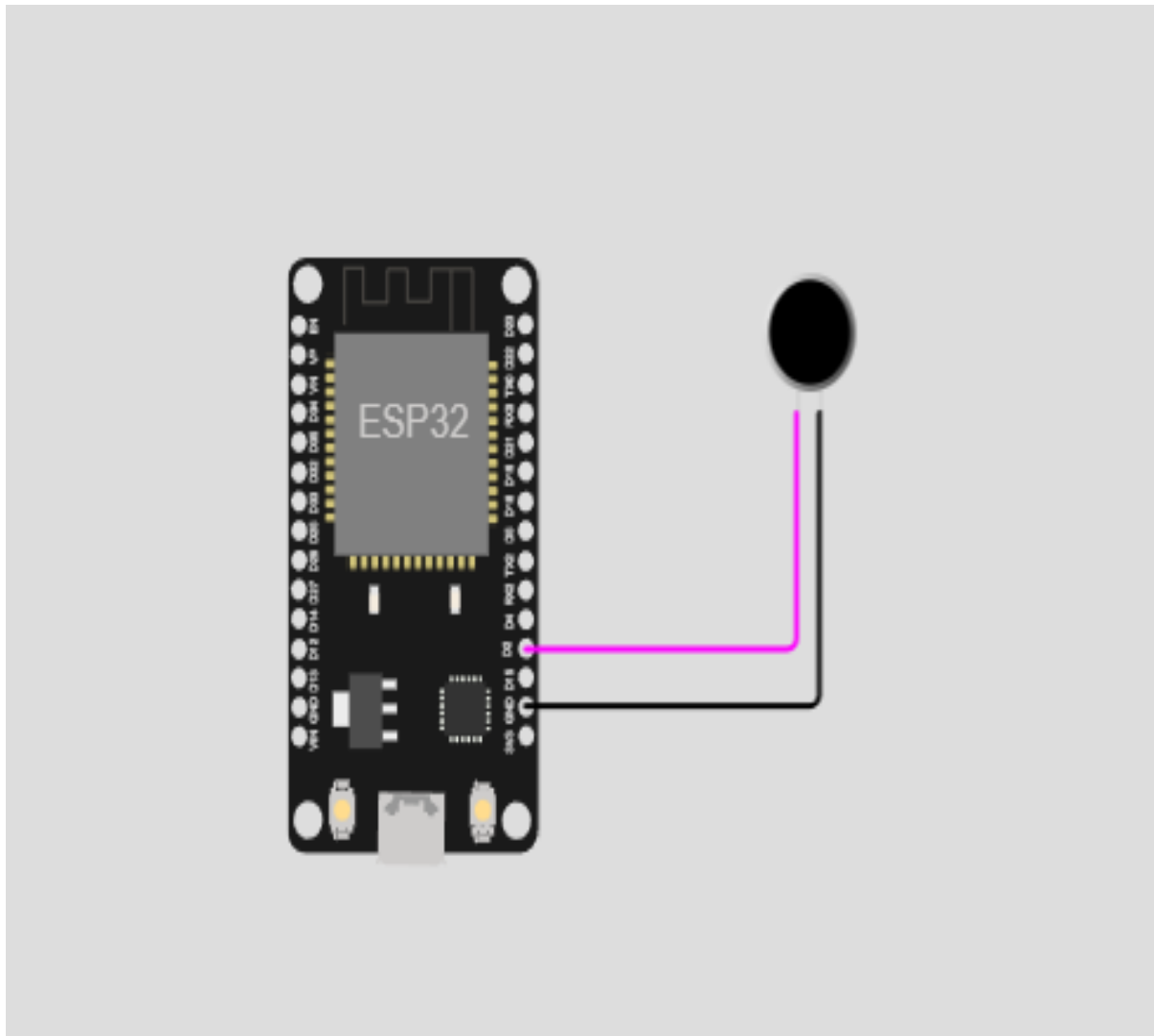


Project Design Phase-3

Date	18 October 2023
Team ID	458
Project Name	4123-Noise Pollution Monitoring
Team Name	Proj_227238_Team_2
Team Members	5

