Assignment -4

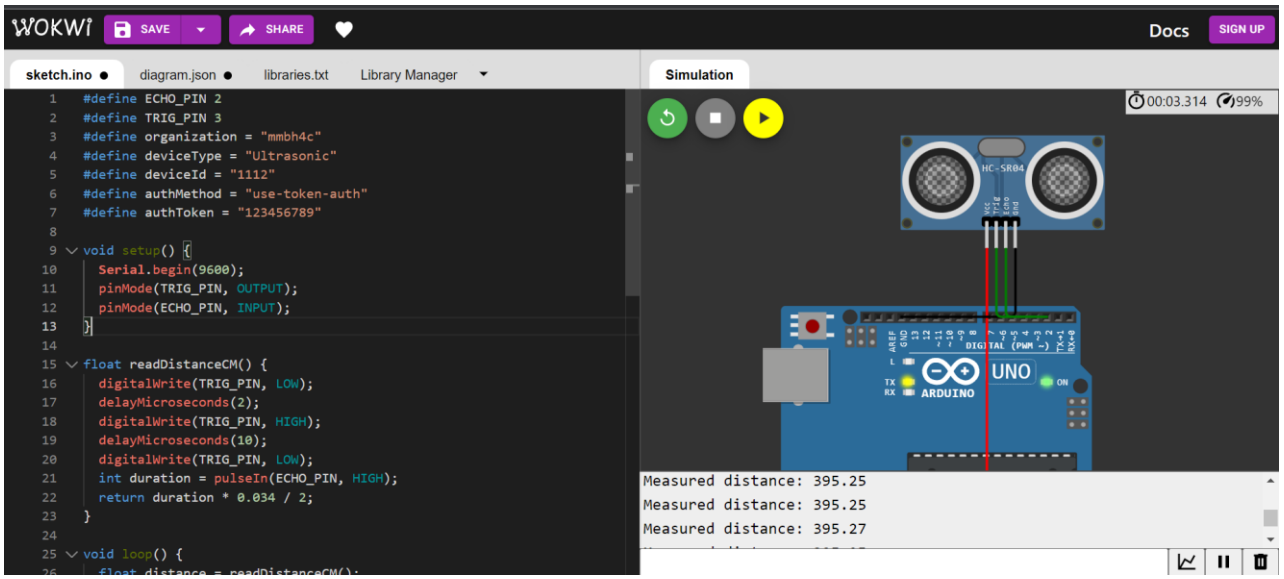
Student's Name	M.KIRTHIKA
Assignment Date	01 November 2022
Team ID	PNT2022TMID18146
Project Name	Project – SMART SIGN CONNECTIVITY FOR ROAD SAFETY
Maximum Marks	2 Marks

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);
}
```

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  return duration * 0.034 / 2;
}

void loop() {
```

Wokwi Link: https://wokwi.com/projects/345395196387656275

OUTPUT:

```
Measured distance: 395.25
Measured distance: 395.35
Measured distance: 395.25
Measured distance: 395.27
Measured distance: 395.25
Measured distance: 395.25
Measured distance: 395.25
easured distance: 395.27
Measured distance: 395.25
Measured distance: 395.25
Measured distance: 395.25
Measured distance: 395.27
Measured distance: 395.25
Measured distance: 395.27
Measured distance: 395.25
Measured distance: 395.
```

IBM Cloud

Device Recent Events