

# Final Proposal Project Proposal

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## Description:



COVID-19 is impacting and reshaping daily life for everyone around the globe. When it comes to coronavirus protection, wash your hands thoroughly with soap and water is really important. However, there are many people only wash their hands less than 10 seconds, which is definitely not enough. So I wanted to make a timer to remind people to wash their hands for 20 seconds, which would eliminate all traces of the virus on their hands.

The timer will detect when you take your hands in front of the soap dispenser and start counting down 20 seconds. Once the red LED turns on, you have to wash your hands long enough to kill most of the germs, and when the red LED turns on, you can wash the soap off with water.

### Estimated supplies:

Arduino Uno

HC-SR04 Ultrasonic Distance Sensor

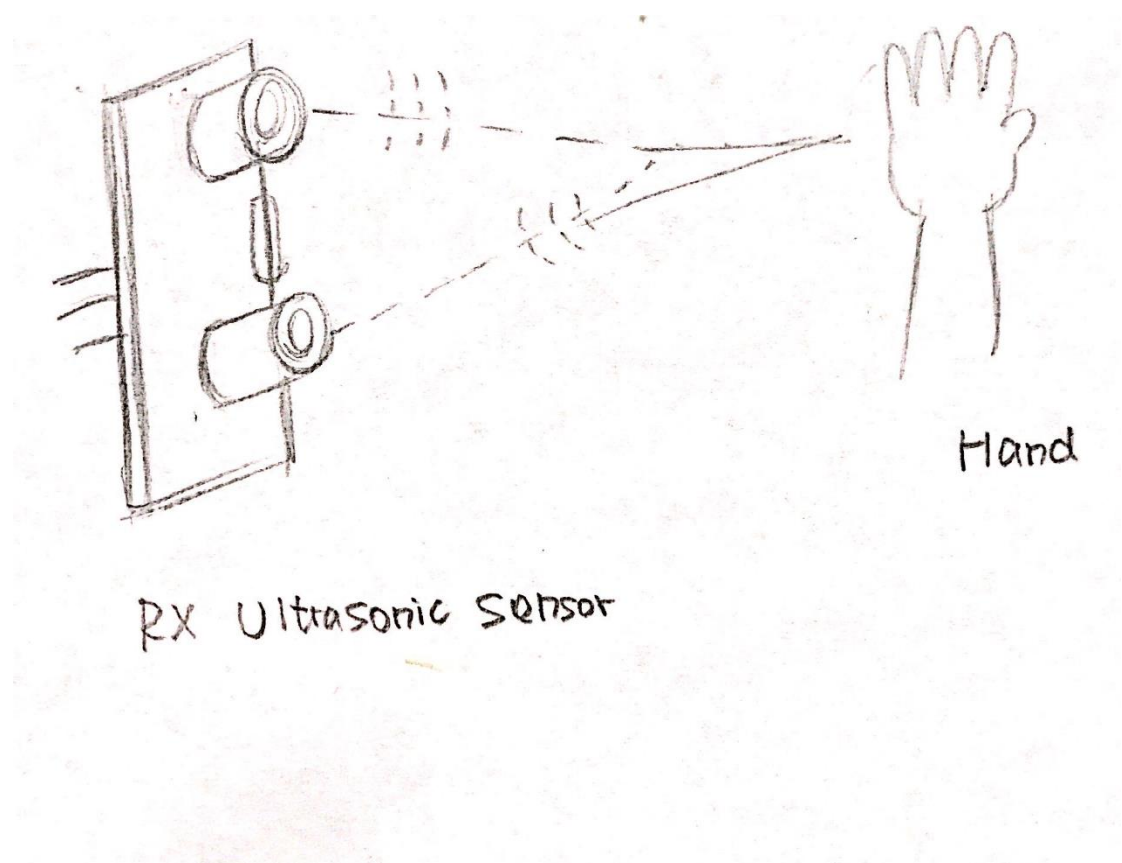
Red LED

Green LED

Enclosure

Breadboard and jumpers

### How it might works



### Functions and flows

- It can detect something within 30 centimeters
- It will turn on the red LED and waits for 4 seconds for you to take some water and

soap on your hands

- It will the 20 seconds countdown
- Once the green LED turns up, you have washed your hands for long enough and you can rinse off the soap

## Fritzing

