Assignment -4

Assignment Date	26 October 2022
Student Name	GUNADEEPAN G
Team ID	PNT2022TMID14561
Project Name	Project-Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

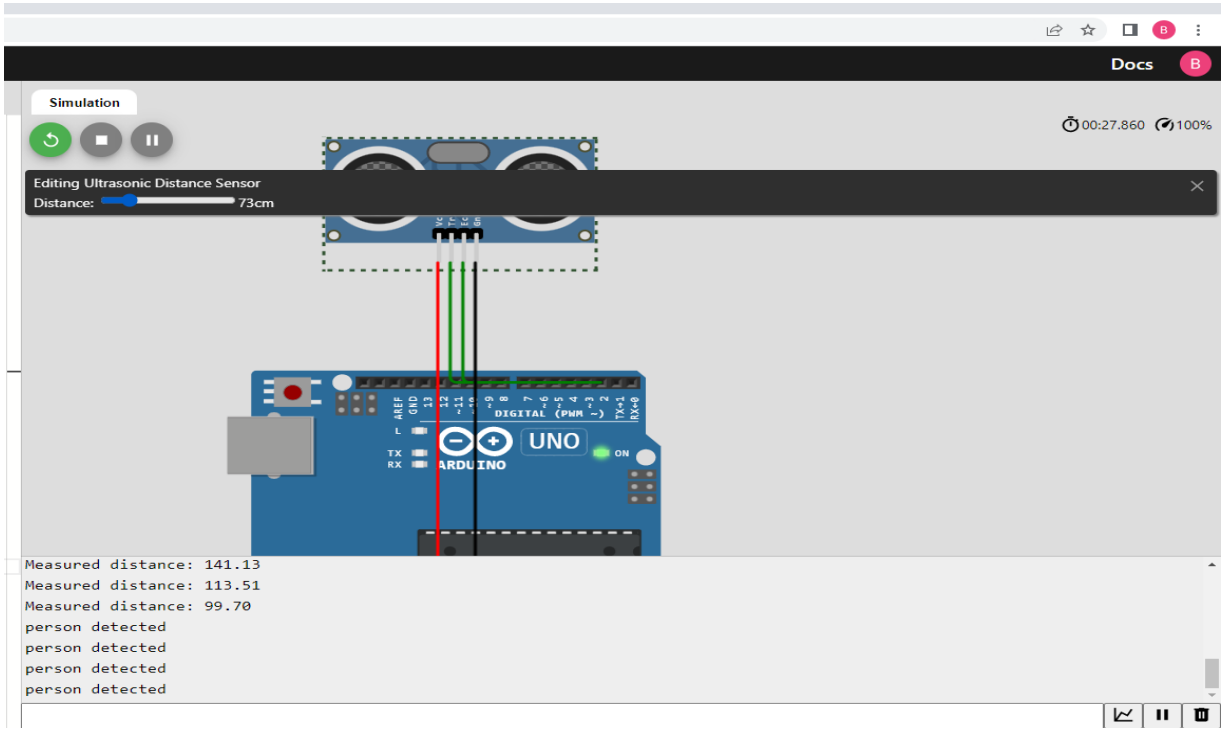
Question-1:

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 =”e03g10”

#define deviceType=” Arduino”

#define deviceId =”2502”

#define authMethod ="use-token-auth"

#define authToken =”12345678”

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(1000);
}
```



Wokwi Link: ***https://wokwi.com/projects/346567349532361298***

IBM Cloud

Device Recent Events