How to use

First you have to change ip.text which is in the pi folder to your own ip.

Then you should go to requirements.txt file which is in both server folder and pi folder and install the necessary requirements.

Then run pi_edge.py (its in pi folder) in your raspberry pi and run back_end.py(its on the server folder) on your computer.

How its works:

In pi_edge.py we open the camera, take a picture in the camera and apply tiny yolo to camera. After that we send the picture in two endpoint named

```
end_point_1a
end_point_1b
```

And send the results of tiny yolo to endpoint:

```
end_point_2
```

end_point_1a:

In here we save the image to server/pics folder and return image file which has been annotated with the bounding boxes of the detections. If needed we can sand the detection information as well just by commenting a line out.

end_point_1b:

In here we find how many people are there in the image with applying yolo to image. We return the result of humans and print this to the console of the server.

end_point_2:

In here we look tiny yolo results to find how many people are in the image on the edge device and we send the whole result to the server for processing then the server parses the data and return the number of humans in the image to the edge device. We return the result.