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In [1]: from azure.cognitiveservices.vision.computervision import ComputerVisionClient
from azure.cognitiveservices.vision.computervision.models import OperationStatusCodes
from azure.cognitiveservices.vision.computervision.models import VisualFeatureTypes
from msrest.authentication import CognitiveServicesCredentials

from array import array
import os
from PIL import Image
import sys
import time
```

```
In [2]: subscription_key = "4b9594cddbe243e0ad9278d5d29e6ad5"
endpoint = "https://asfasfaf.cognitiveservices.azure.com/"
```

```
In [3]: computervision_client = ComputerVisionClient(endpoint, CognitiveServicesCredentials(subscription_key))
```

GUI

Extract text from an image

```
In [5]: from tkinter import *
from tkinter import filedialog
import os
import tkinter as tk
from PIL import Image, ImageTk
import cv2
import matplotlib.pyplot as plt
```

```
In [6]: def detect_object(mylabel1):
    recognize_handw_results = computervision_client.read(mylabel1, raw=True)
    operation_location_remote = recognize_handw_results.headers["Operation-Location"]
    # Grab the ID from the URL
    operation_id = operation_location_remote.split("/")[ -1]

    # Call the "GET" API and wait for it to retrieve the results
    while True:
        get_handw_text_results = computervision_client.get_read_result(operation_id)
        if get_handw_text_results.status not in ['notStarted', 'running']:
            break
        time.sleep(1)

    # Print the detected text
    v=[]
    if get_handw_text_results.status == OperationStatusCodes.succeeded:
        for text_result in get_handw_text_results.analyze_result.read_results:
            for line in text_result.lines:
                v.append(line.text)

    return v
```

```
In [8]: root =Tk()

e=Entry(root,width=100)
e.pack()

def showImage():
    url=e.get()
    #print(url)
    result=detect_object(url)
    mylabel=Label(root,text=result)
    mylabel.pack()

button=Button(root,text="Extract text from image",command=showImage)
button.pack()
root.title("Extract text from a image")
root.geometry("700x300")

root.mainloop()
```

Recognize object from an image

```
In [9]: def detect_object1(url):
    description_results = computervision_client.describe_image(url)
    if (len(description_results.captions) == 0):
        return "No description detected."
    else:
        for caption in description_results.captions:
            return ("'{}' with confidence {:.2f}%".format(caption.text, caption.confidence * 100))
```

```
In [12]: root =Tk()

e=Entry(root,width=100)
e.pack()

def showImage_text():
    url=e.get()
    #print(url)
    result=detect_object(url)
    mylabel=Label(root,text=result)
    mylabel.pack()

def showImage_normal():
    url=e.get()
    #print(url)
    result=detect_object1(url)
    mylabel=Label(root,text=result)
    mylabel.pack()

button=Button(root,text="Extract text from image",command=showImage_text)
button.pack()
button=Button(root,text="Describe image",command=showImage_normal)
button.pack()
root.title("OUTPUT")
root.geometry("700x300")

root.mainloop()
```

In []: