| Date | 20 OCTOBER 2022 |
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| Team ID | PNT2022TMID37847 |
| Project Name | VirtualEye - Life Guard for Swimming Pools to Detect Active Drowning |

## 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*