OCR

OCR (Optical character recognition) is the process by which the computer recognizes the text from an image.
It means that is going to do pretty much all the work regarding text detection.

How to use ocr:

1) Import the libraries and load the image
Let's import all the libraries that we need (Opencv, IO, numpy, requests, JSON).
IO and Json are by default already installed on python, you should install the other libraries if you haven't done it yet.

Then we load the image.

We can **cut the image to select only the area where there is the text**, in case the image contains some background.

2) Set the OCR engine

We now have the image and our goal is to send the image to the orc.space server in order to be processed.

Later we send the bytes to the server using the python library requests.

We need to pass **three** parameters:

1. the first is the url_api
2. Called “Files” which contains the name of the file and the file bytes we generated before after we compressed the image.
3. And then “Data” which contains the post parameters of the OCR engine.
   We need to insert the API key where now it’s written “YOURAPIKEYHERE”, and language is the language of our text. By default is English.
   Go on this page http://ocr.space/OCRAPI to see all the “POST parameters” you can use.

The function is going to send the image to the server and in return, we’re going to get the response from the server.

3) Read the Result

The result from the server is a string.

We’re going first of all to extract the content of the result, then we convert the content into a dictionary.

Result contains the text read from the OCR engine plus a few other values. The other values depend on the post parameters we did set before.