

## **Prior Knowledge**

**One should have knowledge of the following Concepts:**

- YOLO v3
- Flask

### **YOLO v3:**

- Setting up and Installing Dependencies using ANACONDA.
- Downloading and Converting YOLOv3 weights into TensorFlow model files.
- How to run detections in real-time on webcam and video.

### **Flask:**

- Flask is a web application framework written in Python
- Flask is based on Werkzeug, WSGI toolkit and Jinja2 template engine. Both are Pocco projects.

#### **Werkzeug:**

It is a WSGI toolkit, which implements requests, response objects, and other utility functions. This enables building a web framework on top of it. The Flask framework uses Werkzeug as one of its bases.

#### **WSGI:**

Web Server Gateway Interface (WSGI) has been adopted as a standard for Python web application development. WSGI is a specification for a universal interface between the web server and the web applications.

#### **Jinja2:**

Jinja2 is a popular templating engine for Python. A web templating system combines a template with a certain data source to render dynamic web pages.

### **Install virtualenv for development environment:**

**virtualenv** is a virtual Python environment builder. It helps a user to create multiple Python environments side-by-side.

1) Install virtualenv.

```
pip install virtualenv
```

2) Once install new virtual environment is created in new folder.

```
mkdir newproj  
cd newproj  
virtualenv venv
```

3) On windows, to activate.

```
venv\scripts\activate
```

4) Now we can install flask.

```
pip install Flask
```