

## **Project Objective**

### **YOLO**

- YOLO-based Convolutional Neural Network family of models for object detection.
- YOLO is an abbreviation for the term 'You Only Look Once'. This is an algorithm that detects and recognizes various objects in a picture (in real-time). Object detection in YOLO is done as a regression problem and provides the class probabilities of the detected images.
- The most recent variation called YOLOv3.
- This algorithm is popular because of its speed and accuracy. It has been used in various applications to detect traffic signals, people, parking meters, and animals.

### **To train a YOLO model in windows environment:**

- Image Collection
- Image Selection (How to choose a proper set of images to train YOLO)
- Annotate Image
- Download and configure Darknet in Windows
- Create Train and Test Data to train YOLO model
- Compile darknet on Windows
- Train YOLO custom object detection model in Windows
- Test YOLO model for image and video