



Temperature Humidity Sensor

COSC 1030



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mikhail@raspberrypi:~/COSC1000-project$ source env/bin/activate
mikhail@raspberrypi:~/COSC1000-project$ python3 dht11.py
dht11.py -- LICENSE: README.md
(env) mikhail@raspberrypi:~/COSC1000-project$ python3 dht11.py
Temp:23.1 C / 73.0 F Humidity: 28%
Temp:22.4 C / 72.3 F Humidity: 31%
Temp:22.4 C / 72.3 F Humidity: 31%
Temp:22.4 C / 72.3 F Humidity: 30%
Temp:22.4 C / 72.3 F Humidity: 30%
Temp:22.6 C / 72.7 F Humidity: 30%
Temp:22.5 C / 72.5 F Humidity: 29%
Temp:22.6 C / 72.7 F Humidity: 40%
Temp:22.7 C / 72.9 F Humidity: 47%
Temp:22.9 C / 73.2 F Humidity: 47%
Temp:23.0 C / 73.4 F Humidity: 43%
Temp:23.0 C / 73.4 F Humidity: 38%
Temp:23.2 C / 73.8 F Humidity: 34%
Temp:23.2 C / 73.8 F Humidity: 32%
Temp:23.1 C / 73.6 F Humidity: 31%
Checksum did not validate. Try again.
Checksum did not validate. Try again.
Temp:23.1 C / 73.6 F Humidity: 31%
Temp:23.2 C / 73.8 F Humidity: 30%
Temp:23.2 C / 73.8 F Humidity: 70%
Temp:23.7 C / 74.7 F Humidity: 95%
Temp:24.4 C / 75.9 F Humidity: 95%
Temp:25.2 C / 77.4 F Humidity: 95%
Temp:25.6 C / 78.1 F Humidity: 95%
Temp:25.7 C / 78.3 F Humidity: 95%
Temp:25.8 C / 78.4 F Humidity: 95%
Temp:25.7 C / 78.3 F Humidity: 95%
Temp:25.6 C / 78.1 F Humidity: 95%
Checksum did not validate. Try again.
Temp:25.5 C / 77.9 F Humidity: 95%
Temp:24.7 C / 76.5 F Humidity: 95%
Temp:24.6 C / 76.3 F Humidity: 95%
Temp:24.4 C / 75.9 F Humidity: 95%
Temp:24.1 C / 75.4 F Humidity: 95%
Checksum did not validate. Try again.
A full buffer was not returned. Try again.
Temp:24.0 C / 75.2 F Humidity: 40%
Checksum did not validate. Try again.
Temp:23.9 C / 75.0 F Humidity: 40%
Temp:23.9 C / 74.8 F Humidity: 30%
Temp:24.0 C / 75.0 F Humidity: 30%
Temp:23.9 C / 75.0 F Humidity: 30%
Temp:23.9 C / 75.0 F Humidity: 32%
Temp:23.9 C / 75.0 F Humidity: 32%
Temp:23.9 C / 75.0 F Humidity: 31%
Temp:23.9 C / 74.8 F Humidity: 30%
Temp:23.9 C / 74.8 F Humidity: 30%
Temp:23.9 C / 74.8 F Humidity: 30%
Temp:23.9 C / 74.8 F Humidity: 30%

```

```

import time
import adafruit_dht
import board

dht_device = adafruit_dht.DHT11(board.D4)

while True:
    try:
        temperature_c = dht_device.temperature
        temperature_f = temperature_c * (9 / 5) + 32

        humidity = dht_device.humidity

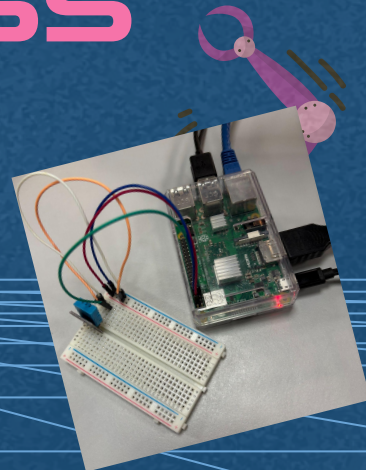
        print("Temp:{:.1f} C / {:.1f} F Humidity: {}%".format(temperature_c, temperature_f, humidity))
    except RuntimeError as err:
        print(err.args[0])

    time.sleep(2.0)

```

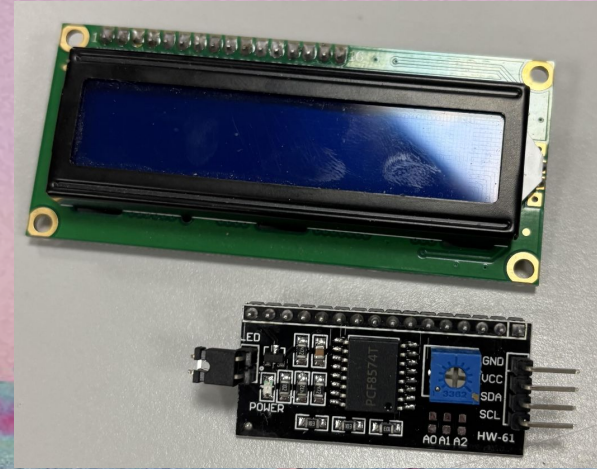
Our Progress

DHT11 with raspberry pi



Future Plans

LCD to display code & I2C Module





Conclusion