GPT協作DHT11和ESP32偵測顯示溫溼度

以下是和GPT3.5互動對話過程，為了讓GPT協作程式碼，以顯示溫溼度。

ChatGPT

A conversational AI system that listens, learns, and challenges

以下顯示GPT協作的程式碼，在ESP上運行，確實能顯示溫濕度

[testDHT0.py]

```python
import machine
import dht
import time

# 初始化DHT11传感器
dht_sensor = dht.DHT11(machine.Pin(4))

# 主循环
while True:
    try:
        # 读取温度和湿度
        dht_sensor.measure()
        temperature = dht_sensor.temperature()
        humidity = dht_sensor.humidity()

        # 打印温度和湿度
        print("Temperature: %d°C, Humidity: %d%%" % (temperature, humidity))

        # 延迟一段时间后再次测量
        time.sleep(2)
    except OSError as e:
        print("Failed to read sensor:", e)
        time.sleep(2)

```

Shell

```
MPY: soft reboot
Temperature: 26°C, Humidity: 68%
Temperature: 26°C, Humidity: 68%
Temperature: 26°C, Humidity: 68%
Temperature: 26°C, Humidity: 68%
Temperature: 26°C, Humidity: 68%
Temperature: 26°C, Humidity: 68%
Temperature: 26°C, Humidity: 68%
Temperature: 26°C, Humidity: 68%
Temperature: 26°C, Humidity: 68%
Temperature: 26°C, Humidity: 68%
```

以下是GPT3.5寫的程式，可以偵測溫度和濕度。

```
import machine

import dht

import time

# 初始化DHT11传感器

dht_sensor = dht.DHT11(machine.Pin(4))

# 主循环

while True:

    try:

        # 读取温度和湿度

        dht_sensor.measure()

        temperature = dht_sensor.temperature()

        humidity = dht_sensor.humidity()

        # 打印温度和湿度

        print("Temperature: %d°C, Humidity: %d%%" % (temperature, humidity))

        # 延迟一段时间后再次测量

        time.sleep(2)

    except OSError as e:

        print("Failed to read sensor:", e)

        time.sleep(2)
```