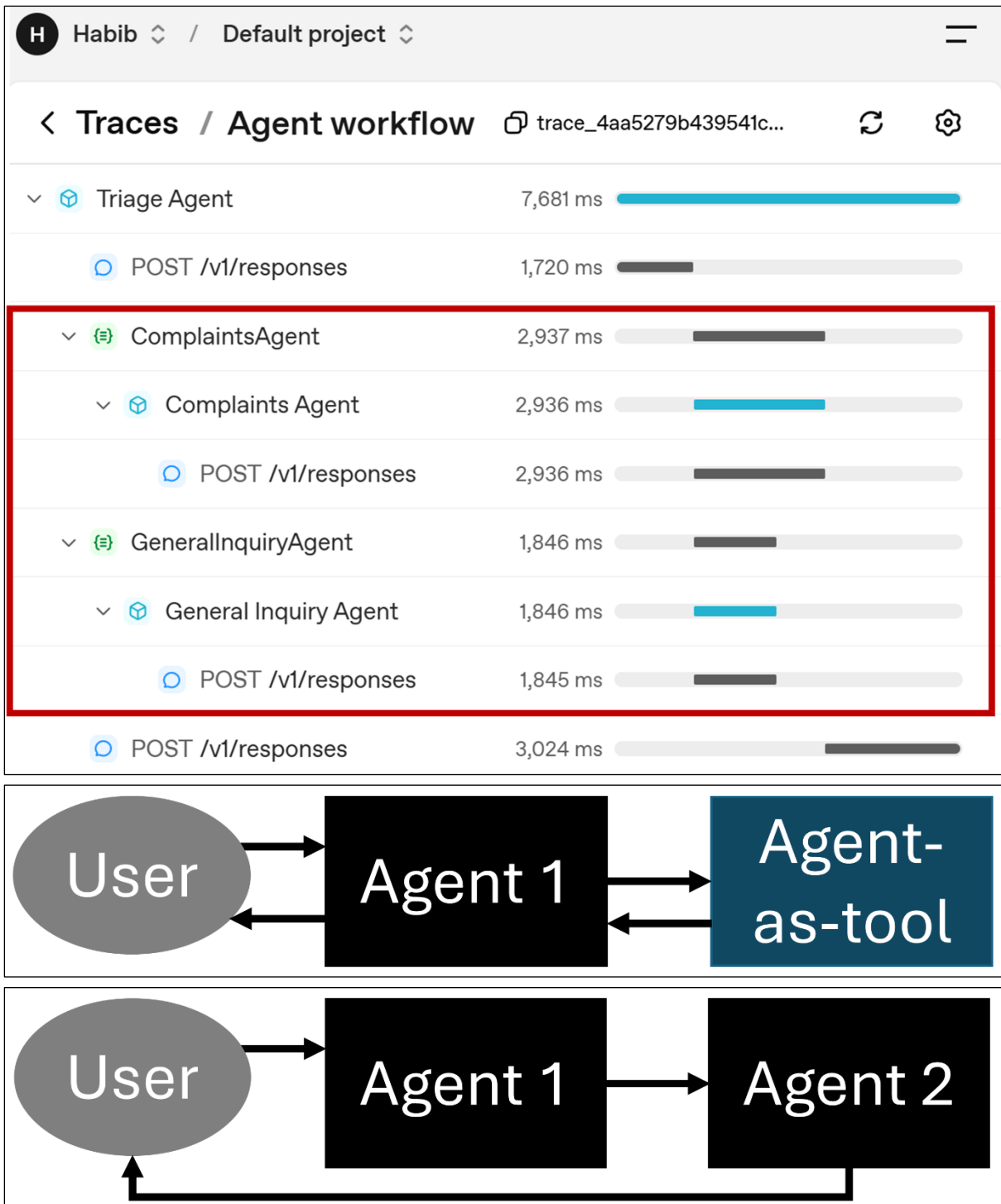
Senators must be at least 30 years old.

USConstitution.txt

🔍 📄

Chapter 6: Multi-Agent Systems and Handoffs





H Habib / Default project

< Traces / Agent workflow

trace_210ad0220b094d0...

↺

⚙

▼ 📦 Triage Agent	1,632 ms	
○ POST /v1/responses	1,622 ms	
🔗 Handoff > Complaints Agent	0 ms	
▼ 📦 Complaints Agent	2,963 ms	
○ POST /v1/responses	2,962 ms	

< Traces / Multi-agent system

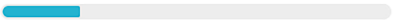
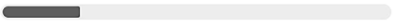
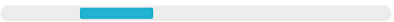
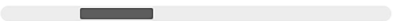
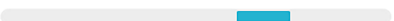
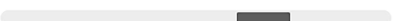
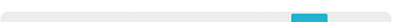
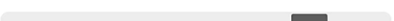
trace_69c8cf16fb604139...

