# **Google API documentation**

 $\mathsf{Code} \xrightarrow{} \mathsf{1.0}\text{-}\mathsf{acpg}\text{-}\mathsf{googleAPI}\text{-}\mathsf{getText}\text{-}\mathsf{getObjects}.\mathsf{ipynb}$ 

### Input data

For the code to work, two data sources need to be specified. One for our own memes and another for facebook memes.

Our memes → "./data/raw"

Facebook memes → "./data/external"

#### Our memes

Content of "./data/raw", is a csv file name "our\_images.csv", this file have the following content: Name of the image | Type of hate | Hate/NotHate. Apart from the csv file it has all the images.

```
data > raw > III our_images.csv
       ,Name,type,hate
      0,10246724 747008182064474 2873398654888745189 n.png,Affiliations,1
      1,obama-meme.jpg,Affiliations,1
       2, alldone.png, Affiliations, 1
       3, brown.png, Affiliations, 1
       4,patriots.png,Affiliations,1
      5,pending.png,Affiliations,1
       6,mikeFlynn.png,Affiliations,1
       7, precipice.png, Affiliations, 1
       8, DUfydpRW4AA5WYF.jpg, Affiliations, 1
       9, DUfigmUXUAIc8G5.jpg, Affiliations, 1
       10,DUPUIOkXcAAujr0.jpg,Affiliations,1
       11,DVKz6V5WsAE7dlR.jpg,Affiliations,1
       12, hypocrite2.png, Affiliations, 1
       13, isaid.png, Affiliations, 1
       14,racistVoting.png,Affiliations,1
       15, bush.png, Affiliations, 1
       16, pedowood.png, Affiliations, 1
       17,bringPain.png,Affiliations,1
       18, twitterJail.jpg, Affiliations, 1
       19, treasonNN.jpg, Affiliations, 1
       20, PROSECUTION. jpg, Affiliations, 1
       21, faithhealer.jpg, Affiliations, 1
       22,PrayingMedic.jpg,Affiliations,1
       23, noFlyNancy.jpg, Affiliations, 1
       24, maggie.png, Affiliations, 1
```

#### Facebook memes

Content of "./data/external", is a csv file name "facebook\_images.csv", this file have the following content: Name of the image | Hate/NotHate. Apart from the csv file it has all the images.

```
data > external > III facebook_images.csv
        ,Name,hate
    1
        0,08291.png,1
        1,46971.png,1
        2,03745.png,1
        3,83745.png,1
        4,80243.png,1
        5,05279.png,1
        6,01796.png,1
        7,53046.png,1
        8,82301.png,1
        9,31752.png,1
   11
   12
        10,27635.png,1
   13
        11,80597.png,1
   14
        12,45368.png,1
        13,17963.png,1
   15
        14,53968.png,1
   16
   17
        15,10749.png,1
        16,25149.png,1
   18
        17,87520.png,1
   19
        18,89071.png,1
   21
        19,09563.png,1
   22
        20,72048.png,1
        21,49826.png,1
   23
        22,26453.png,1
   25
        23,12650.png,1
        24,02568.png,1
   26
```

# Google API Keys

For the code to work a json file is needed with the keys for the google cloud vision API. That file needs to be place in the "./notebobook" folder and then the path specify in the variable "path\_to\_key".

The Key that we used to run the code is NOT uploaded to the github repository due to security concerns. Please use your own Keys or get in touch with the developing team.

## Output data

The output data is saved to the folder "./data/processed/google\_API\_response"

The responses are saved into csv files:

Our memes → "our\_images\_API\_response.csv"

Facebook memes → "facebook\_images\_API\_response.csv"

The content of the csv files is: Name | hate | text | object

Name is the name of the image

hate is binary (0: No hate | 1: Hate)

text is the json response for that image

object is the json response for that image

#### **Functions**

```
# Get the Text From an Image
# Img: one image in the Bytes format
# Returns: Json response from Google API
def getTextFromImage(img):
```

```
# Get the Objects from an Image
# Img: one image in the Bytes format
# Returns: Json response from Google API
def getObjectsFromImage(img):
```

```
# Open the Image specify by the "path_images" and the "name" of the
image. It returns it as a Bytes type
# path_images: path of the folder that contains the image
# name: name of the image that we wish to open
# Returns: Content of the Image in Bytes Format
def open_img(path_images,name):
```

```
# Method that save the response into the corresponding file.
# name_file: name of csv file where the content is saved
# content_names: list of all the names of the images
# content_hate: list of all the categoriacal casiflication for all the
images (0: No hate | 1: Hate)
# content_text: list of all the json responses from the getText API
function
# content_objects: list of all the json responses from the getObjects API
function
def
save_response(name_file,content_names,content_hate,content_text,content_o
bjects):
```

```
# Reiterate over all images an get the text and objects
# origin specify which dataset to use --> If 'our' it will processed our
memes. If 'facebook' it will processed facebook memes.
def mainGetTextAndObjectsFromImages(origin):
```