Person Tracking algorithm in Open CV

In this project we are going to apply persons in the video file but we can apply tracking algorithm any object we want from the the video file or usb webcam etc.

Here, In this project I am applying to Centroid tracking algorithm. Keep on tracking the codinates of the objects in frame. here we apply only for person. And we will keep on fitting the coordinates of the person to the tracker. Tracker does that it will save coordinates and it will compare and compute the distances between the current coordinates and previous coordinates. If it is below the some threshold value it will keep tracking the objects else it will not simply track and consider it to be a new object.

And one more thing which I have applied in this project these are: FPS(Frame per Second) and Non Max Sppression.

Non-max suppression: the model in which detect the person works fine for almost most of the cases. But it is sometime gives false detection. By false detection it is also detects wrong objects.

FPS: means that How many frames or applications and hardware is able to process in one second. And also how much speed getting in applications. It is totally depends on hardware.

First we import the necessary libraries and then read the frames.then apply non mas suppression technique. The apply fps after that detects the persons from frames. It will save coordinates and save the apply tracker algorithm. At last showing the frames.