▼ 📦 Triage Agent	1,150 ms	
○ POST /v1/responses	1,139 ms	
▼ 📦 Triage Agent	879 ms	
○ POST /v1/responses	878 ms	
🔗 Handoff > Sales Agent	0 ms	
▼ 📦 Sales Agent	1,757 ms	
○ POST /v1/responses	1,756 ms	
▼ 📦 Sales Agent	843 ms	
○ POST /v1/responses	842 ms	
🔗 Handoff > Complaints Agent	0 ms	
▼ 📦 Complaints Agent	1,958 ms	
○ POST /v1/responses	1,957 ms	

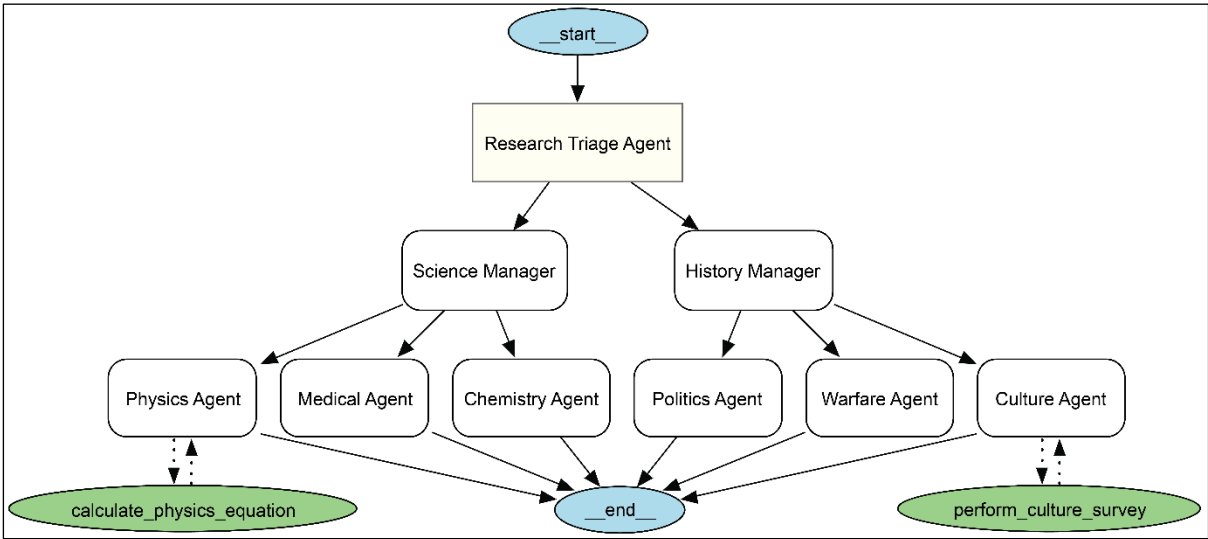
< Traces / Hierarchical system trace_a946061a45e74da...

✓  Research Triage Agent	1,503 ms	
○ POST /v1/responses	1,493 ms	
 Handoff > History Manager	0 ms	
✓  History Manager	908 ms	
○ POST /v1/responses	907 ms	
 Handoff > Warfare Agent	1 ms	
✓  Warfare Agent	2,206 ms	
○ POST /v1/responses	2,205 ms	

< Traces / Decentralized system trace_904764e7be4c4c8...

✓  Landlord Agent	15.16 s 
○ POST /v1/responses	15.15 s 
✓  Tenant Agent	14.31 s 
○ POST /v1/responses	14.31 s 
✓  Landlord Agent	16.45 s 
○ POST /v1/responses	16.45 s 
✓  Tenant Agent	10.58 s 
○ POST /v1/responses	10.58 s 
✓  Landlord Agent	7,232 ms 
○ POST /v1/responses	7,231 ms 
✓  Tenant Agent	6,176 ms 
○ POST /v1/responses	6,175 ms 
✓  Summarizer Agent	5,761 ms 
○ POST /v1/responses	5,760 ms 

Chapter 8: Agent System Management



< Traces / Input Guardrails

trace_c9943226b6ca4a0...

Customer service agent

0 ms

complaint_detector_guardrail

0 ms

< Traces / Agent workflow

trace_3f397c191d764238...

Trace

Refresh

QuestionAnswerAgent

Spans

2,667 ms

POST /v1/responses

2,657 ms

POST /v1/responses

Response

36t

2657ms

span_37425776...

Properties

Span Properties

Created

Aug 16, 2025, 5:52 PM

ID

resp_68a0fd8fd3608199bac0...

