**ADVANCED DOORBELL TO PREVENT   
COVID-19 USING ARDUINO NANO**

**A PROJECT REPORT**

**Submitted by**

**V. K. Ramdas Coudinya (11189C190)**

**R. V. Sarath Kumar (11189C193)**

**T. Ravi Teja (11189C222)**

***in partial fulfilment of the requirements for the degree of***

**BACHELOR OF ENGINEERING**



**Department of Electronics & Communication Engineering**

**Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,**

**Enathur, Kanchipuram - 631 561**

**APRIL 2022**

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**BONAFIDE CERTIFICATE**

Certified that this report “**ADVANCED DOORBELL TO PREVENT   
COVID-19 USING ARDUINO NANO”** is a bonafide work of **“V. K. Ramdas Coudinya (11189C190), R. V. Sarath Kumar (11189C193), T. Ravi Teja (11189C222)”** who carried out the project under my supervision.

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|  |
| --- |
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| Date: | | |

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**ABSTRACT**

* In this project, we will be designing an advanced doorbell that ensures safety from COVID-19 pandemic as it is fully touch proof. What If the person who came to our house cannot find the doorbell or if the person is has fever or if they maybe covid affected, what can be done to ensure?
* How will it be if we use an automatic doorbell which checks their temperature and gives us instructions whether it is safe or not to let them inside and ring bell only when he is good? There are no more hassles.
* The person who comes to our house need not search for the doorbell and press it any more. If we install this automatic doorbell using object detection circuit on the door itself, the circuit will automatically sense the presence of the person and ring the doorbell.
* Anti-Corona Touchless Doorbell using Arduino and IR Sensor. In this Covid-19 situation we are going to make a very practical doorbell project that measures temperature of the visitors using sensor and gives us instructions whether to let them in or not.
* You know during this Covid-19 Corona Virus situation we need to keep the distance from others and stop touching things which may be easily infected. Doorbell is touched by everyone, and what if the Doorbell button is pressed by someone who is Corona positive? We need to stop Corona Virus from spreading, not only Corona Virus there may be some other diseases which may spread through touching. As engineers, we will show you how to make a touch-free or touchless doorbell. So, in this project we will make a touchless doorbell system using Arduino NANO. By touch-free doorbell we quite literally mean touch-free. So, you do not need to press the bell button anymore. You just wave your hand in front of the IR sensor and the doorbell will start ringing. So, the purpose behind this project is, as you all might know one of the most recommended precautions to take against the covid-19 is to maintain social distance and avoid contact with each other or strangers. So, what happens is whenever a person comes to our houses the first thing that they do is they touch or press the doorbell and by doing so they are leaving the germs that were previously on their hands to the doorway and the next time someone from your family presses the doors doorbell the same germs get transferred to their hands. So, to avoid this kind of situation we completely eliminate the need to press the doorbell itself. So, when there will be no need to press the doorbell no one will touch it and that’s when no germs will be transferred.
* How will it be if we use an automatic doorbell which checks their temperature and gives us instructions whether it is safe or not to let them inside and ring bell only when he is good? There are no more hassles

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