Assignment -4

Assignment Date	26 October 2022
Student Name	Kaviarasu D
Team ID	PNT2022TMID14625
Project Name	Project-Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

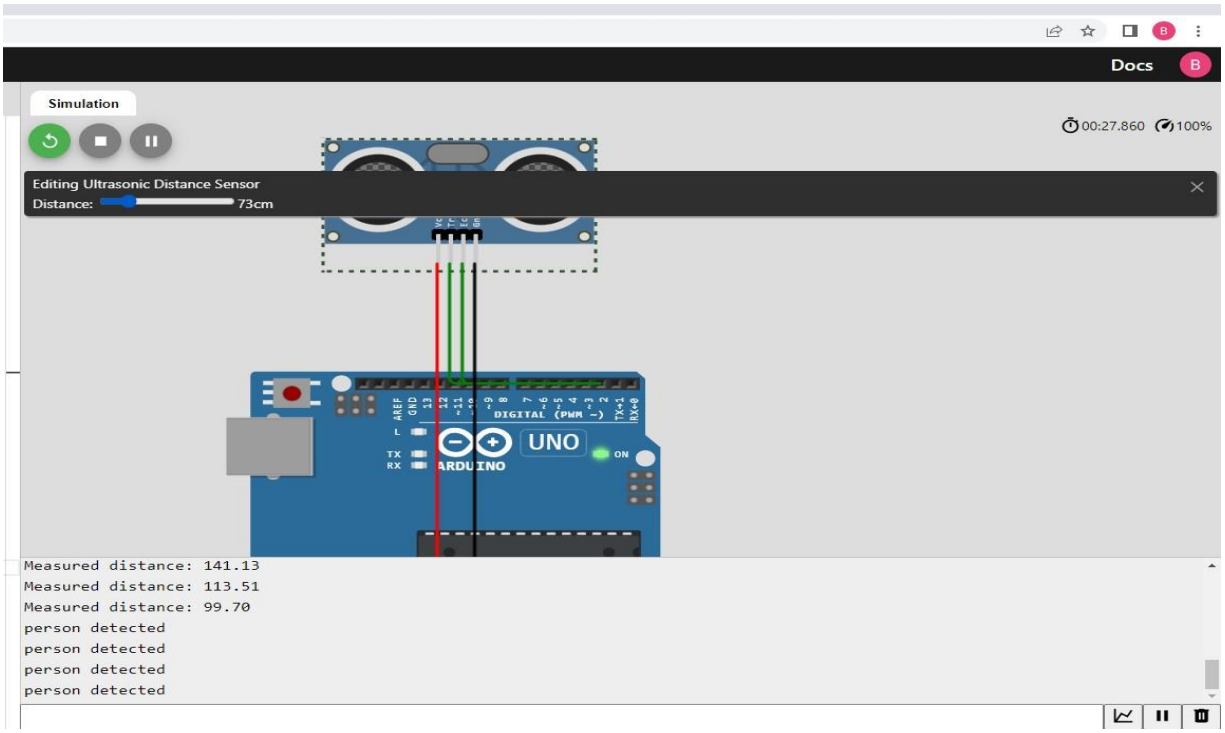
Q1:

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