Model

gpt-4o-2024-08-06

Tokens

36 total

Configuration

Response

text

Verbosity

medium

Instructions

System Instructions

You are an AI agent that answers questions in as few words as possible

Logs

Completions

Responses

Traces

Workflow Search...

Group Search...

Metadata

Workflow

Flow

Henry's Workflow

QuestionAnswerAgent

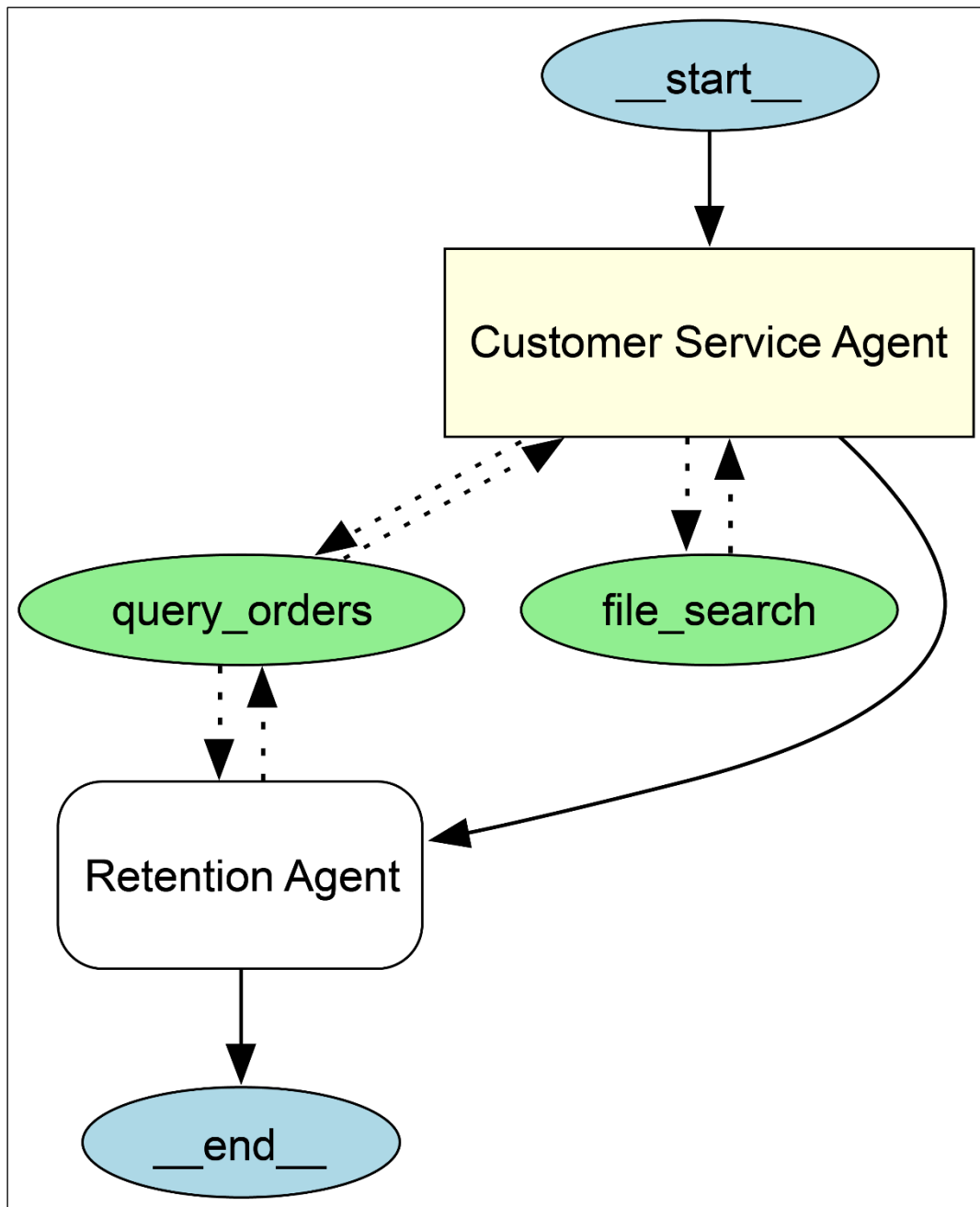
< Traces / Henry's Workflow trace_a0c30f61c8cc469d... ↺ ⚙️		
🔗 Task 1	5,013 ms	
▼ 🔗 Task 2	1,398 ms	
▼ 🧠 QuestionAnswerAgent	1,396 ms	
🔗 POST /v1/responses	1,387 ms	
🔗 Task 3	5,013 ms	
🔗 Task 4	5,004 ms	

