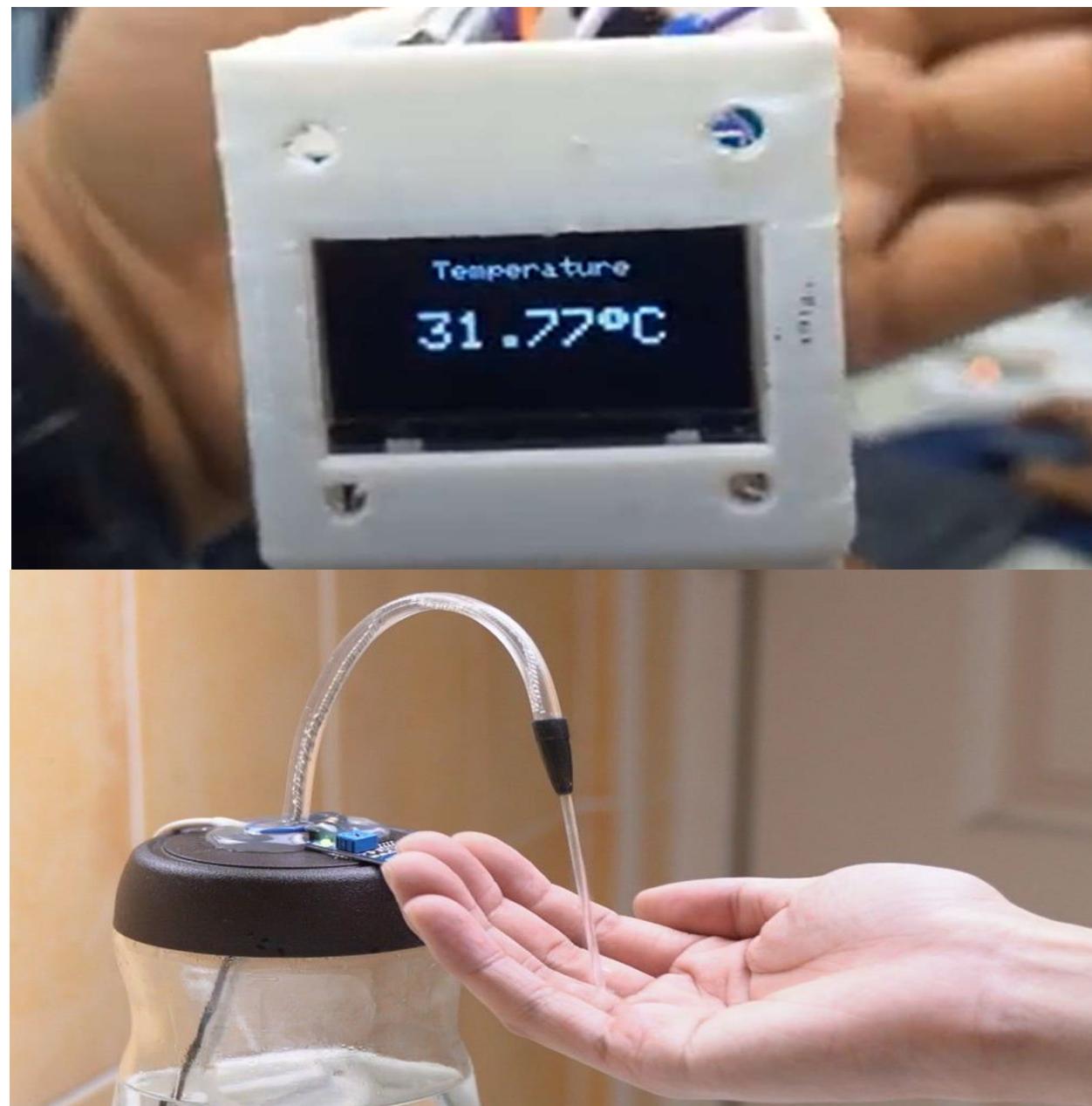
