



Welcome!



M.Kumarasamy
College of Engineering

NAAC Accredited Autonomous Institution

Approved by AICTE & Affiliated to Anna University

ISO 9001:2015 Certified Institution

Thalavapalayam, Karur, Tamilnadu.



CORONA PROTECTED AUTOMATIC DOORBELL

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INTRODUCTION

- A doorbell is an indicator device typically placed near a door to a house entrance.
- When touching the bell switch by different people is harmful. For good example is corona virus.
- So protection from coronavirus at the entrance (doorbell switch) is necessary.
- Hand sanitization is one among all good precautions.
- This is designed and implemented a corona protected automatic touchless doorbell with the help of interfacing of arduino which rings automatically.
- When someone wants to ring the bell he/she should show his/her hands just 3 to 5 cm. Apart in front of the mq3 sensor.

ABSTRACT

- When someone wants to ring the bell.
- He/she should put his/her hands in front of the mq3 sensor after sanitizing hands (2 to 5 cm. Distance).
- At this moment mq3 generates an analog output which will drive the interfaced arduino-uno.
- To generate a signal at pin-8 and pin- 9.

OBJECTIVES

- Automatic door operators offer several advantages in addition to reducing the chances of transmitting the coronavirus.
- They make it more convenient for people entering and exiting a building, particularly those carrying packages.
- They reduce the risk of people getting hit by closing hinged doors or having fingers caught between a door and its frame.

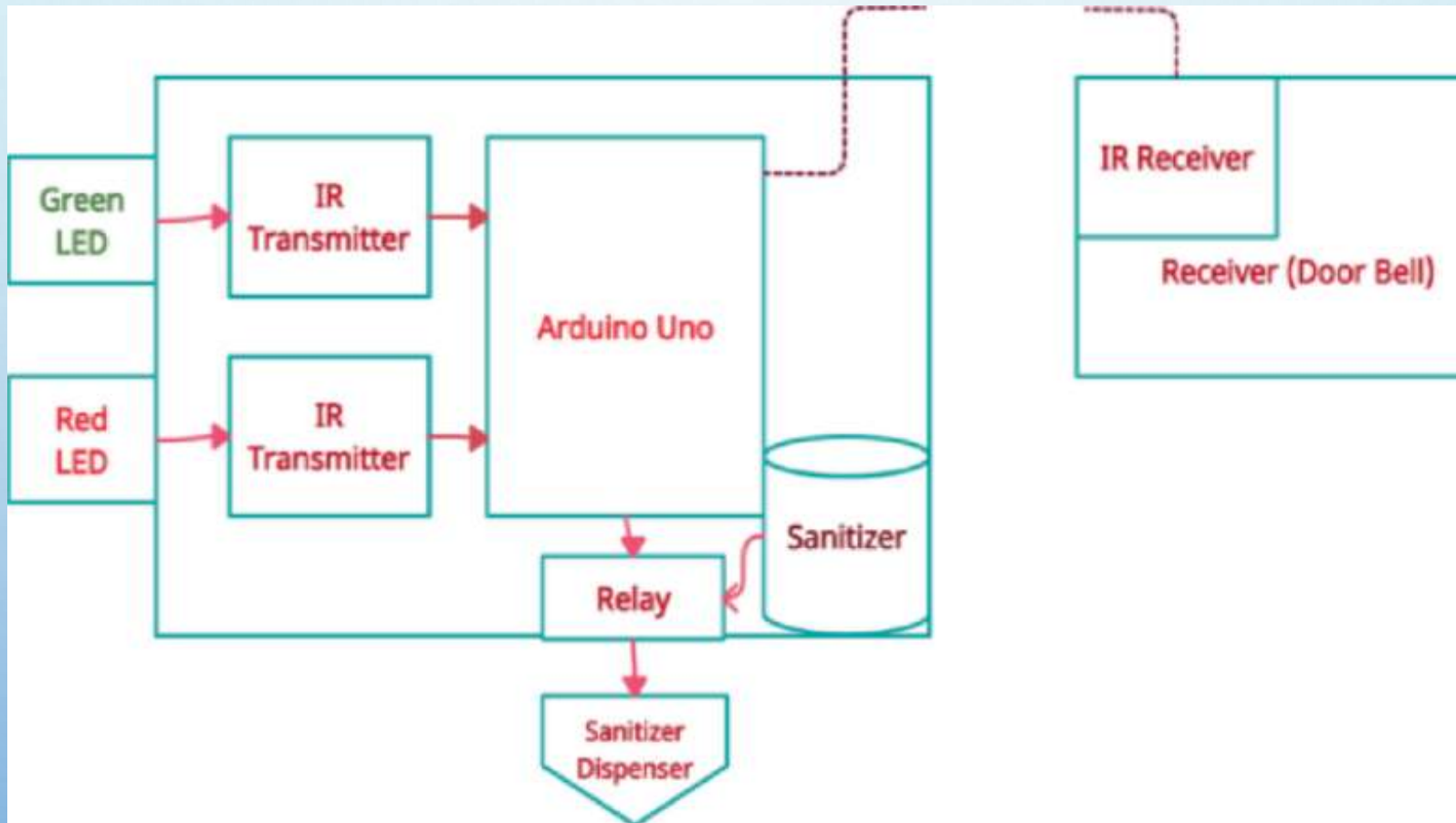
WORKING

- When someone wants to ring the bell, he/she should put his/her hands in front of the MQ3 sensor after sanitizing hands (2 to 5 cm. Distance).
- At this moment mq3 generates an analog output which will drive the interfaced arduino-uno to generate a signal at pin-8 and pin- 9.
- Here the led is connected to pin-8 which will glow when mq3 senses the odor of sanitizer.
- Pin 9 is connected to uln2003ic which actually drives the relay at the same time and the relay is connected to the doorbell so it will ring.

