ASSIGNMENT-4

|  |  |
| --- | --- |
| **Assignment Date** | **26 October 2022** |
| **Team ID** | **PNT2022TMID15065** |
| **Project Name** | **IoT Based Safety Gadget for Child Safety Monitoring & Notification** |
| **Maximum Marks** | **2 Marks** |

Write code and connections in wokwi for ultrasonic. Whenever distance is less than 100 cms send “alert” to ibm cloud and display in device recent events.

Solution:

#define ECHO\_PIN 2

#define TRIG\_PIN 3

#define organization = "mmbh4c" #define deviceType = "Ultrasonic" #define deviceId = "1112"

#define authMethod = "use-token-auth"

#define authToken = "123456789"

void setup() { **Serial**.begin(9600); pinMode(TRIG\_PIN, OUTPUT); pinMode(ECHO\_PIN, INPUT);

}

float readDistanceCM() {

digitalWrite(TRIG\_PIN, LOW);

delayMicroseconds(2); digitalWrite(TRIG\_PIN, HIGH); delayMicroseconds(10); digitalWrite(TRIG\_PIN, LOW);

int duration = pulseIn(ECHO\_PIN, HIGH);

return duration \* 0.034 / 2;

}

void loop() {

float distance = readDistanceCM(); if(distance <= 100)

{

**Serial**.println("person detected ");

}

else{

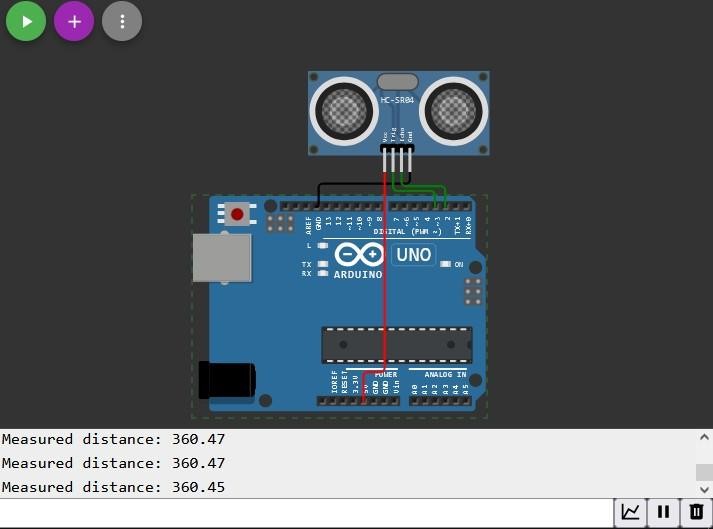
**Serial**.print("Measured distance: ");

**Serial**.println(readDistanceCM());

}

delay(100);

}



IBM Cloud

Device Recent Events

