

Smart home in Tinkercad using 2+,Sensors,Led ,Buzzer in single code and circuit.

// C++ code

int val = 0;

long readUltrasonicDistance(int triggerPin, int echoPin)

{

pinMode(triggerPin, OUTPUT); // Clear the trigger

digitalWrite(triggerPin, LOW);

delayMicroseconds(2);

// Sets the trigger pin to HIGH state for 10 microseconds

digitalWrite(triggerPin, HIGH);

delayMicroseconds(10);

digitalWrite(triggerPin, LOW);

pinMode(echoPin, INPUT);

// Reads the echo pin, and returns the sound wave travel time in microseconds

return pulseIn(echoPin, HIGH);

}

void setup()

{

Serial.begin(9600);

pinMode(8, OUTPUT);

pinMode(9, OUTPUT);

pinMode(10, OUTPUT);

}

void loop()

{

val = 0.01723 * readUltrasonicDistance(6, 5);

Serial.println(val);

if (val <= 50) {

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    digitalWrite(8, HIGH);
} else {
    digitalWrite(8, LOW);
}

if (val <= 75) {
    digitalWrite(9, HIGH);
} else {
    digitalWrite(9, LOW);
}

if (val <= 100) {
    digitalWrite(10, HIGH);
} else {
    digitalWrite(10, LOW);
}

delay(10); // Delay a little bit to improve simulation performance
}

```

Circuit:

