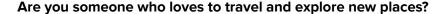
API Documentation for Destination Image Recognition (ITIS-6177 System Integration)

Nehal Kathale 801205316

Index

- 1. Introduction
- 2. About Google Vision API
 - a. Overview
 - b. Example
- 3. Use Web Application for Google Vision API
- 4. Use PostMan for Google Vision API
- 5. Supported End Points
- 6. Conclusion

Introduction





 $Ref: \underline{https://photodune.net/item/young-couple-asian-traveler-holding-and-looking-city-map-at-loovre-museum-in-paris-france/34559636$

People love to travel, explore new places, and try to find information about the site they visit. Sometimes users visit different countries and cities when they may come across someplace user never heard of. Curious minds will seek more information about the place. Advanced Image Recognition helps users to get information about a place after clicking or uploading pictures of places. Google's CloudVision API, Amazon's Rekognition API, IBM's Watson Visual Recognition API, Microsoft Azure Cloud's Computer Vision API, etc provide an ability to recognize destinations. These APIs are simple to use. Users have to provide an image URL or jpeg/png/SVG files to these APIs, and it simply returns a prediction based on the model.

To use these APIs users have to create an account and use their services. This is time-consuming and expensive. To overcome these problems I build an APP using Google's CloudVision AP which can be accessed using the web and postman.

About Google's CloudVision API



Overview:

Google's CloudVision API is an image recognition API that is easy to use, it's close to plug-and-play. Using this API users can achieve the most common image recognition tasks like object detection, reading handwriting, and detecting explicit content. It also can access image information in a variety of ways. It can return image descriptions, entity identification, and matching images. It can also be used to identify the predominant color of an image.

Users can find all details of this API here: https://cloud.google.com/vision

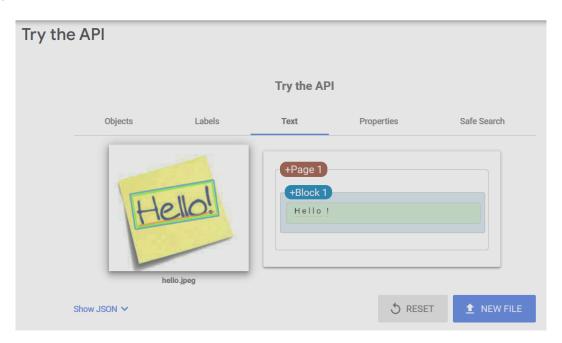
Example:

After uploading an image this API can detect objects, label images, extract text, display properties, and also provides a safe search option.

1) Object detection



2) Text Extraction

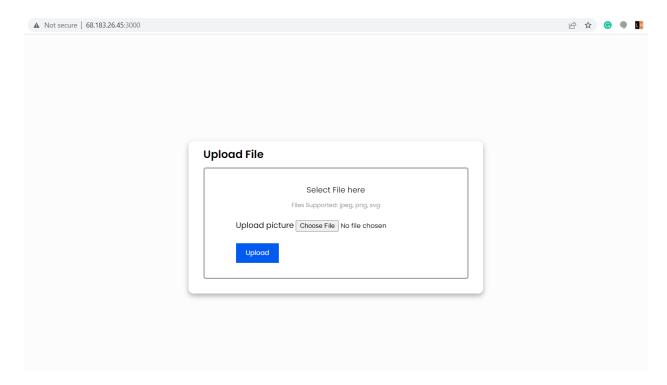


Use Web Application for Google Vision API

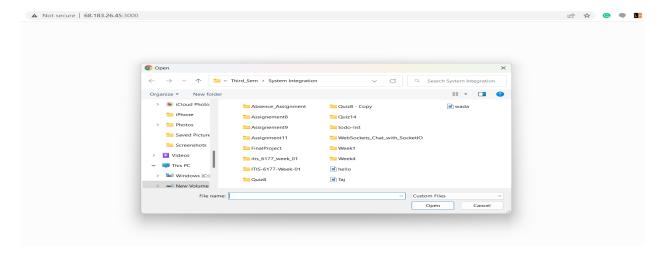
User can access web application here.

