

# FlutterFlow



# OpenAI API

## Project Two



### Image Interpretation

The Image Interpretation project is an intelligent application built with  **FlutterFlow** and powered by

the  **OpenAI Image & Vision API**

Its purpose is to act as a visual interpreter for users by analyzing provided image URLs to generate detailed descriptions, explanations, and contextual insights regarding\* the visual content.

# 1. Context and Overview

The Image Interpretation project is an AI-powered visual assistant that brings computer “vision”. It integrates  **FlutterFlow** (low-code UI) with the  **OpenAI Image API** (using gpt-5mini). This fusion lets users upload any image URL, ask natural questions about it, and receive accurate, detailed answers instantly demonstrating seamless low-code and multimodal AI integration.

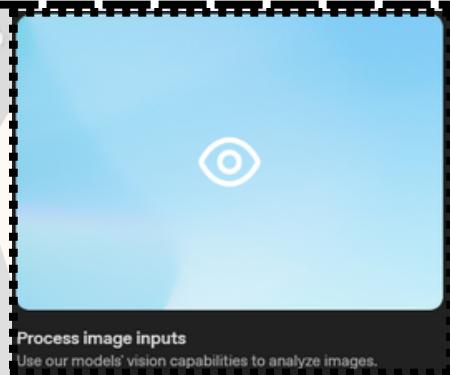


# 2. Understanding the OpenAI Image API

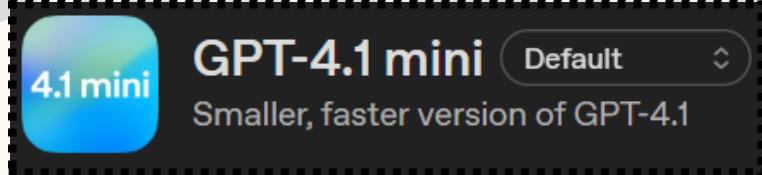
OpenAI's Image API allows:

This category of models:

- Image interpretation
- Object detection
- Scene description
- Reading embedded text (OCR-like)
- Safety-aware analysis



Specifically for this project



```
"input": [  
  { "role": "user",  
  "content": [  
    { "type": "input_text", "text":  
      "PROMPT" },  
    { "type": "input_image",  
      "image_url": "URL_IMAGE" }  
  ]  
]
```

The default of image inputs utilize the gtp.4.1.mini

This flexible format allows combining a user prompt with any online-hosted image.

# 3. Creating the Project and API Keys

In the OpenAI dashboard

Create the project named

The screenshot shows the OpenAI dashboard interface. At the top, there is a header bar with the text "A Adriano" and "Image Interpretation: Visual Helper". Below the header, there is a button labeled "+ Create project" and a highlighted button labeled "Image Interpretation: Visual Helper".

Generate an API Key

The screenshot shows the "API keys" section in the OpenAI dashboard. It features a key icon and the text "API keys". To the right, a red starburst icon with the text "Don't Share your API Key" is displayed. Below this, a table lists the details of a single API key:

NAME	STATUS	SECRET KEY	CREATED	LAST USED	CREATED BY
API_Key_Image_Interpretation	Active	sk-...1o8A	1 de dez. de 2025	1 de dez. de 2025	Lazy Cap

Store the key securely ( FlutterFlow  → variables)

The screenshot shows the "Variables" screen in FlutterFlow. It displays a table with one row, showing a variable named "API\_KEY\_Image\_Interpretation" with a type of "String" and a value of "False".

Variables	Type	Is List
API_KEY_Image_Interpretation	String	False



# 4. Screen Design in FlutterFlow

FlutterFlow



Container 1

Title: Image Interpretation: Visual Helper

URL\_IMG

Image URL

Button

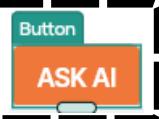


Image URL

Question\_Text\_Field

Write a Question Related to the image

Container 2

Answer

Preview

Image Interpretation: Visual Helper

Image URL

Image Adress

Ask a Question

Write a Question Related to the image

ASK AI

Answer

# 5. Creating the API Call Inside FlutterFlow

API Calls + Add New API Call

Name: "Image Interpretation"

