

PROJECT DEVELOPMENT PHASE
SPRINT-1

Date	1 NOVEMBER 2022
Team ID	PNT2022TMID42437
Project Name	Project - Hazardous Area Monitoring for Industrial Plant powered by IoT
Maximum Marks	4 Marks

CODE :

SENSOR BEACON

```
#include <dht.h>

#define dht_apin A0           // Analog Pin 0 is connected to DHT sensor #define
mq_t_apin A1                 // Analog Pin 1 is connected to MQT 135 sensor
dht DHT; int
sensorValue;

void setup(){

    Serial.begin(9600);        //Serial port to communicate with Python code
    Serial1.begin(9600);       //Serial port to communicate with Wearable device
    through Bluetooth (HC-05)

    delay(500);                //Delay to let system boot }

void loop(){
```

```

    DHT.read11(dht_apin);                // read analog input pin 0(DHT11)  sensorValue
= analogRead(mqt_apin);                // read analog input pin 1(MQ135)  //Send Humidity
status to Python Code

    Serial.print("Current humidity = ");
    Serial.print(DHT.humidity);
    Serial.print("% ");

//Send Temperature status to Python Code
    Serial.print("temperature = ");
    Serial.print(DHT.temperature);
    Serial.println("C ");

//Send AirQuality sensor value to Python code
    Serial.print("AirQua=");
    Serial.print(sensorValue, DEC);
    Serial.println(" PPM");

//Send signals to the Wearable
    Serial1.println("H T A");
    Serial1.println(DHT.humidity);
    Serial1.println(DHT.temperature);
    Serial1.println(sensorValue, DEC);

    delay(100);                // wait 100 milliseconds for next reading
}

```