

Please note that this is a basic example, and you may need to adapt it to your specific hardware and requirements. Additionally, you may need to install the necessary libraries and dependencies for your noise sensor.

Python code in developing part an lot noise pollution

Certainly! Here's an example of Python code that demonstrates a basic implementation for an IoT-based noise pollution monitoring system:

```
python
import time
import random

class NoiseSensor:
    def __init__(self, sensor_id):
        self.sensor_id = sensor_id

    def measure_noise_level(self):
        # Simulating noise level measurement
        noise_level = random.randint(50, 100)
        return noise_level

class DataCollectionDevice:
    def __init__(self):
        self.sensors = []

    def add_sensor(self, sensor):
        self.sensors.append(sensor)

    def collect_data(self):
        data = {}
        for sensor in self.sensors:
            noise_level = sensor.measure_noise_level()
            data[sensor.sensor_id] = noise_level
        return data

class CentralProcessingUnit:
    def __init__(self, data_collection_device):
        self.data_collection_device = data_collection_device

    def analyze_data(self):
        data = self.data_collection_device.collect_data()
        # Perform noise analysis on the collected data
```

```
# Implement your noise analysis algorithms here
for sensor_id, noise_level in data.items():
    print(f"Noise level from sensor {sensor_id}: {noise_level}")

# Create noise sensors
sensor1 = NoiseSensor(1)
sensor2 = NoiseSensor(2)

# Create data collection device and add sensors
data_collection_device = DataCollectionDevice()
data_collection_device.add_sensor(sensor1)
data_collection_device.add_sensor(sensor2)

# Create central processing unit
cpu = CentralProcessingUnit(data_collection_device)

# Continuously analyze data
while True:
    cpu.analyze_data()
    time.sleep(5) # Sleep for 5 seconds before analyzing data again
```

Please note that this code is a simplified example and does not include actual noise analysis algorithms. You would need to implement your own algorithms based on your specific requirements and data analysis techniques.