

## FACE MASK DETECTED WITH THE TEMPERATURE CHECKING AFTER THE DOOR GATE OPEN

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### ABSTRACT

Wearing a mask in the public area is on transport. In the COVID-19 face mask, it is detected. In the project detected is the one identified on the people who are wearing it or not, based on the dataset collection. It is the face that will check the dataset and the temperature sensor is active and it will read the person's temperature. If the temperature is higher than 39 °C, then a particular person will not be allowed inside. If the person has a temperature of less than 39 °C, then the person will be allowed inside. In the image and video, they identify the people with the two colors. It is the two colors of red and green that are notifications. The red symbol is the notification that if people are not wearing masks, they will not be allowed inside. The green symbol is the notification that the people are allowed inside and the door will open. The red symbol is an alert of a locked door. On the door sensor, it will activate the camera and monitor. It is the system that monitors public places and anywhere in the world. Three sensors are basic on the controller

**Keywords:** Temperature sensor, OpenCV, Raspberry pi, Motor..

### 1. INTRODUCTION

The COVID-19 was started in the year of 2019 DEC, in the places of Wuhan, China. All countries are affected by the disease and The disease was affecting many people was affecting per day many people are affected by the disease nearly lakhs of people are dead and affected. So, the government has put the rule of people are not want to come outside of the house. Any emergence issues only people are want to come outside of the house or otherwise people are not allowed in roadside and all countries are commonly put the rule of 144(lockdown). Any emergence is needed means people want to wear the mask. If people are not following the rule that particular person is not allowed inside. Only the people are wearing masks and the person's body temperature is normal to means only the door will be open or otherwise, the door will not open. The drive name is the Face Mask Detected with the temperature checking after the door gate[1]. The processor can identify with the signal of the OpenCV or camera we can see the face on the monitor. The monitor will focus on the faces and whether the people are wearing masks or not checking with the help of the image or video it will notify of the image or video capture of white people are wearing masks the notification is the symbol is green and the white people are not wearing a mask the notification of the symbol is red. In the focus, we can check the person's body temperature sensor will check the normal degree or unnormal degree of checking processor it will notification on the LCD or monitor. Went the all checking is over means after only the door will be open otherwise the door will not open. Before that, we will be waiting for the data of mask detected and temperature sensor are detected of door gate will be open[2]. The drive is useful in the school, college, railway station, airport, etc.

### 2. METHODOLOGY

The face mask is a detected was checking a person whether with a mask or without a mask. The notification on the camera or OpenCV focuses on the person whether a wearing mask or not. Went the person wearing a mask at that time the image or video will be captured and it will be stored in a folder[4]. We can see it on the OpenCV. We can focus on the frame and we can take the image processor which will collect the image or video. It will store the data collection and it will store into two parts with a mask and without a mask. The checking processor is over that time only the door will be open or otherwise the door will be open

#### 2.1 With mask and maskless

We can notify on the LCD or monitor. The identification of a person wearing a mask means the sensor will be detected and it will give the green symbol on the image or video and it will be stored in the folder called the data collection.

We can notify on the LCD or monitor. The identification of the person who is in wearing a mask means the sensor will be detected and it will give the red symbol on the image or video and it will be stored in the folder called a collection.

#### 2.2 TEMPERATURE SENSOR:

The sensor detected a person's body temperature degree. The notification will be sent to the LCD or monitor. It will be displayed on the particular part only. when the door will be open means the temperature degree is normal means the

door will be open or otherwise the door will not open [3]. The normal degree is the identification as 70 degrees. The unnormal degree is the identification above 70 degrees. From the LCD we can see the person's temperature. Only the door will be open or otherwise the gate will not open.

### 3. MODELING AND ANALYSIS

The block diagram of the Face Mask Detected with the temperature checking after the door opens is the main control of R pi. The temperature sensor is the checking is the passing is raspberry pi. The cv2 is reading passing to the R pi and the R pi reading send to the door sensor. The finally of a driver is to control the open or closed door.

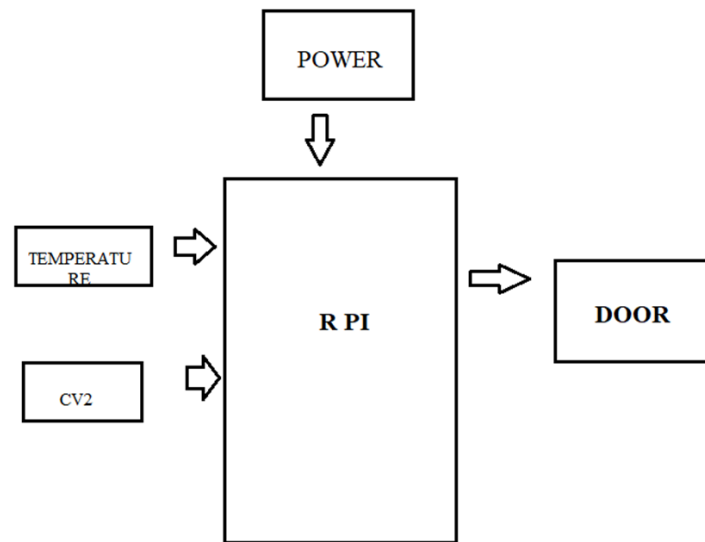


Figure 1: Block diagram

### 4. RESULTS AND DISCUSSION

The OpenCV is viewed on the monitor and it will display on the frame for face catch software. It will be detected a people are wearing a mask or not checking software with the help of python code software [1]. We can design the frame of size and width also we can create the OpenCV.

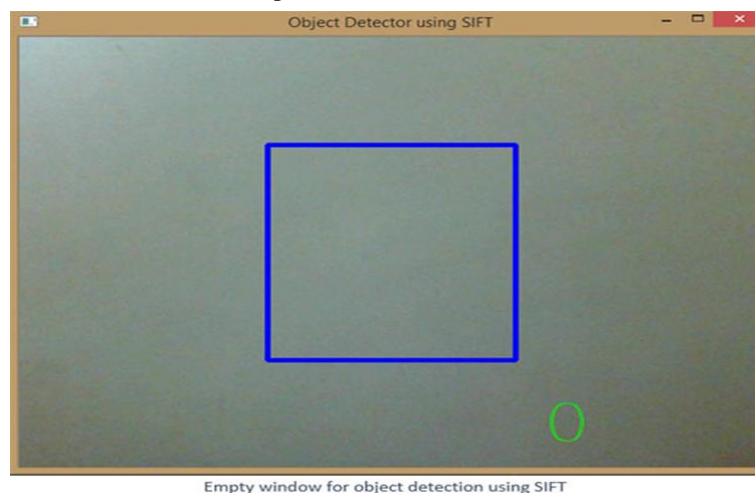


Figure 2 : Output

### 5. CONCLUSION

The conclusion of the Face Mask Detected with the Temperature checking after the Door Gate Open his only the all checking processor is over means after one the gate will be open and finally, we get the answer of Face Mask Detected with the Temperature checking after the Door Gate Open in the project of level by level checking processor. The level 1 weather a face catches his verity and after the temperature, it was detected and it verity and it's the door will be open it's also verity and all the processor of the full of verity.

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