Object-Detection-and-Cropping

The Project uses YOLO Library to detect the required object. The goal of the project is to detect the object's location/coordinates in a frame or image and crop it out. It is observed that, for some objects, the boundary of the detected object does not cover the entire object. We overcome this problem in this project.

Authors & Contributors: **Aniket Srivastsav** and **Bharathi Callepalli.** In addition, this project would not be easier without YOLO pre-trained Weights.

Features:

1. Detect specific object/s out of 76 objects mentioned in **detectction.py** file
2. Crop each object
3. Expand or Contract the Area to be cropped

(Note: By default, the boxes detecting the objects are invisible. For the boxes to be visible, uncomment all the statements starting with **draw_box ()** function in the file **detection.py)**

#Installation:

Packages required:

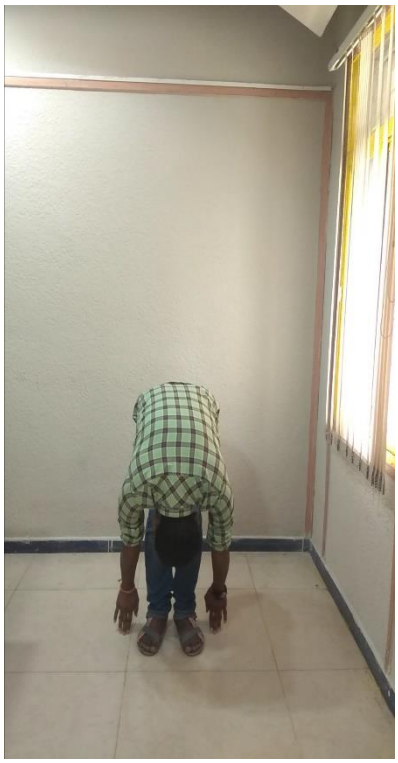
1. NumPy : **pip install numpy**
2. PIL : **pip install PIL**

To execute the code, Run:

Python obj_detect_crop.py

#Results:

Original Image:



Yolo Detection:

Yolo Result:

Our Model Result: