

Project Design Phase-4

Date	26 October 2023
Team ID	458
Project Name	4123-Noise Pollution Monitoring
Team Name	Proj_227238_Team_2
Team Members	5

Adding New Data To The Existing Dataset

Reference:<https://wokwi.com/projects/378926166342981633>

Python Code:

```
from machine import Pin, ADC
from time import sleep
import math

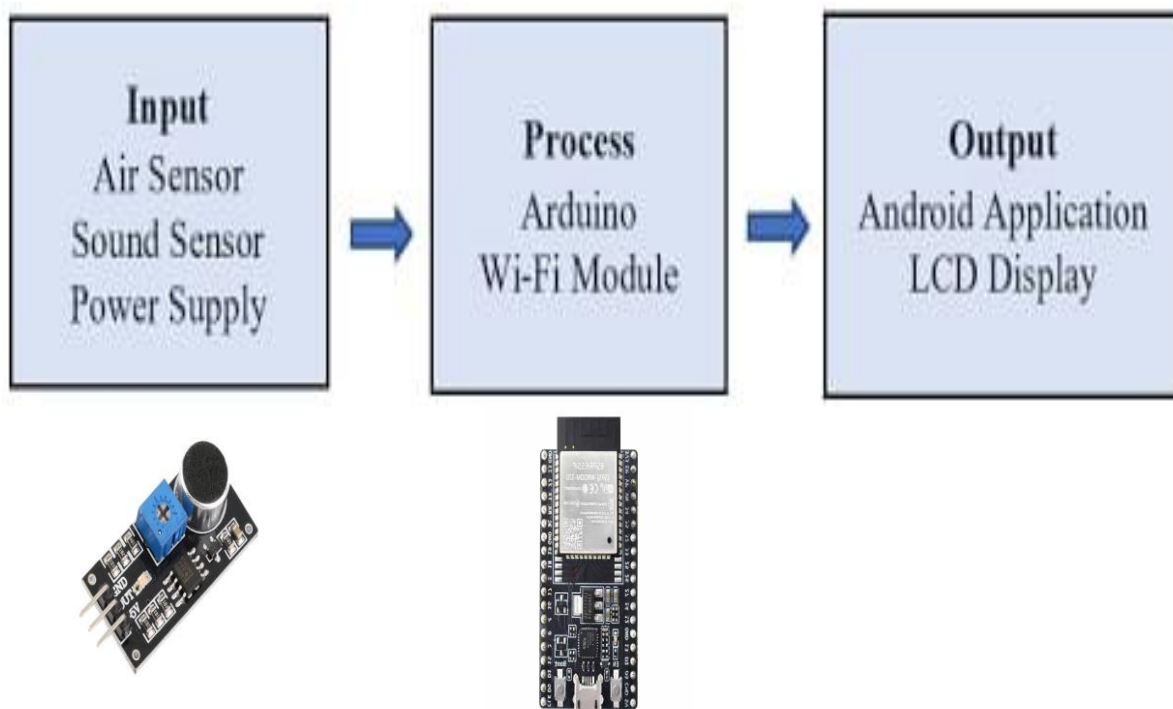
mic = ADC(Pin(2))
mic.atten(ADC.ATTN_11DB)

calibration_constant = 2.0
noise_threshold = 60

while True:
    mic_level = mic.read()
    mic_level_db = 20 * math.log10(mic_level / calibration_constant)
    if mic_level_db > noise_threshold:
```

```
print("Warning: Noise pollution exceeds threshold!")  
print("dB: {:.2f}".format(mic_level_db))  
sleep(0.3)
```

BLOCK DIAGRAM:



Output:

```
load:0x40080400,len:3368
entry 0x400805cc
Warning: Noise pollution exceeds threshold!
dB: 60.18
Warning: Noise pollution exceeds threshold!
dB: 60.18
Warning: Noise pollution exceeds threshold!
dB: 60.18
Warning: Noise pollution exceeds threshold!
dB: 60.18
Warning: Noise pollution exceeds threshold!
```