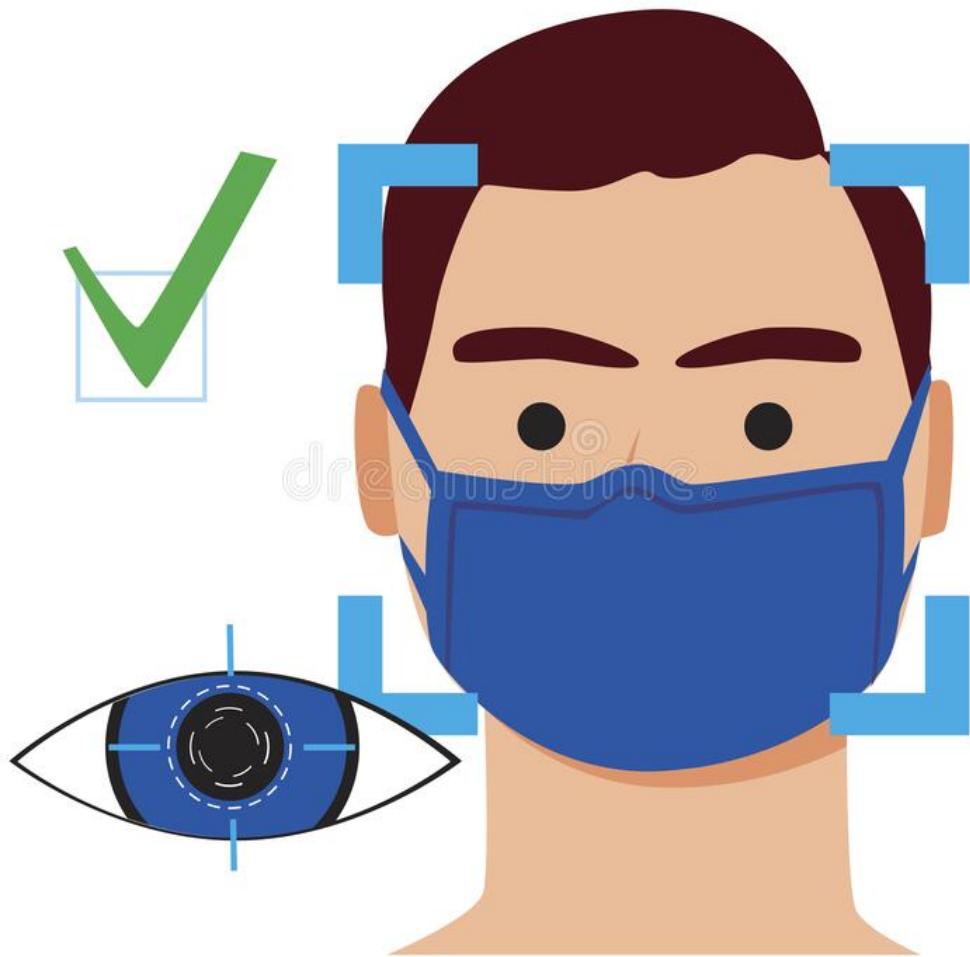


