

A Major Project Report On

**COVID-19 DETECTION AND SAFETY  
MEASURE AUTOMATION USING ARDUINO**

*Submitted in partial fulfilment of the requirement*

*for the award of the degree of*

**BACHELOR OF TECHNOLOGY  
IN  
ELECTRONICS AND COMMUNICATION ENGINEERING**

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### CERTIFICATE

This is to certify that the major project report titled on **“COVID-19 DETECTION AND SAFETY MEASURE AUTOMATION USING ARDUINO”** is being submitted by students **C. SHASHANK (17P61A0429), A. HEMANTH (17P61A0403), E. BHANU PRAKASH (17P61A0442), K. SAI PRASAD (17C21A0411)** in partial fulfilment for the award of the Degree of Bachelor of Technology in **ELECTRONICS AND COMMUNICATION ENGINEERING** to Jawaharlal Nehru Technological University, Hyderabad, is a record of a bonafide work carried out by them under my guidance and supervision.

The results embedded in this project report have not been submitted to any other University/ Institution for the award of any Degree.

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### CANDIDATE DECLARATION

We hereby declare that this major project report titled on “**COVID-19 DETECTION AND SAFETY MEASURE AUTOMATION USING ARDUINO**” submitted by us to the Department of Electronics and Communication Engineering, Vignana Bharathi Institute of Technology, Aushapur, under Jawaharlal Nehru Technological University-Hyderabad, is a bonafide work undertaken by **C. SHASHANK (17P61A0429), A. HEMANTH (17P61A0403), E. BHANU PRAKASH (17P61A0442), K. SAI PRASAD (17C21A0411)** and it is not submitted to any other University or Institution for the award of any degree.

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## **ABSTRACT**

Telling people to stay safe may seem a nice and easy thing to do, while most of them obey the safety precautions, most of them don't. But "stay safe" is a rather stealthy way of conveying that. The novel COVID-19 has taught us a lot more about the safety measures that have to be taken to keep ourselves protected from this situation.

With safety being the utmost priority during the current pandemic situation, the project uses RFID tags and when scanned, will tell the equipment if the person is tested for Covid-19 positive or negative, the door opens if the RFID reads negative and if the RFID reads positive then a buzzer buzzes alarming the authority. The MLX90614 Temperature sensor senses the body temperature and if it is above threshold value then the buzzer buzzes alarming the authorities about the same, once it is safe to enter the place. It dispenses the liquid disinfectants and tissue paper using an Ultrasonic Sensor and Servo motor.

This project uses a Dustbin which is used to throw away the used tissue papers or any waste materials as such, and the major component of this prototype is the Robotic Arm which is the combination of 10K Potentiometers and servo motors which help delivering the products.

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