## PRODUCT DEVELOPMENT LAB

## TITLE-

## VEHICLE IDENTIFICATION AND ALERTING SYSTEM

### **TEAM MEMBERS-**

- 1. ANWESH KUMAR SAMAL 119EC0268
- 2. MALAYAJ RATH 119EC0597
- 3. SRITAM PANDA 119EC0195

## **WEEKLY STATUS-**

#### **WEEK-1:-**

- Studied regarding the concepts of Deep learning like convolution, object localization, object detection using YOLO algorithm.
- Searched research papers on DETR algorithm.
  - Learnt about OpenCV basics for object detection implementation

### **WEEK-2:** -

- 1. <u>Anwesh</u> Searched about the architecture and implementation of the approach of the DETR algorithm. Tried to understand the terms associated with the trained model.
- 2. <u>Sritam</u>- Went through YouTube videos so as to understand the logic behind each step of the algorithm.
- 3. <u>Malayaj</u>- Compiled the test code and tried to implement on a sample video.

**GITHUB LINK** (test code): https://github.com/malayaj2000/vehical-detection-and--alert

Finally, the code modification was done by all of us so as to match and check the proper confidence interval to have a better probability of the object / vehicle detection.

## **Problems faced-**

• FPS problem – too low fps but the detection was accurate.

## **OBSERVATIONS-**

# Based on a sample video