Steps to use this application:

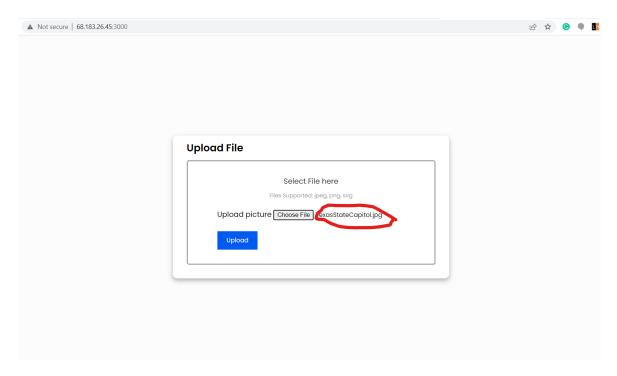
- 1) Goto http://68.183.26.45:3000/
- 2) User will see below screen:



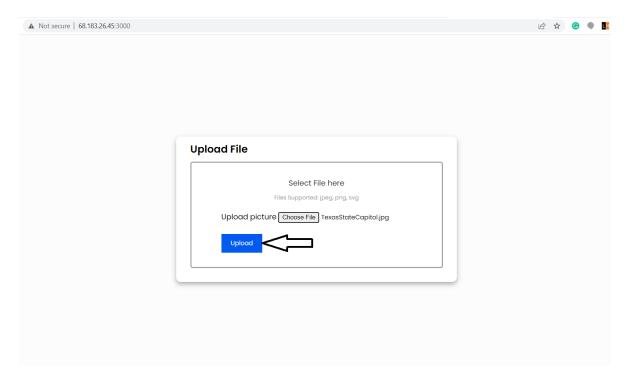
3) Click on Choose File Button. Select any image from file explorer.



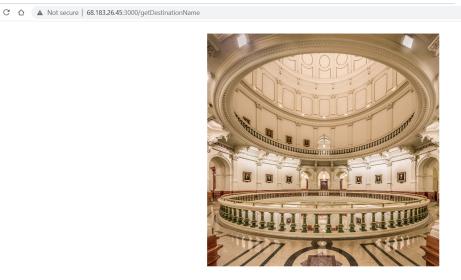
4) User can see selected image file name.



5) Click on upload button



6) After clicking on upload button, user can see uploaded file and destination.



Texas Capitol

7) User can click on home button to go back to home page and check different images.

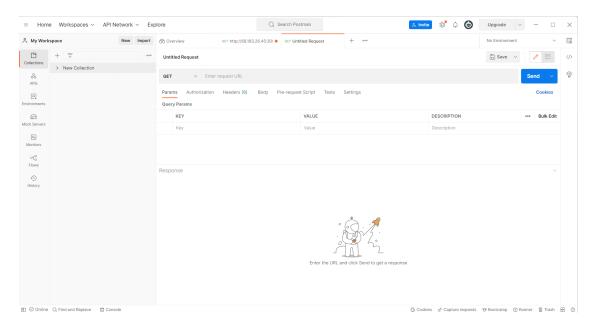


Taj Mahal

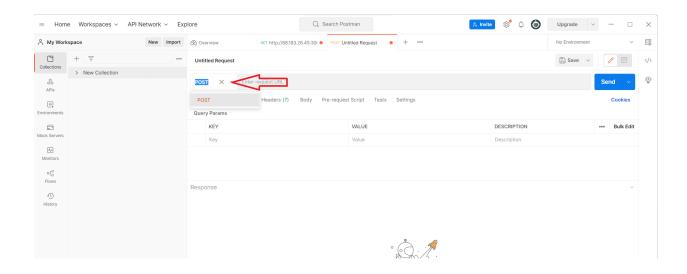
Use PostMan for Google Vision API

Steps to use Postman:

