CMPE258
YOLACT Semantic Segmentation and Comparison with YOLO
HL

1. Install and test run YOLACT based on the readme document given in the class github for detection and identification of (1) vehicle and (2) pedestrian, and (3) make comparison with your YOLO program from the previous homework. This project is total 10 points.

2. This requirement is the same/repeat of your Yolo homework, you can update your previous video clips if you want, or if it fits, you can use your previous video clip for this project. If you choose to update your video clip, then use you smart phone to take record a 15 - 30 second video clip for YOLO v4 object detection purpose. Convert the captured video file to mp4 (mpeg4) format using an online tool. I suggest you to capture traffic video with vehicles.

3. Run the YOLACT code, then

4. Run YOLO v4 program for vehicle/pedestrain detection and save the detected result in a video file.

What to submit:

4. Create a folder with the following naming convention and

(4.1) any configured and modified code; and

(4.2) the processed video clip 1 of Yolact, and processed video clip 2 of Yolo, and video clip 3 which is the original video clip.

Use the following naming convention: project_yolact_yolo_cmpe258_First_last_name_SID, then zip it and submit it to the CANVAS.

5. Your implementation will have to support both live video input (USB webcam) and the input from saved video files. Your program should prompt the user for the options of input video.
a. The original video should be in color.

6. Save 20-30 seconds each for 3 video clips.

7. Submit
(7.1) Readme for implementation and testing instructions, so your submission can be verified. Lack of details in the readme can lead to reduction of marks. Be sure detailed adequate information is provided for testing and verification purpose.
(7.2) Video clips and modified code
Put all the above files into one folder and zip it.

8. Use the following file naming convention for your file:
firstName_lastName_SID(last-4-digits)_cmpe258_digitsRecognition.pdf.
Submit it to the class canvas.
Note: fail to follow the requirements will lead to reduction of marks.
(END)