Set as POST

Image Interpretation  
api.openai.com/v1/responses

POST

Add headers:

- Content-Type: application/json
- Authorization: Bearer [API\_KEY\_Image\_Interpretation]

Headers

```
Content-Type: application/json
Authorization: Bearer [API_KEY_Image_Interpretation]
```

Create variables

Variables	Name	Type	Is List
	API_KEY_Image_Interpretation	String	False
	PROMPT	String	False
	URL_IMG	String	False

- API\_KEY\_Image\_Interpretation → string
- PROMPT → string (input from user)
- URL\_IMG → string (input from user)

Define Response Variable:

Response & Test

\$.output[:].content[:].text

Answer = JSON Path

JSON Path	Name	Response Preview	Type
\$.output[:].content[:].text	Answer	[Click "Test API Call" to view preview]	String

In JSON Body, add:

the OpenAI API doc

Docs

Call Definition

```
"input": [
  { "role": "user",
  "content": [
    { "type": "input_text", "text": "PROMPT" },
    { "type": "input_image", "image_url": "URL_IMAGE" }
  ]
}
```



Insert

Variables: API\_KEY\_Image\_Interpretation PROMPT URL\_IMG

```
1 {
2   "model": "gpt-4.1-mini",
3   "input": [
4     {
5       "role": "user",
6       "content": [
7         {
8           "type": "input_text",
9           "text": "PROMPT"
10        },
11        {
12          "type": "input_image",
13          "image_url": "URL_IMAGE"
14        }
15      ]
16    }
17  ]
18 }
```

# 6. Applying the Image API Inside the App

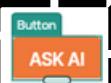
## In the "Send Question" button:

Pass:

API\_KEY\_Image\_Interpretation

PROMPT

Add Action → API Call



On Tap  
3 actions

On Success → Show Snackbar “Request Successful”

Action 2  
Show Snack Bar

Value Successful Request

On Error → Show Snackbar “Error Detected”

Action 3  
Show Snack Bar

Value Error

## On the answer container:

- Set the text to show the API variable **Answer**

Testing



Ask a Question

Text  
Answer

Set from Variable  
Type: String

Variable  
**apiResultpw** ⓘ  
Action Output Predefined Path

API Response Options

**JSON Body**

Available Options ⓘ

**Predefined Path**

Predefined Path Name ⓘ

**Answer**

Default Variable Value ⓘ

**Answer**

Image Interpretation: Visual Helper

Image URL

!MOClgwte1FxtYFrVG0x5z8S038/3EaHUWBixdxy2EG2E/5h6GsV7KAy+EBgD5ia673Cj6oVsEwTrW5Msv/jHCgHQDsJ5uu7s8WafAAA=

Ask a Question

which animal is this ?

ASK AI

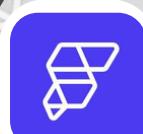
This animal is an orangutan. Specifically, the large cheek pads indicate that this is a mature male orangutan.



## The Image Interpretation: Visual Helper project demonstrates how to

- Integrate Flutterflow with the OpenAI Image & Vision API
- Send dynamic prompts and image URLs to perform detailed image analysis
- Capture structured responses with JSON paths
- Build a clean, user-friendly interface for visual understanding tasks
- Enable real-time scene description, object identification, and contextual image insights

**It is a practical, fully functional example of how low-code development + multimodal AI instantly unlocks advanced computer vision features (object detection, scene description, OCR, and contextual reasoning) without writing a single line of backend or ML code, making sophisticated image-understanding apps accessible to anyone in minutes**



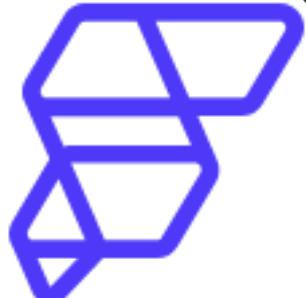
# Next Project

**Image Regeator, project demonstrates in practice how to:**

- Integrate Flutterflow with the OpenAI Image Generation API
- Allow users to generate images by simply describing what they want
- Bind dynamic variables to API requests
- Handle responses and display generated images
- Build fast, smart, low-code creative applications

**Image  
Regerator**

**Quick Short  
Project**



**FlutterFlow**



**OpenAI API**