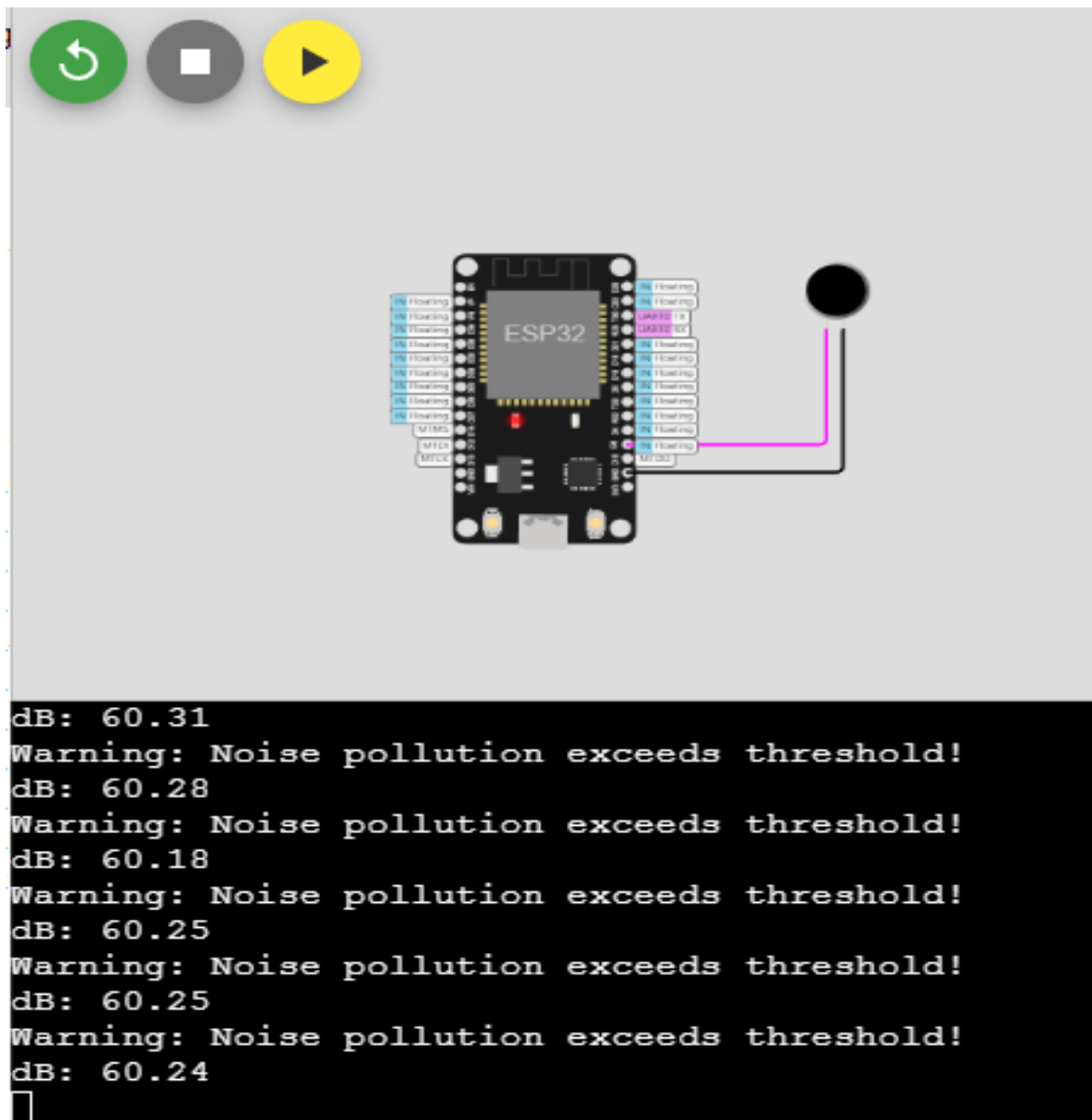
Noise Pollution Monitoring Block Diagram:



Program code for NPM:

```
main.py  diagram.json ▼
1  from machine import Pin, ADC
2  from time import sleep
3  import math
4
5  mic = ADC(Pin(2))
6  mic.atten(ADC.ATTN_11DB)
7
8  calibration_constant = 2.0
9  noise_threshold = 60
10
11 while True:
12     mic_level = mic.read()
13     mic_level_db = 20 * math.log10(mic_level / calibration_constant)
14     if mic_level_db > noise_threshold:
15         print("Warning: Noise pollution exceeds threshold!")
16     print("dB: {:.2f}".format(mic_level_db))
17     sleep(0.3)
18
19
20
```

OUTPUT:



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