# COVID-19 PREVENTION PROTOCOL SYSTEM



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VIVEK AGARWAL  
ECE B  
11500319027



# FEATURES

In this project we will create a **IOT based system** where we will be adding ***three important features*** which will help the system to perform as a **covid-19 protocol security system** at the entrance. Wherever we go, at the present covid-19 situation we face **2 major checking**

1. Are we wearing Proper Face Mask
2. Do we have a Normal Body temperature

If both condition satisfies we are given some sanitizers and sanitize our hands before getting in.

Hence Here we will be making a system which will perform this ***3 tasks automatically***.

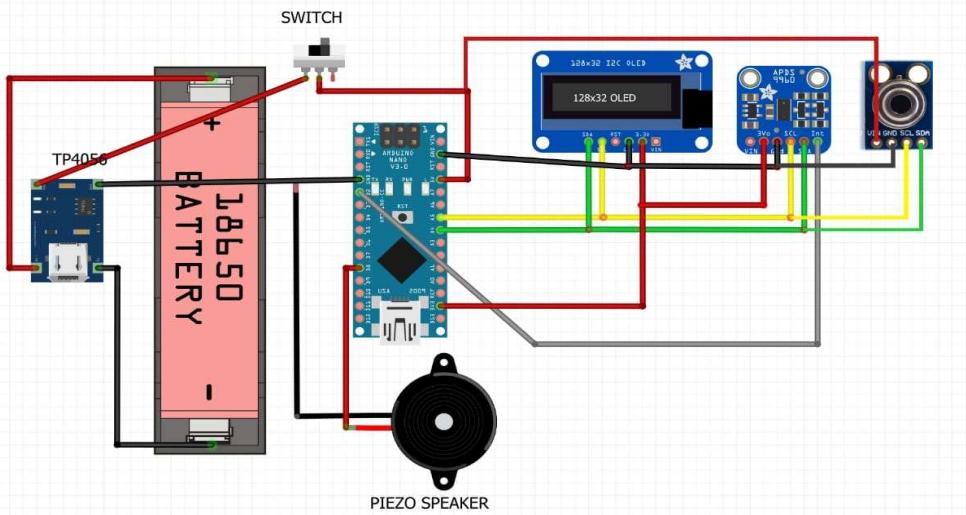
Hence, at first we will be making a **contactless Thermal Gun** to get ***the body temperature***, with the help of **MLX90614 Contactless Infrared Temperature Sensor** with a microcontroller. Then we proceed for the last step that is **sanitizing part** with the help of a **microcontroller and a ultrasonic or infrared IR Sensor**. And both will be linked with our **Python OpenCV TensorFlow Face Mask Detection**.

# COMPONENTS REQUIRED

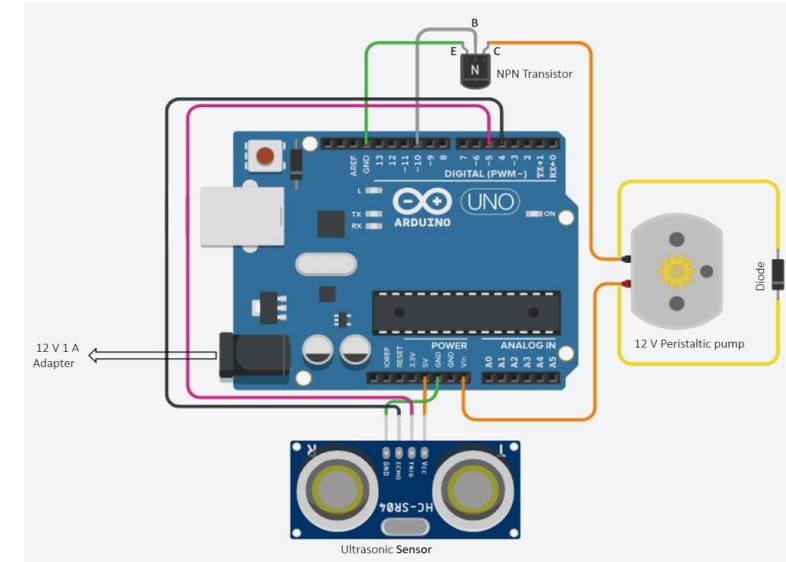
1. MLX90614 Contactless Infrared Temperature Sensor
2. Microcontroller (Arduino / Nodemcu / MSP430 etc.)
3. MLX90614 Pinout
4. IR Sensor or Ultrasonic Sensor
5. 5V water pump
6. Laptop Webcam or External camera



