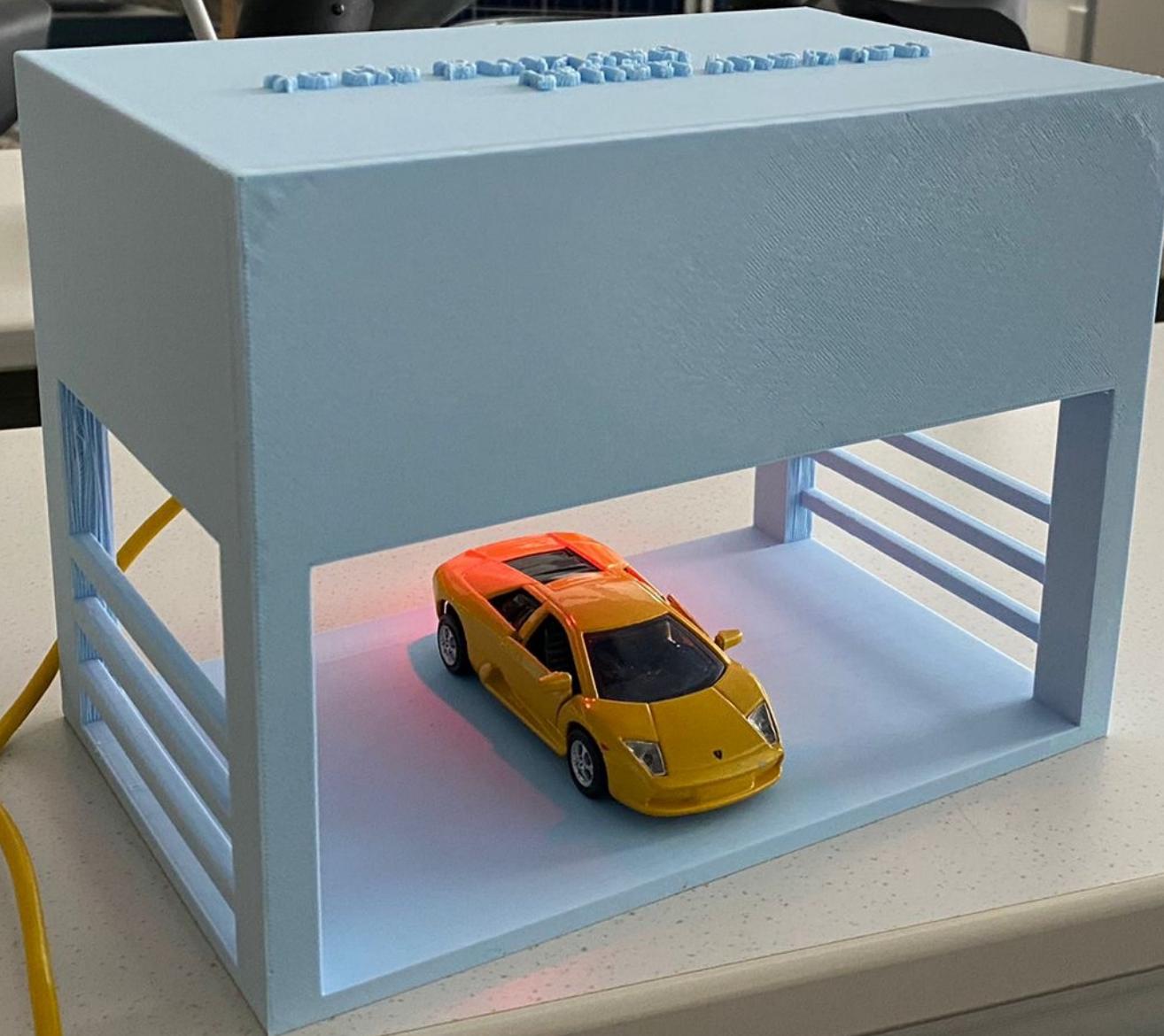


PARKING LOT

Arduino project – distance sensor

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The sensor measures if there is any car in the parking spot or not.



There is a RGB led that turns red if the spot is occupied.



The led turns green if the spot is free.



Basically, makes life easier for you to find a free spot in a parking lot.

THE IDEA





- When the sensor detects no car in the parking spot, the LED light turns **green**, meaning that the parking lot is free

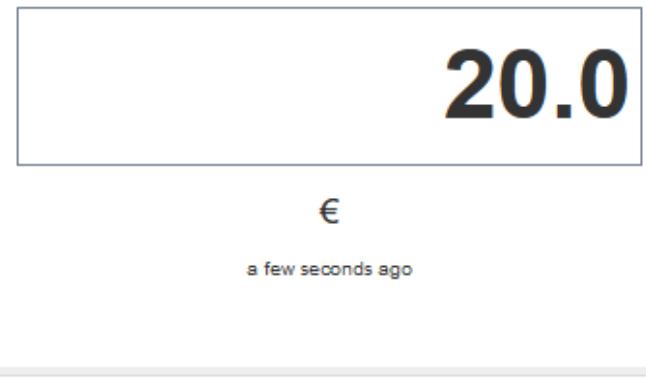
- When the sensor detects a car parked, the LED light turns **red**, meaning that the parking lot is occupied.

