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# COVID CARE

Reimagining the health checkup procedures in post covid era

# Our inspiration for this project

As the world will reopen after the pandemic, there will be a necessity to follow the covid SOP in public places and the need for a one-stop solution for checking all the vitals will surge. Our project COVID CARE was made to serve this need. It focuses on providing maximum services to track the health of a person and maintain a database of the health of people checking in a public place.

# COVID CARE : What it does

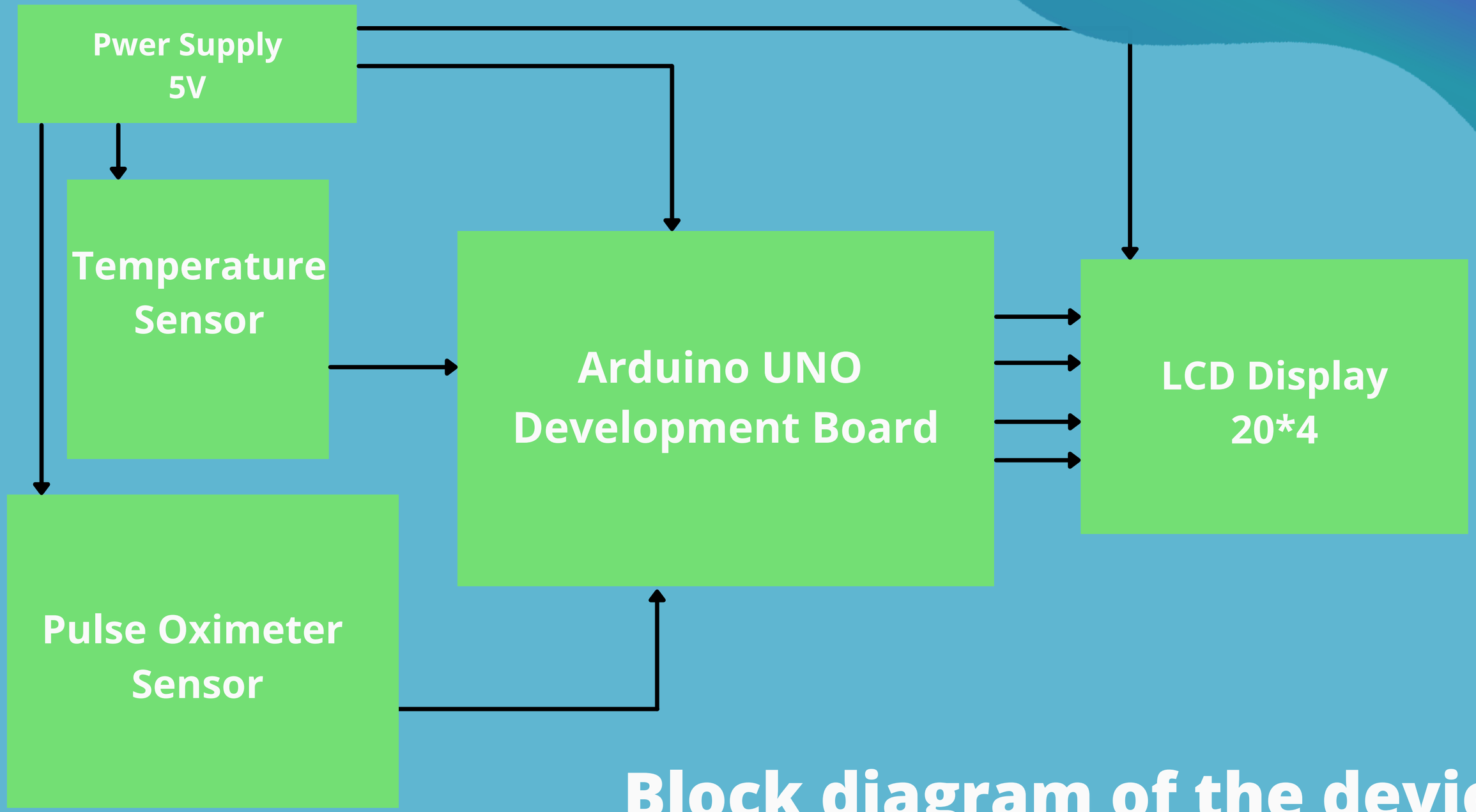
01 Provides an instant report of a person's pulse rate, oxygen levels and body temperature.

