

Node-RED : Flow 1 | Node-RED Dashboard

Not secure 169.254.209.214:1880/#flow/c03438377deaf9ae

Node-RED Deploy

filter nodes

Flow 1

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function
- switch
- change
- range
- template

Sense HAT (connected)

Raspberry Temperature

Raspberry Humidity

limit 1 msg/s

Date

Time

limit 1 msg/s

AverageVlue

Temperature

average-bars

Average/humid

Humidity

function 1

Temp

Average_Humidity

Humid

pH

debug 8

1 -2°C Pölvistä

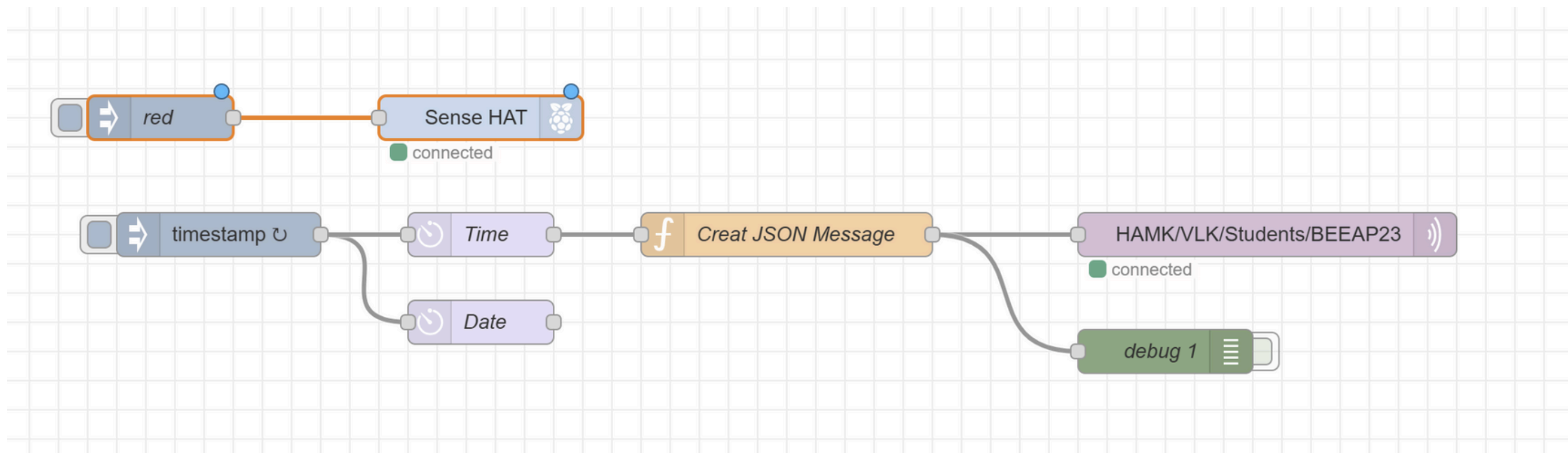
Search

16

15:39 17/12/2024

```
graph LR; SenseHAT[Sense HAT] --> Temp[Raspberry Temperature]; SenseHAT --> Humid[Raspberry Humidity]; SenseHAT --> Date[Date]; Temp --> AvgTemp[AverageVlue]; Temp --> AvgTempBar[average-bars]; Temp --> TempNode[Temperature]; Humid --> AvgHumid[Average/humid]; Humid --> AvgHumidBar[average-bars]; Humid --> HumidNode[Humidity]; Date --> Time[Time]; Time --> AvgHumid; Time --> AvgHumidBar; Time --> Funct1[function 1]; AvgTemp --> AvgTempNode[Average_Temperature]; AvgTempBar --> TempNode; AvgHumid --> AvgHumidNode[Average_Humidity]; AvgHumidBar --> HumidNode; Funct1 --> pH[pH]; Funct1 --> Debug8[debug 8];
```

The flow diagram in Node-RED processes data from a Sense HAT sensor. It starts with a 'Sense HAT' node (labeled 'connected') which branches into three paths. The first path goes to a 'Raspberry Temperature' node, which then feeds into an 'AverageVlue' node, an 'average-bars' node, and a 'Temperature' node. The second path goes to a 'Raspberry Humidity' node, which feeds into an 'Average/humid' node, another 'average-bars' node, and a 'Humidity' node. The third path goes to a 'Date' node, which then feeds into a 'Time' node. The 'Time' node feeds into the 'Average/humid' node, the 'average-bars' node, and a 'function 1' node. The 'function 1' node feeds into a 'pH' node and a 'debug 8' node. There are also 'limit 1 msg/s' nodes placed before the 'AverageVlue' and 'Average/humid' nodes to throttle the data. The final outputs are 'Average_Temperature', 'Average_Humidity', 'Temp', 'Humid', 'pH', and 'debug 8'.



