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/*
    This code should work to get warning cross the buzzer when something be closer than 0.5
meter

    Circuit is ultrasonic sensor and buzzer +5v and Arduino uno is used

    a_atef45@yahoo.com

    www.zerosnones.net

    +201153300223
*/

// Define pins for ultrasonic and buzzer
int const trigPin = 10;
int const echoPin = 9;
int const buzzPin = 2;

void setup()
{
    pinMode(trigPin, OUTPUT); // trig pin will have pulses output
    pinMode(echoPin, INPUT); // echo pin should be input to get pulse width
    pinMode(buzzPin, OUTPUT); // buzz pin is output to control buzzing
}

void loop()
{
    // Duration will be the input pulse width and distance will be the distance to the obstacle in
centimeters

    int duration, distance;

    // Output pulse with 1ms width on trigPin
    digitalWrite(trigPin, HIGH);
    delay(1);
    digitalWrite(trigPin, LOW);

    // Measure the pulse input in echo pin
    duration = pulseIn(echoPin, HIGH);

    // Distance is half the duration divided by 29.1 (from datasheet)

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distance = (duration/2) / 29.1;

// if distance less than 0.5 meter and more than 0 (0 or less means over range)
if (distance <= 50 && distance >= 0) {

    // Buzz

    digitalWrite(buzzPin, HIGH);

} else {

    // Don't buzz

    digitalWrite(buzzPin, LOW);

}

// Waiting 60 ms won't hurt any one

delay(60);

}
```