



# COVID-19 HUMAN DETECTOR

A Project of Digital Electronics

“Technology now allows people to connect anytime, anywhere, to anyone in the world, from almost any device. This is dramatically changing the way people work, facilitating 24/7 collaboration with colleagues who are dispersed across time zones, countries, and continents.”

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# INTRODUCTION TO COVID -19 HUMAN DETECTOR

❖ Covid -19 human detector is a device which detect the presence of human who is infected just by the help of sensor.

# APPARATUS AND SOFTWARE REQUIRED

Arduino UNO R3.

Breadboard.

LCD 16 X 2

Tinkercad

1k ohm resistor

Potentiometer.

PIR Sensor

Buzzer.

THEORY

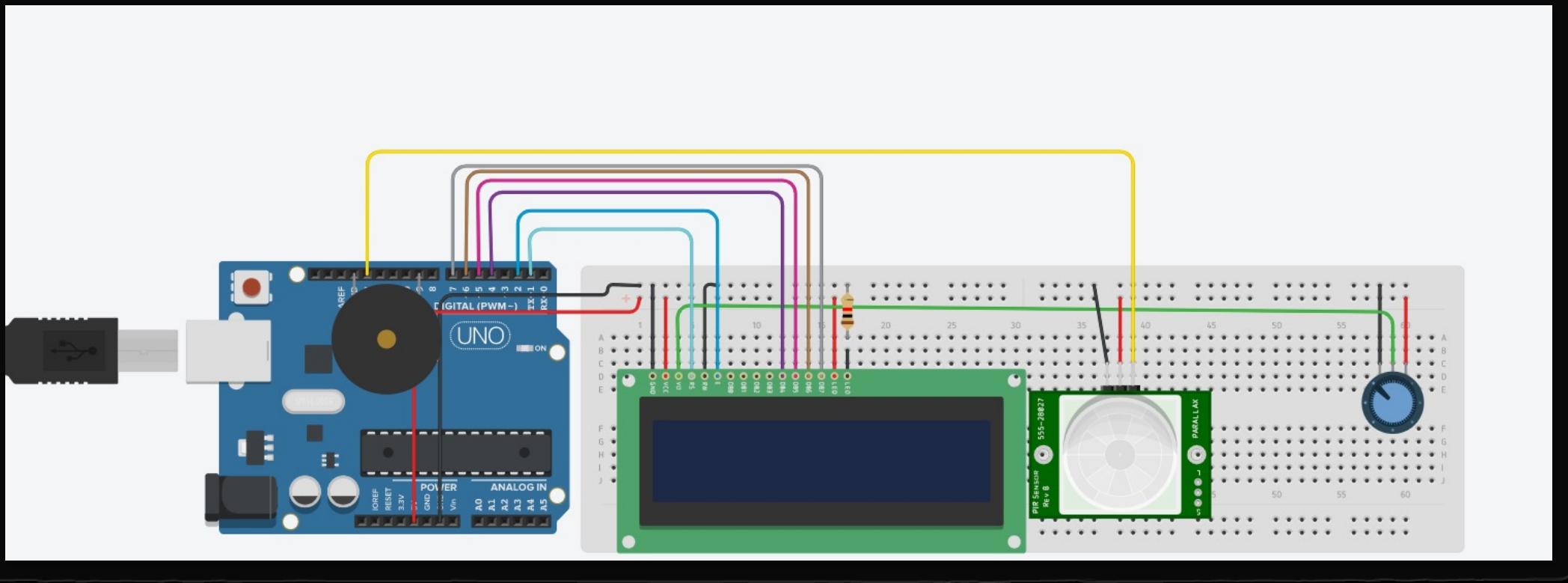
# ARDUINO Uno R3

The **Arduino Uno R3** is a microcontroller board based on a removable, dual-inline-package (DIP) ATmega328 AVR microcontroller. It has 20 digital input/output pins (of which 6 can be used as PWM outputs and 6 can be used as analog inputs). The **R3** is the third, and latest, revision of the **Arduino Uno**. It is able to read inputs - light on a sensor, a finger on a button, or a Twitter message - and turn it into an output - activating a motor, turning on an LED, publishing something online.

A **breadboard** is **used** to build and test circuits quickly before finalizing any circuit design. The **breadboard** has many holes into which circuit components like ICs and resistors can be inserted.

A **passive infrared sensor (PIR sensor)** is an electronic **sensor** that measures infrared (IR) light radiating from objects in its field of view. They are most often **used** in **PIR-based motion** detectors. **PIR sensors** are commonly **used** in security alarms and automatic lighting **applications**.





# CIRCUIT

## COVID-19 HUMAN DETECTOR

# WORKING

- ❖ So in this Project Microcontroller (Arduino) are reading the value from the PIR Sensor and storing them in a variable and with that Sensor Value it(Arduino) showing the Human Status on the LCD and whenever there is any human presence it triggers the Buzzer. That's all about working. We have used a Sensor (PIR Sensor) to detecting the Human Presence, One 16x2 LCD to show the status that "It is Human" OR "There is no any Human", One Potentiometer to set the Brightness in the LCD, and One Buzzer for the Beep whenever there is any Human Presence.

❖

# BENEFITS

It will detect the infected person immediately. So, that other person will not come in contact with him or her and treatment will start from the same moment.

## DRAWBACKS

It is not working properly in most sunny area.

It give the each output with delay of two seconds .

# TROUBLESHOOTING

Sensor is detecting something under 0 to 180 degree.

Trying to add delay of 2 to 3 seconds in program so it can give each output under 2 to 3 seconds

“STAY HOME STAY SAFE “

THANKYOU