Node-RED : Flow 1Node-RED Dashboard

Not secure169.254.209.214:1880/#flow/c03438377deaf9ae

Node-REDDeploy

filter nodes

common

injectdebugcompletecatchstatuslink inlink calllink outcomment

function

functionswitchchange rangetemplate

Flow 1

HAMK/VLK/Students/BEEAP23/Group_3

switch

Temperature

Humidity

Brightness

Motion

function 3

average-bars

Temperature

Humidity

Brightness

led

Arduino 2

average-bars

Temperature

Humidity

Brightness

led

time

time

1-2°C
Pilvistä

Search

16

15:42
17/12/2024

Node-RED : Flow 1Node-RED Dashboard

Not secure169.254.209.214:1880/#flow/c03438377deaf9ae

Node-REDDeploy

filter nodes

common

injectdebugcompletecatchstatuslink inlink calllink outcomment

function

functionswitchchangeirangerange

Flow 1

timestamp

http request

debug 7

TemperatureTemp

Humidityhumidity

feels_likefeels_like

Temp_minTemp_min

temp_maxTemp_max

speedspeed

sunrisesunrise

sunset

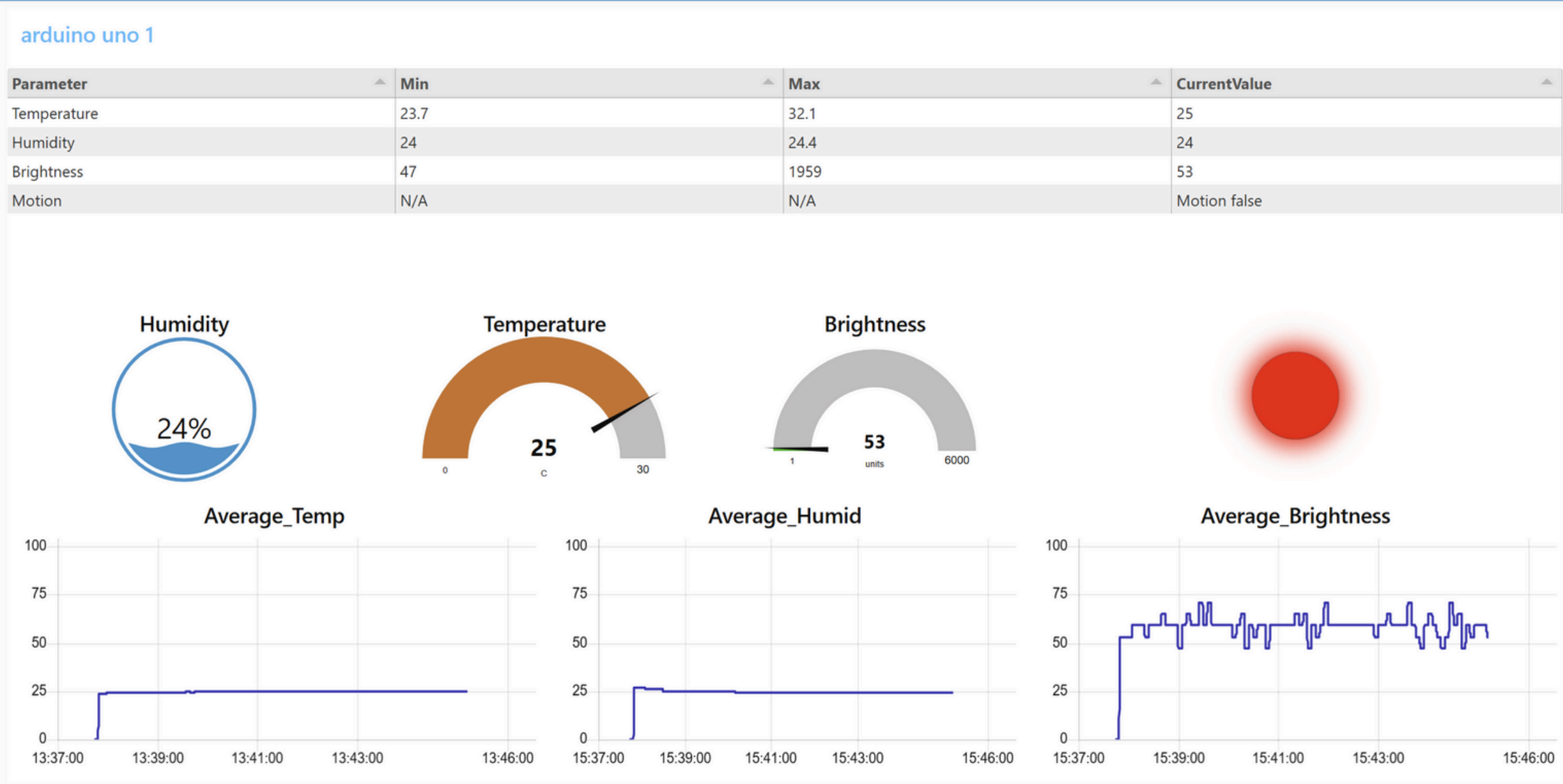
-2°C
Pilvistä

Search

16

15:44
17/12/2024

Arduino Uno 1



The screenshot displays a web browser window with two tabs: "Node-RED : Flow 1" and "Node-RED Dashboard". The address bar shows the URL "169.254.209.214:1880/ui/#!/0?socketid=t4OQ9Fvl_c-PiHvnAABJ". The browser's security status is "Not secure".

