Cameroon License Plate Recognition Project

Description of the project

Read the .pdf **Report - Cameroon License Plate Recognition.pdf**

Installation guide

1. Install python 3.7 (if it is not installed) :
    - Activate internet connection
    - open the command-line (Ctrl-Alt-T)
    - enter **sudo apt update**
    - enter **sudo apt install software-properties-common**
    - enter **sudo add-apt-repository ppa:deadsnakes/ppa**
    - enter **sudo apt update**
    - enter **sudo apt install python3.7**
    - close the command-line
2. Extract the zip license_plate_recognition.zip
3. Open (Enter in) the directory **recognition**
4. Install the dependancies :
    - open the command-line (Ctrl-Alt-T)
    - enter **pip3 install -r requirements.txt**

      Now we need to install detectron2
    - enter **pip3 install -U torch==1.4+cu100 torchvision==0.5+cu100 -f https://download.pytorch.org/whl/torch_stable.html**
    - enter **pip3 install cython pyyaml==5.1**
    - enter **pip3 install -U 'git+https://github.com/cocodataset/cocoapi.git#subdirectory=PythonAPI'**
    - enter **pip3 install detectron2 -f https://dl.fbaipublicfiles.com/detectron2/wheels/cu100/index.html**
5. Run the program:
    - Take a photo or download a photo or choose a photo in the directory test_images (there are some images of cars)
    - enter **python predict_plate.py "/path/to/image"**. This means that if the image car.jpg is in the directory **.images**, we should write **python predict_plate.py "./images/car.jpg"**
    - It will output the prediction of the license plate

It is important to note that this is just a prototype. In real life production, the software should be integrated in a camera and should analyse images frame by frame.