User Manual

Setup Instructions

Material Required

- Arduino Nano IoT 33
- CCS811 Arduino Sensor
- 5110 LCD Display
- Breadboard
- Male to Male Jumper cables
- Male to Female Jumper cables
- Laptop or Computer with Arduino IDE
- Mobile to receive notification.

Hardware Setup

1. **Connect the CCS811 sensor to the Arduino Nano 33 IoT**:
   - VCC to 3.3V
   - GND to GND
   - SDA to A4
   - SCL to A5
2. **Connect the 5110 LCD**:
   - RST to D8
   - CE to D10
   - DC to D9
   - DIN to D11
   - CLK to D13
   - VCC to 3.3V
   - LIGHT to 3.3V
   - GND to GND

Software Setup

1. Install the necessary libraries in Arduino IDE:
   - Adafruit_GFX
   - Adafruit_PCD8544
   - Adafruit_CCS811
   - WiFiNINA
   - ThingSpeak
2. Download the program file from the Github provided and open in the Arduino IDE:

Running the System

1. Provide power by connecting the battery's positive terminal to VIN, and negative terminal to GND, alternatively provide power through the Micro USB port using a computer or laptop.
2. Once system is powered, upload the code to the Arduino through the Arduino IDE.
3. The display will then connect to the IFTTT and ThingSpeak servers automatically and confirm once done on the LCD display.
4. Finally, you can monitor the data on your ThingSpeak account, or await the notification on your mobile from IFTTT.