IBM Watson Website

Link	https://cloud.i-bm.com
Create Ressource	AI -> Visual Recognition
make service	Lite Plan
get important information	API Key and URL

Installation

Install opencv	pip install opencv-python
Install ibm-watson	pip install ibm-watson

Test Application

Send Picture to Goolge press	d
Quit application press	q

Paste in a Pythonfile

```
import cv2
from ibm_watson import Visual-
RecognitionV3
from ibm_cloud_sdk_core.authe-
nticators import IAMAuthen-
ticator
import json
import sys

authenticator = IAMAuthenticato-
r('API KEY')
service = VisualRecognitionV3(
    version='2020-02-26',
    authenticator=authenticator
)
service.set_service_url('URL')

cap = cv2.VideoCapture(0)

key = ''
```

Paste in a Pythonfile (cont)

```
while( key != 'q' ):
    ret, frame = cap.read()
    cv2.imshow('frame', frame)
intkey = cv2.waitKey(2)
    if( intkey > 0 ):
        key = chr(intkey)
    else:
        key = ''

    if key == 'd' :
        cv2.imwrite('uploa-
d.jpg', frame)
        with open('upload.jp-
g','rb') as file:
            classes = service.c-
lassify(images_file=file,thres-
hold='0.6').get_result()
            print(json.dumps(c-
lasses, indent=2))
```

Speech to Text

```
curl -X POST -u "apikey:
{apikey}" \
--header "Content-Type: audio/-
flac" \
--data-binary @{path_to_file}-
audio-file.flac \
"{url}/v1/recognize?timestamps=-
true&max_alternatives=3"
```

Speech to Text

install	curl

Speech to Text

```
{
  "results": [
    {
      "alternatives": [
        {
          "timestamps": [
            ["several":, 1.0,
1.51],
```

Speech to Text (cont)

```
            ["tornadoes":, 1.51,
2.15],
            ["touch":, 2.15,
2.5],
            . . .
          ]
        },
        {
          "confidence": 0.96
          "transcript": "several
tornadoes touch down as a line
of severe thunderstorms swept
through Colorado on Sunday "
        },
        {
          "transcript": "several
tornadoes touched down as a line
of
severe thunderstorms swept
through Colorado on Sunday "
        },
        {
          "transcript": "several
tornadoes touch down as a line
of severe thunderstorms swept
through Colorado and Sunday "
        }
      ],
      "final": true
    }
  ],
  "result_index": 0
}
```