//pairing means to check if persons and the face detected are the same via checking if their boxes overlap

Import libraries

Create variables

create array of classes called people

Setup{

Create a screen and connect to cameras and coms and make an open cv instance

Save if an esp is connected by checking if coms available

Se framerate

}

While==true{

Load video and display video

Calc optical flow for image

Open cv Detect faces and put a box over them

//main part of program and stolen from dan shirfmans blob tracking

If people size=0{

If there is a new face update people array and bottom of screen

}

Else if there is a face>peaple that's been there for more that 700 milliseconds{

Pair up faces with people that are not being registered with opencv or make new person

}

Else if faces are face< people{

Register them to be searched for and also pair the faces

}

Else if faces==people{

check for any faces that not pared and pair them

}

Update existing person with the faces detected by opencv

Any persons that are not paired then use my algorithm

Clean up people that are expired(cant find them for 800 miliseconds)

If face change update timer for adding new face

If esp is connected and there are peaple{

Follow face

}

}

If mouse pressed then delete face that mouse selects

If key pressed move or do controls

Boolean update face{

Check if boxes are overlapping

}

Class person{

Needs id and color

One created it adds image to bottom of screen

Boolean facecheck{// same thing as update face but it it returns boolean

Check if boxes are overlapping

}

Update face{

Use my color tracking algorithm if person is not paired to a opencv face

}

}