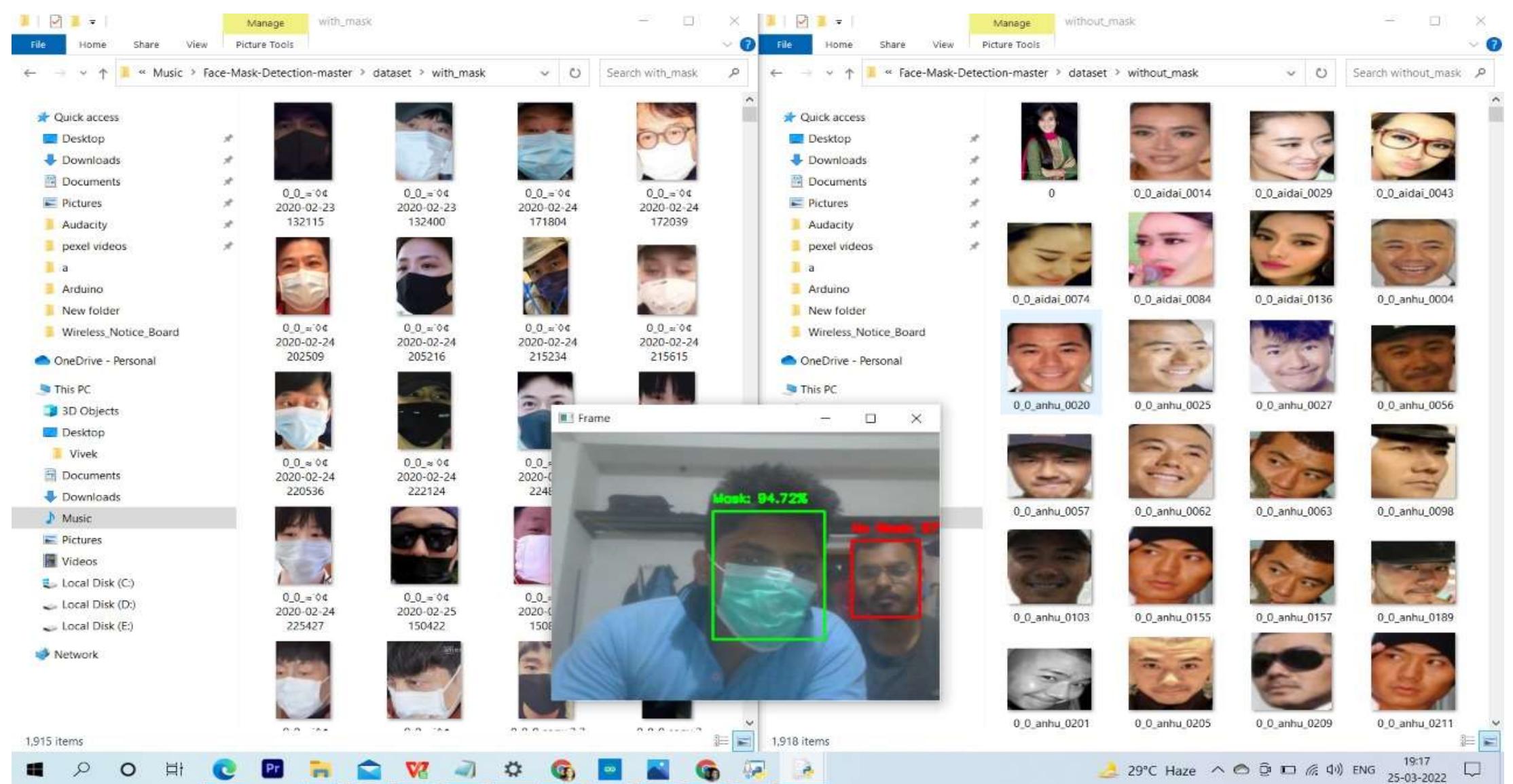
# CIRCUIT DIAGRAM

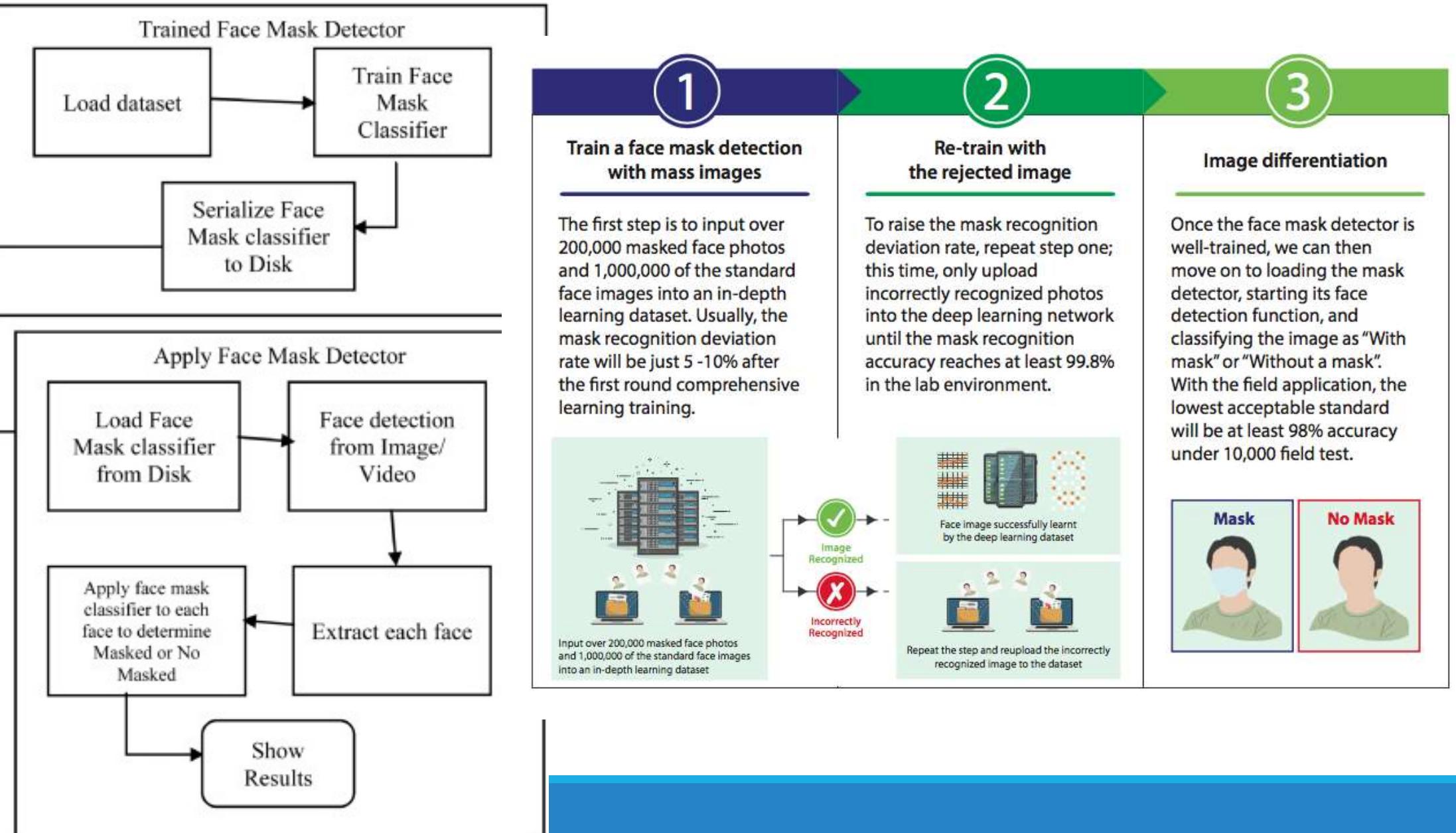


Contactless Thermometer



Auto-Sanitizer Dispenser





# **ADVANTAGES**

- 1.Facial Recognition.**
- 2.Follows Covid-19 Protocol helps disease to spread less**
- 3.Saves time and space**
- 4.Staff Friendly**
- 5.Ensure sanitization before entry**
- 6.Alert (High Body Temp / No Face Mask)**

## CONCLUSION AND FUTURE SCOPE

In This Project, we will be making a *small system* to just ensure that the people entering are following the **Government Covid-19 Protocol**, using **few sensors microcontroller and a machine learning approach**. But is this the end, No as we can in cooperate many things in future. This works for one to one, hence might *consume a lot of time*, hence the proposed technique can be integrated into any high-resolution video surveillance devices and not limited to **mask detection only**.

Adding a Covid-19 texting booth, storing the data for future purposes, making a quarantine based support application could be the next step to help the society and decrease the chance of the spread of this Covid-19 disease.