02 Access your health records at a public check-in on mobile app.

03 Maintains a database of the health of all the people checking in at a public place.

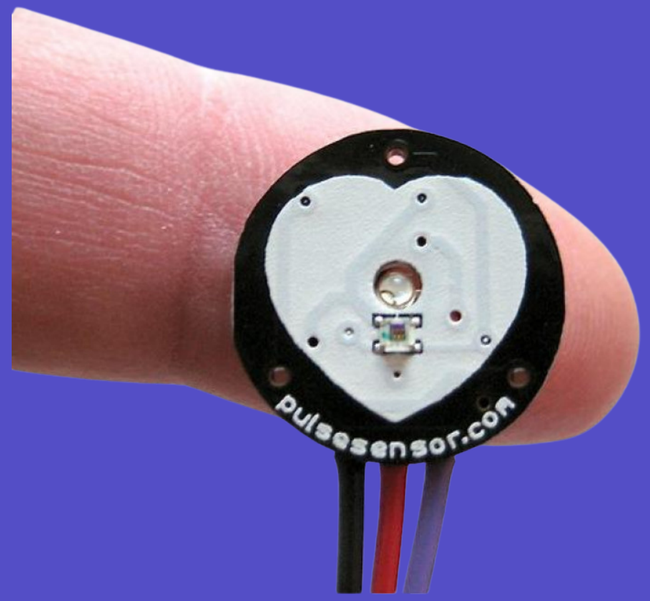
04 Sends alert in case of adverse changes in health parameters

05 The user of the mobile app can also add health records.

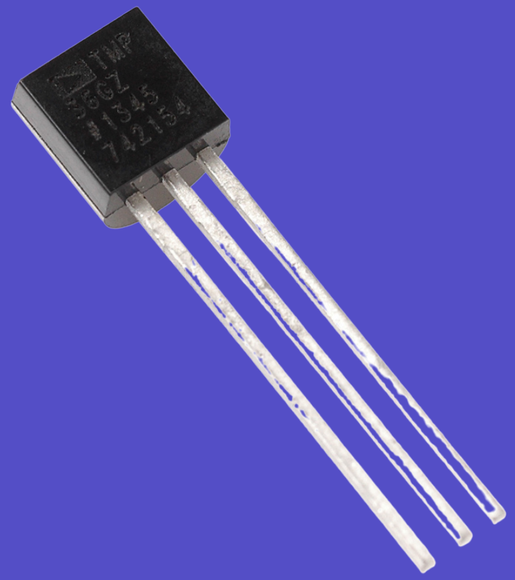



# Block diagram of the device

# Sensors used to detect vitals in Proteus




Pulse sensor



Temperature Sensor
(Tmp36)

**Note: Here we have used a pulse sensor instead of a pulse oximeter sensor, because library of the pulse oximeter sensor for proteus and other softwares was not available.**

# Future Aspects of Hardware Implementation


In real life scenario we will be using **MAX 30100** pulse oximeter sensor module. It's an optical sensor that derives its readings from emitting two wavelengths of light from two LEDs – a red and an infrared one – then measuring the absorbance of pulsing blood through a photodetector. This particular LED color combination is optimized for reading the data through the tip of one's finger.

The signal is processed by a low-noise analog signal processing unit and communicated to the target MCU through the mikroBUS I2C interface.

# What's next for COVID CARE

01 UI/UX designs of mobile app with accessibility features for specially abled

02 Integration with fitness apps and devices like Fitbit

03 Adding Wi-fi and Bluetooth functionality in device to connect with mobile app

04 Using pulse oximeter sensor instead of pulse sensor in hardware part

# Our team

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https://github.com/nishisharma311/Covid_Care

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# Thank you