# **PROJECT INITIATION DOCUMENT**

PROJECT TITLE :- FACE DETECTION AND DISTANCE FROM CENTER

# THE CONTEXT-

### **S**COPE OF PROJECT

- Can be used in Smart Devices.
- Can be used in Buildings.
- Can be used in Car.
- > Can be used in Robots.
- > Can be used in Drones.

#### PROBLEM IT CAN SOLVE

- > Secure Biometrics feature for User Authentication.
- Can be implemented in self-driving vehicles to get alert if something comes Infront of vehicles.
- In Malls, Hotels, Museums (etc...) to open door when detecting a person coming to the building.
- It can also be deployed in police station to identify and verify the criminals.
- It can also be deployed in Bank or where Private/Confidential files are kept to ensure only authorised person can go to that place.

# **APPROACH**

Approach for this problem is that we are making an application {which would detect the person and the distance from the center} using Python programming.

We are using OpenCV Library in Python for implementing that feature. Also, we are using HaarCascade Files that an Object Detection Algorithm used to identify in an image or a

HaarCascade Files that an Object Detection Algorithm used to identify in an image or a real time video. (HaarCascade is a Machine Learning Approach where a lot of positive and negative images are used to train the classifier.)