THE INSIDE

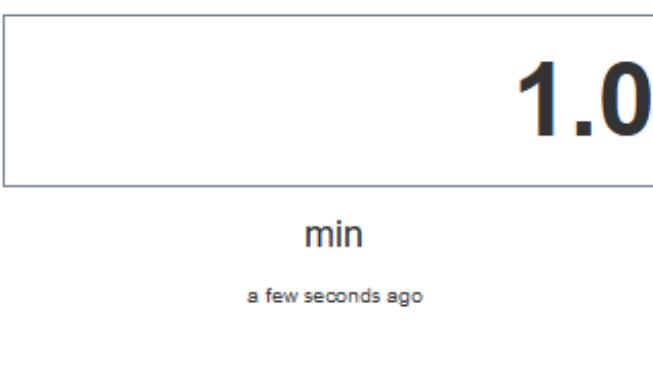
- Arduino uno Wi-Fi rev2
- CJMCU-530 sensor
- RGB LED light
- Cable & wires
- Lamborghini Murcielago



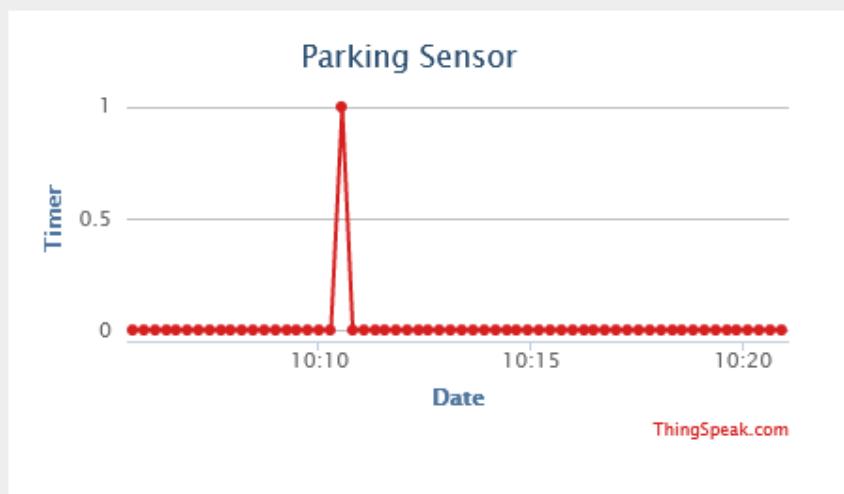
Field 4 Numeric Display



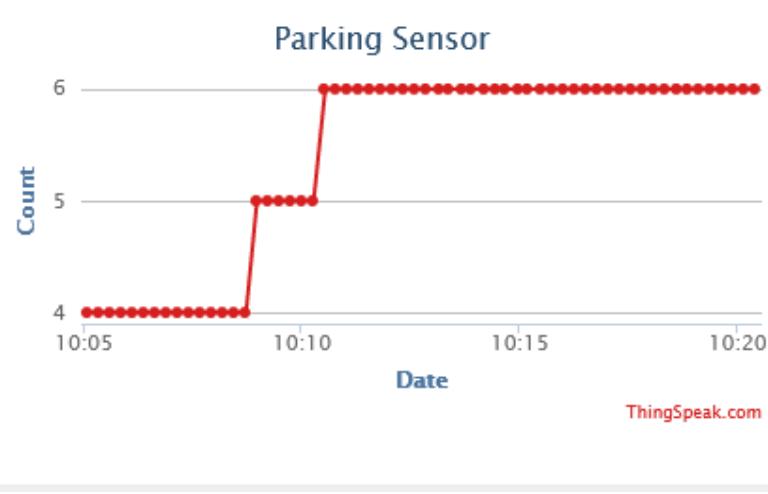
Field 3 Numeric Display



Field 3 Chart



Field 5 Chart



ADDITIONAL FUNCTIONS



Timer



Counter



Price



Blue Light

```
//setting ThingSpeak fields for variables
ThingSpeak.setField(1, dist);
ThingSpeak.setField(2, state);
ThingSpeak.setField(3, time_spent);
ThingSpeak.setField(4, price_calc);
ThingSpeak.setField(5, count);

ThingSpeak.writeFields(myChannelNbr,writeAPIKey); //sending values to ThingSpeak channel
Serial.println();
delay(500);
```

- Connection to the ThingSpeak

```
if(dist<a && state == 0)//red when car enters and sensor at state 0
{
    timeIn = millis(); //getting current time (when car entered)
    state = 1;
    set_colour(255,0,0); //setting red
    time_spent = 0;
}
```

- Timer initialisation and changing of colour of RGB to red.



**THANK YOU FOR
WATCHING**