# brought to you by Group D

Selin's Individual Report

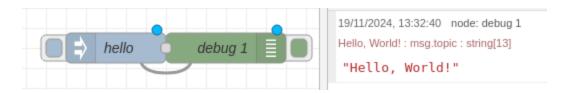
# Node-Red

## 28th November

## 1 Hello World

#### How I did it:

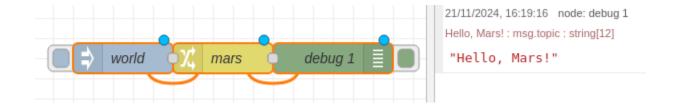
- 1. Drag in two nodes: Inject and Debug
- 2. Change Inject's msg.topic to "Hello, World!"
- 3. Let the Debug node output whatever is in the msg.topic.



## 2 Hello Mars

## What changed:

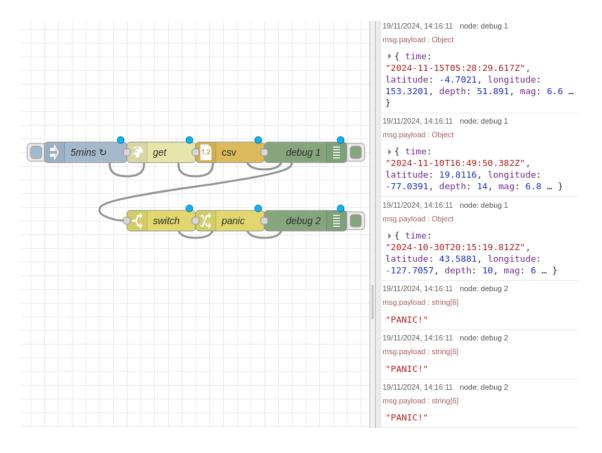
- 1. Insert Change Node between Inject and Debug Node.
- 2. Let the Change node search for "World" and change it to "Mars".



# 3 Earthquakes

### **Observations:**

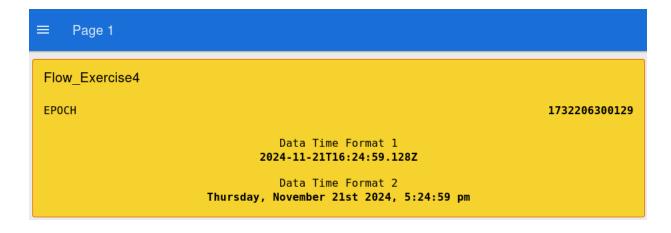
- 1. Inject Node triggers flow every 5 minutes.
- 2. CSV Node parses the data into a JSON format.
- 3. Debug Node outputs the parsed earthquake data.
- 4. Switch Node filters earthquakes with magnitude >= 6 (for example).
- 5. Thresholds  $\geq$  1,  $\geq$  2,  $\geq$  3,  $\geq$  4,  $\geq$  5, and  $\geq$  6 resulted in three "PANIC!" messages for each earthquake that matched the condition.
- 6. Thresholds  $\geq$  7,  $\geq$  8,  $\geq$  9, and  $\geq$  10 did not generate any "PANIC!" messages.

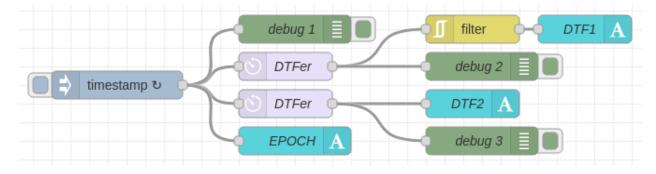


## 4 Date and Time Dashboard

#### What I did:

- 1. Wonder what the filter is for.
- 2. Set the first format to default (ISO8601)
- 3. Set the second format to dddd, MMMM Do YYYY, h:mm:ss a
- 4. Create an aesthetic theme:)





## 5 Date and Time Dashboard Pro Max 9000

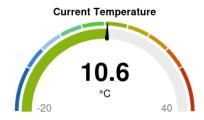
## Steps taken:

- Inject HTTP Request:
   <a href="https://api.openweathermap.org/data/2.5/weather?q=Konstanz,de&APPID={API-KEY}">https://api.openweathermap.org/data/2.5/weather?q=Konstanz,de&APPID={API-KEY}</a>
- 2. Insert JSON Node that parses into JS and back.
- Insert Change Node for Current Temperature \$round(payload.main.temp -273.15, 1), Humidity and Temperature (for Chart).

4. Insert function node:

```
const {
    name,
    coord: { lat, lon },
    weather: [{ main, description }]
} = msg.payload;
msg.payload = `The weather in ${name} at coordinates: ${lat}, ${lon} is
${main} (${description}).`;
```

5. Wait for Charts to aggregate data.



Current Weather
The weather in Konstanz at coordinates: 47.6603, 9.1758 is Clouds (few clouds).

