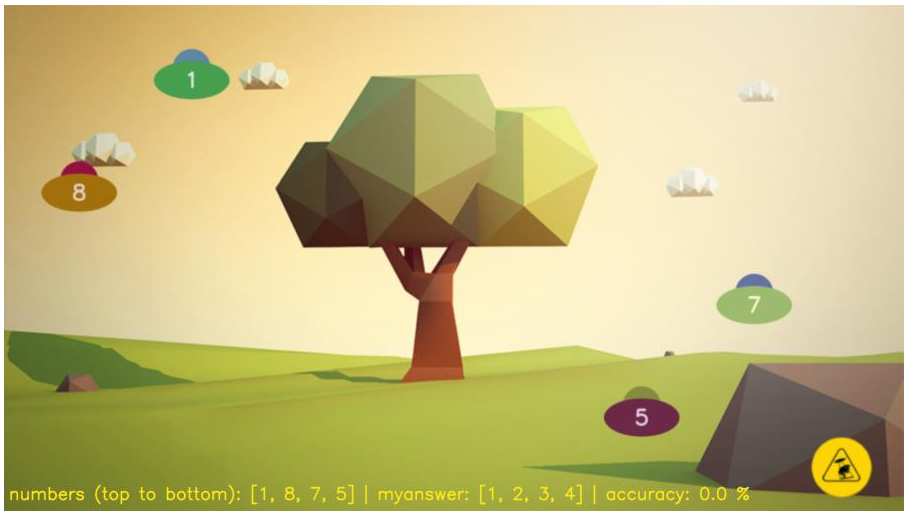
Spacy challenge

You are given a video stream and many UFO's are visible on each frame with a different number ranging from 0 - 9 written on them. Your task is to find the location of those UFO's on each frame, sort them from top to bottom by their position and return numbers written on them using custom trained ML models provided by the data scientist for making predictions on the real-time data stream.

Illustration



In the photo above, if you sort UFO's from top to bottom the numbers written on them will be [1, 8, 7, 5] .

while reading frames from the generator, you will also get the answers i.e., numbers sorted from top to bottom, but that's just for validation purpose, you need to find it yourself.

Once you find the location of the UFO's, you need to crop that part and pass it through a classifier to find the number that UFO contains. The classifier in the code base is trained on 5000 images. If it doesn't works well, you are welcome to train your own classifier.

Code base

We have the code base written in Python for you. The data scientist has trained two high accuracy models: one is for object detection and the other for object classification. The two custom trained models are also provided for you.

Install requirements
pip install -r requirements.txt

To run the application
python run.py