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HC-SR04 Ping distance sensor]

VCC to arduino 5v GND to arduino GND

Echo to Arduino pin 13 Trig to Arduino pin 12

Red POS to Arduino pin 11

Green POS to Arduino pin 10

560 ohm resistor to both LED NEG and GRD power rail

More info at: http://goo.gl/kJ8Gl

Original code improvements to the Ping sketch sourced from Trollmaker.com

Some code and wiring inspired by http://en.wikiversity.org/wiki/User:Dstaub/robotcar

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#define trigPin 13

#define echoPin 12

#define led 11

#define led2 10

void setup() {

Serial.begin (9600);

pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT);

pinMode(led, OUTPUT);

pinMode(led2, OUTPUT);

}

void loop() {

long duration, distance;

digitalWrite(trigPin, LOW); // Added this line

delayMicroseconds(2); // Added this line

digitalWrite(trigPin, HIGH);

// delayMicroseconds(1000); - Removed this line

delayMicroseconds(10); // Added this line

digitalWrite(trigPin, LOW);

duration = pulseIn(echoPin, HIGH);

distance = (duration/2) / 29.1;

if (distance < 4) { // This is where the LED On/Off happens

digitalWrite(led,HIGH); // When the Red condition is met, the Green LED should turn off

digitalWrite(led2,LOW);

}

else {

digitalWrite(led,LOW);

digitalWrite(led2,HIGH);

}

if (distance >= 20 || distance <= 0){

Serial.println("Out of range");

}

else {

Serial.print(distance);

Serial.println(" cm");

}

delay(500);

}