Project Objective

Date	08 November 2022
Team ID	PNT2022TMID41486
Project Name	Virtual Eye - Life Guard for Swimming Pools to Detect Active Drowning

YOLO:

- ✓ YOLO-based Convolution 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 Dark net in Windows
- ✓ Create Train and Test Data to train YOLO model
- ✓ Compile dark net on Windows
- ✓ Train YOLO custom object detection model in Windows
- ✓ Test YOLO model for image and video