< Traces / Henry's Workflow trace_9f0ff2fe02ce48f6a... ↺ ⚙️		
▼ 🔗 Task 1	1,213 ms	
▼ 🧠 QuestionAnswerAgent	1,212 ms	
🔗 POST /v1/responses	1,202 ms	
▼ 🔗 Task 2	739 ms	
▼ 🧠 QuestionAnswerAgent	739 ms	
🔗 POST /v1/responses	738 ms	
▼ 🔗 Task 3	1,835 ms	
▼ 🧠 QuestionAnswerAgent	1,835 ms	
🔗 POST /v1/responses	1,833 ms	
▼ 🔗 Task 4	1,470 ms	
▼ 🧠 QuestionAnswerAgent	1,470 ms	
🔗 POST /v1/responses	1,470 ms	

< Traces / Henry's Workflow 🔗 trace_A1B2C3 ↺ ⚙️		
▼ 🔗 Task 1	2,353 ms	
▼ 🔗 QuestionAnswerAgent	2,352 ms	
🔗 POST /v1/responses	2,341 ms	
▼ 🔗 Task 1	2,266 ms	
▼ 🔗 QuestionAnswerAgent	2,265 ms	
🔗 POST /v1/responses	2,255 ms	
▼ 🔗 Task 1	1,605 ms	
▼ 🔗 QuestionAnswerAgent	1,603 ms	
🔗 POST /v1/responses	1,594 ms	

< Traces / Henry's Research Workflow 🔗 trace_6e5f8b8823194713... ↺ ⚙️		
▼ 🔗 Research Task	4,021 ms	
▼ 🔗 Research	4,020 ms	
🔗 POST /v1/responses	2,390 ms	
🔗 POST /v1/responses	1,620 ms	
🔗 get_fun_facts	0 ms	
▼ 🔗 Text Generation Task	3,230 ms	
▼ 🔗 Text Generation	3,230 ms	
🔗 POST /v1/responses	3,230 ms	

Chapter 9: Building AI Agents and Agentic Systems



Habib / Default project

Dashboard Docs API reference

Create

- Chat
- Audio
- Images
- Assistants

Manage

- Usage
- API keys
- Logs
- Storage

Storage

Files Vector stores

+ Create

Store Name	Size	Created At
PaperCoCustomerServiceMaterials	9 KB	8/19/2025, 10:17 PM
Untitled store	64 KB	7/21/2025, 8:00 PM
Untitled store	0 KB	7/21/2025, 8:00 PM

VECTOR STORE

PaperCoCustomerServiceMa...

ID: vs_68a5302b710c81919a9

Estimated usage: 384 KB so far this month

Cost: \$0.1 / GB per day

H Habib / Default project

DashboardDocsAPI reference

Create

Chat

Audio

Images

Assistants

Manage

Usage

API keys

Logs

Storage

Storage

Files

Vector stores

PaperCoCustomerServiceMaterials

8/19/2025, 10:17 PM

9 KB -

vs_68a5302b710c81919a916b264bb31fef

Untitled store

7/21/2025, 8:00 PM

64 KB -

vs_687ed4bb479c81919b530ab152f373d8

Untitled store

7/21/2025, 8:00 PM

0 KB -

vs_687ed4a8fad48191b91a1be29775964f

VECTOR STORE

PaperCoCustomerServiceMa...

ID

vs_68a5302b710c81919a9

384 KB

· \$0.1 /

hours

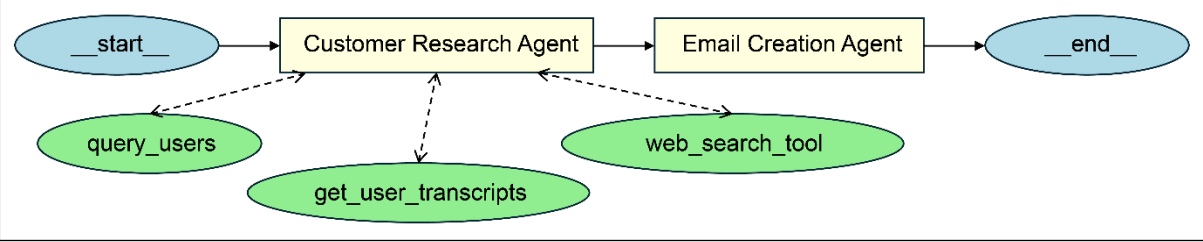
so far this

month

GB per

day

Estimated usage



< Traces / Workflow automation agent for user: 1			trace_8c630339dbea49
Customer Research Agent	29.10 s		
POST /v1/responses	2,814 ms		
query_users	9 ms		
POST /v1/responses	1,370 ms		
get_user_transcripts	8 ms		
POST /v1/responses	24.89 s		
Email Creation Agent	4,724 ms		
POST /v1/responses	4,721 ms		