The dashboard, titled "Raspberry Pi", features a table at the top with the following data:

Parameter	Min	Max	CurrentValue
Temperature	36.94	38.12	37.21
Humidity	16.37	35.46	18.6

Below the table are two large circular gauges. The "Temperature" gauge shows a value of 37.21 with a needle pointing to the right. The "Humidity" gauge shows a value of 18.7 with a needle pointing to the left. Both gauges have a scale from 0 to 100. Below the gauges are two line graphs. The "Average_Temperature" graph shows a flat line at approximately 37.21. The "Average_Humidity" graph shows a flat line at approximately 18.6. Both graphs have a y-axis from 0 to 100 and an x-axis with timestamps from 13:25:00 to 13:46:00.

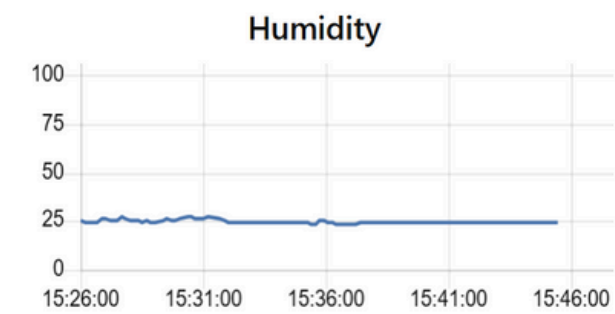
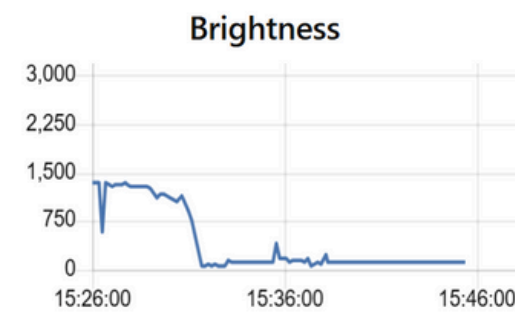
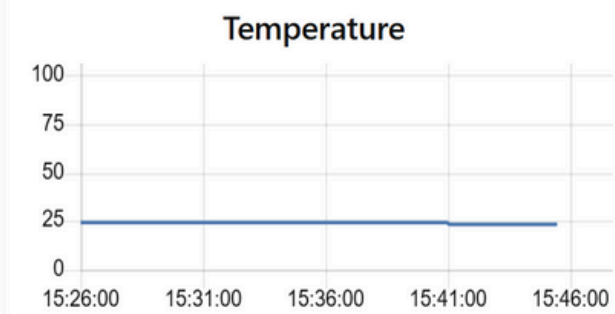
The bottom of the image shows the Windows taskbar with the date and time "15:44 17/12/2024".

arduino uno 2

HAMK/VLK/Students/BEEAP23/Group_3

Parameter	Min	Max	CurrentValue
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Temperature	23.5	23.5	23.5
Humidity	24.4	76.3	24.4
Brightness	12	1959	112
Motion	N/A	N/A	Motion undefined



Helsinki Weather Station

