INTERFACING DHT11 SENSOR WITH ESP32 DEV BOARD

I have interfaced the DHT11 Sensor with the ESP32 microcontroller. It senses temperature and humidity and gives digital signals to the microcontroller.

Read about DHT11 Sensor here: [DHT11 Sensor Pinout, Features, Equivalents & Datasheet (components101.com)]

The datasheet and the code for interfacing the DHT11 is attached in the folder.

Now, coming to the hardware part, 3 pins are connected to the microcontroller:

1. The VCC pin and GND of the DHT11 is connected to the 5V pin and GND pin of ESP32.
2. The DO pin of the DHT11 is connected to the GPIO 2 pin of ESP32.

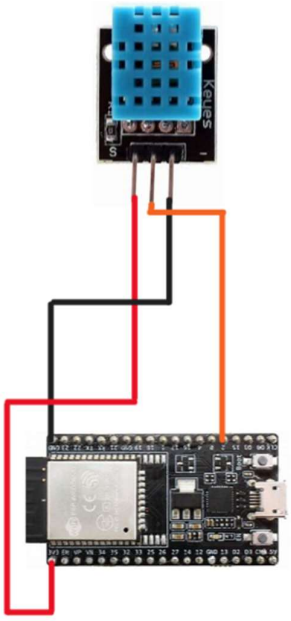

Fig 1: Circuit Diagram

```
Humidity: 43.00%, Temperature: 26.20°C
Humidity: 43.00%, Temperature: 26.20°C
Humidity: 44.00%, Temperature: 26.20°C
Humidity: 47.00%, Temperature: 26.30°C
Humidity: 49.00%, Temperature: 26.30°C
Humidity: 52.00%, Temperature: 26.40°C
Humidity: 55.00%, Temperature: 26.50°C
Humidity: 56.00%, Temperature: 26.70°C
Humidity: 57.00%, Temperature: 26.90°C
Humidity: 58.00%, Temperature: 27.10°C
Humidity: 59.00%, Temperature: 27.40°C
Humidity: 59.00%, Temperature: 27.70°C
Humidity: 60.00%, Temperature: 27.90°C
Humidity: 60.00%, Temperature: 28.20°C
Humidity: 60.00%, Temperature: 28.50°C
Humidity: 60.00%, Temperature: 28.70°C
Humidity: 60.00%, Temperature: 29.00°C
Humidity: 60.00%, Temperature: 29.20°C
Humidity: 60.00%, Temperature: 29.40°C
Humidity: 60.00%, Temperature: 29.70°C
Humidity: 60.00%, Temperature: 29.90°C
```

Fig 2: Serial Monitor Output

The programming is done in PlatformIO in VSCode and the output connections can be connected to your choice and operated based on the applications.