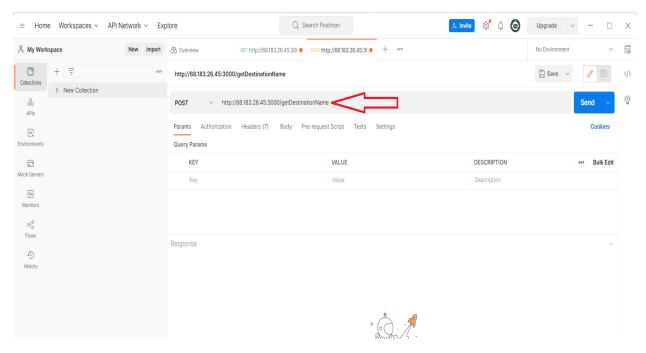
1) Open postman app



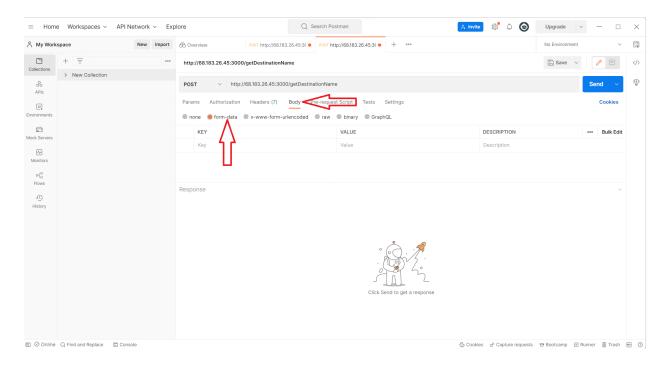
2) Change method to POST



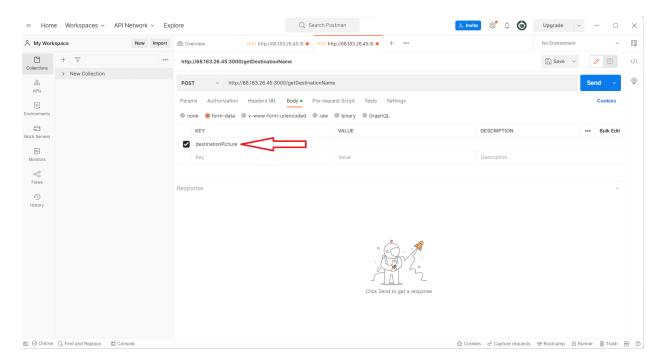
3) Enter URL http://68.183.26.45:3000/getDestinationName



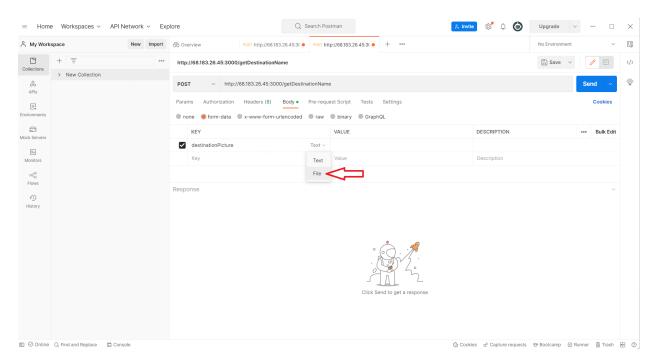
4) Click on Body and then select form-data



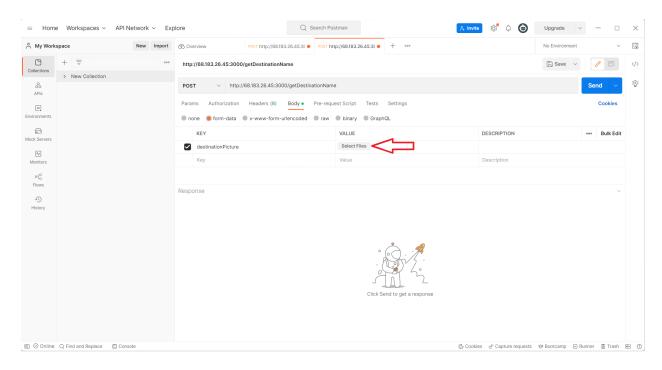
5) Enter destinationPicture in Key



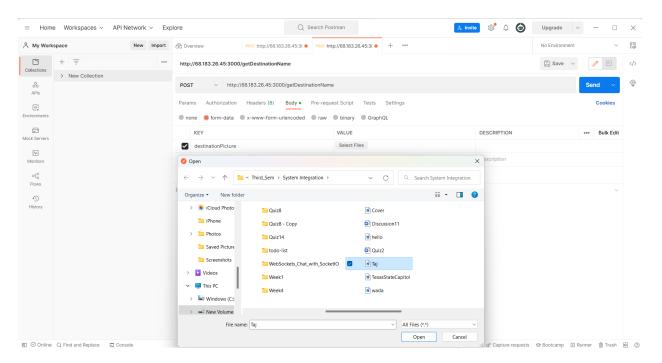
6) Select File from dropdown next to key