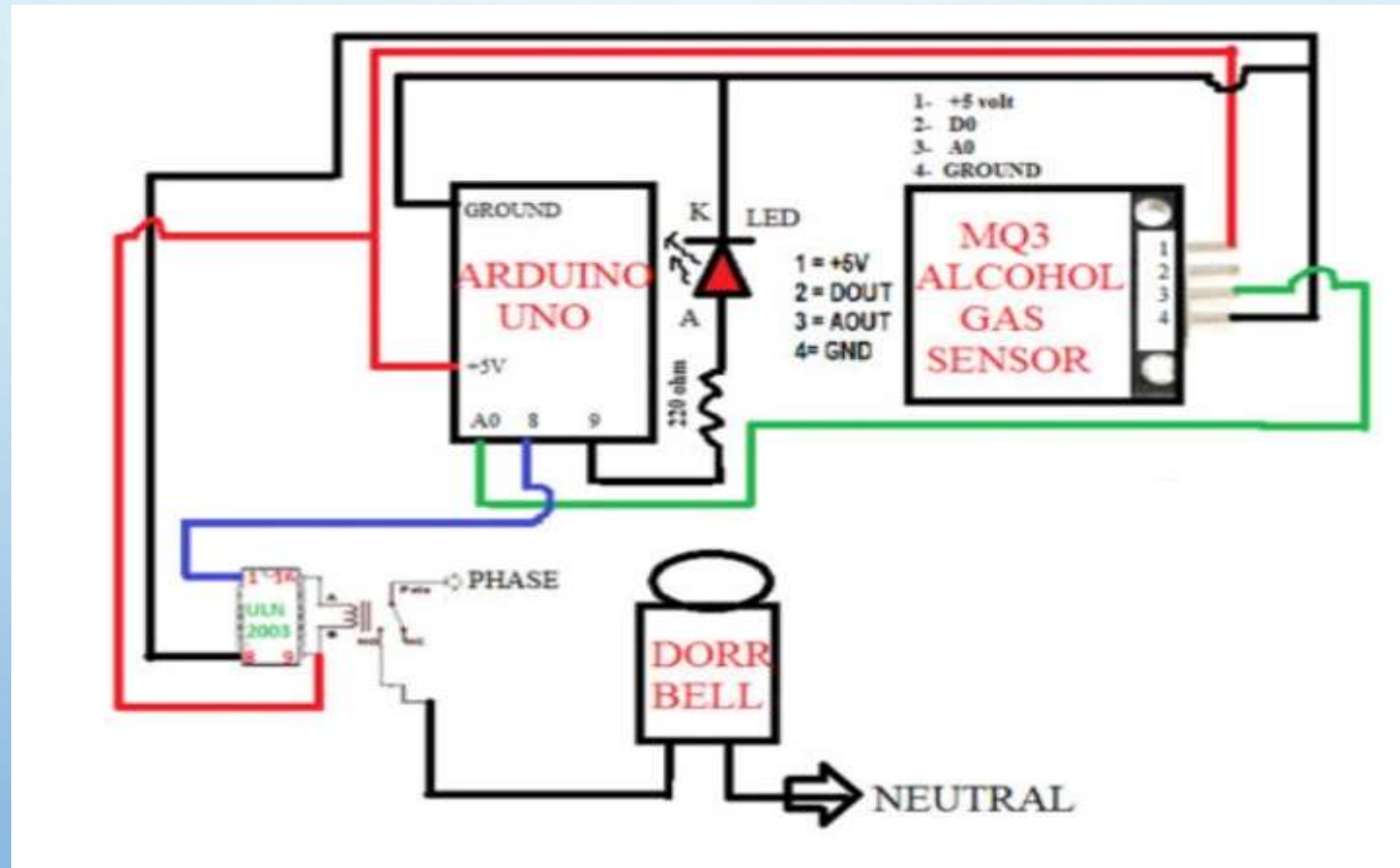
COMPONENTS

NAME	APPROX. COST
ARDUINO-UNO	500/-
12v,2A adapter	230/-
5V RELAY	20/-
ELECTRIC DOORBELL	150/-
LED	2/-
220OHM RESISTOR	1/-
Breadboard	75/-

BLOCK DIAGRAM



CIRCUIT DIAGRAM



CONCLUSION

- Wireless doorbell functions through a transmitter that sends a coded signal when the outside button is pressed. There is a myriad of advantages of having a wireless doorbell in place of wired one.



Thank you!