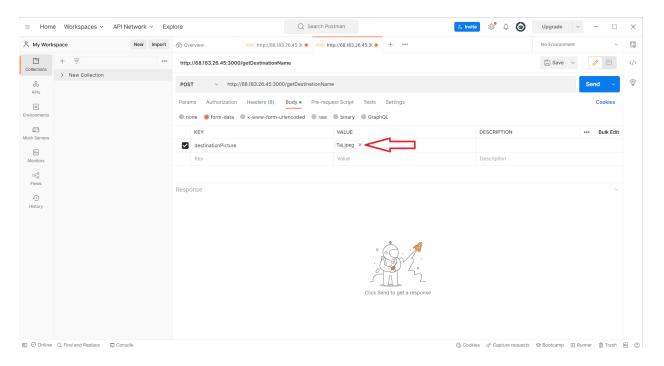
7) User will be able to see select file option



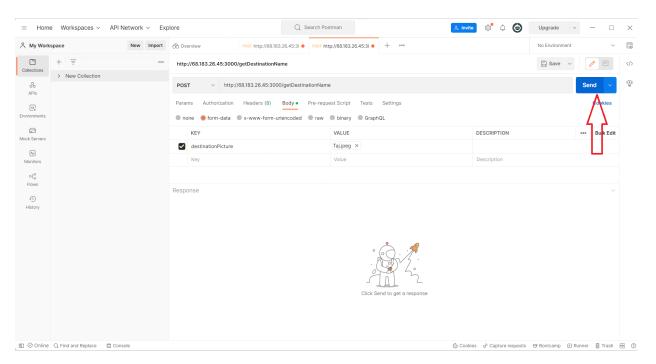
8) Click on Select file option to upload an image



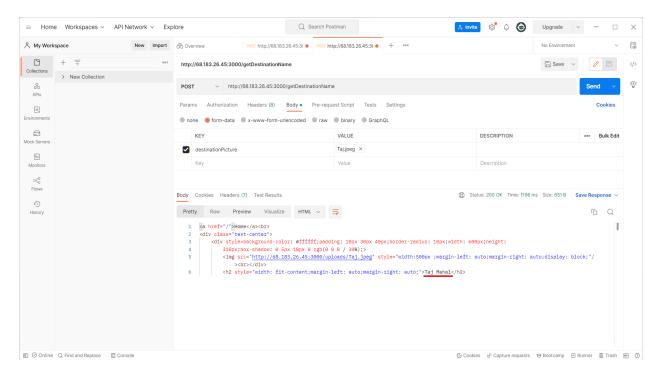
9) User can see image name uploaded by the user



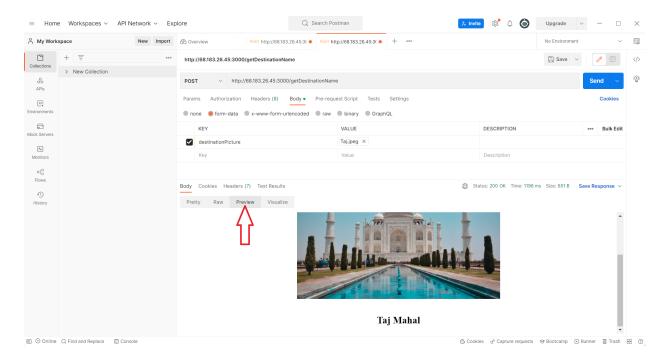
10) Click on send button to get a response



11) User can see result.



12) Click on preview button to see web result.



Supported End Points:

1) Upload an Image

HTTP Method: GET

Endpoint: http://68.183.26.45:3000

Description: This endpoint allow user to see home page and provide option to upload

image.

2) Get Result

HTTP Method: POST

Endpoint: http://68.183.26.45:3000/getDestinationName

Description: This endpoint will take image as an input and send destination name in

response.

Conclusion:

User can successfully identify destination by using web app or postman. Get method is used to display home page. POST method is used to give external call to Google CloudVision API. This request will receive an image from the user and as a result it will return destination name.