ECE 3502 – IoT Domain Analyst

Week 4

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<u>**Aim:**</u> Create a Open weather map node in Node Red

<u>**Procedure:**</u>

Step 1) Select Nodes.

Step 2) Set properties of the Nodes such as name, message etc and then click Done.
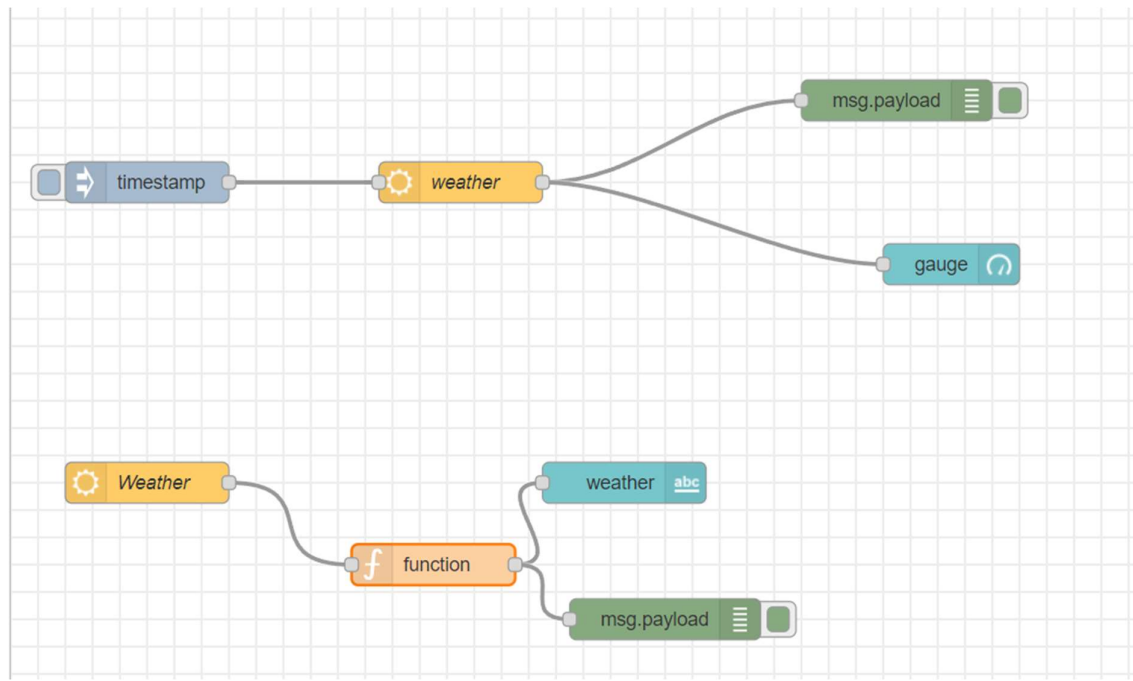
Step 3) Fill requirements and necessary details of all the Nodes.

Step 4) Select and fill function then click Done.
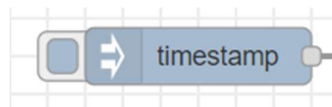
Step 5) Click Deploy and Confirm.

Step 6) The output is visible in the debug menu as well as the ui page.
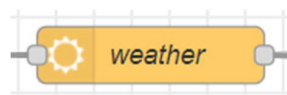
Screenshots of Flow:
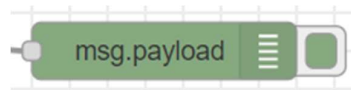

Node:

Inject Node:

Gauge Node:

Weather Node:

Function Node:

Text Node:

Debug Node:

Debug Window-

Node Property Window

Edit openweathermap node

| Delete | | Cancel | Done |

⚙ Properties

⚷ API Key ••••••••

🌐 Language English ⌄

Current weather for ⌄

🌐 Location City, Country ⌄

City Delhi

Country IN

Name weather

Tip: you may want to manually search for the location first to check it can be found. Often two character country codes work best.

Note: The API Key may not immediately ready to use after creation. As FAQ said: *Your API key will be activated automatically, between 10 minutes and 2 hours after your successful registration.* Just wait a little bit.

○ Enabled

Edit gauge node

Delete   Cancel   **Done**

⚙ **Properties**   ⚙ 📄 🔲

⊞ Group   [weather] weather   ⌄   ✏

🔲 Size   auto

☰ Type   Gauge   ⌄

I Label   gauge

I Value format {{msg.payload.tempc}}

I Units   units

Range   min 0   max 50

Colour gradient 🟩🟩🟩 🟨🟨🟨 🟥🟥🟥

Sectors   0   ...   10   ...   30   ...   50

🏷 Name

○ Enabled

Edit text node

Delete   Cancel   **Done**

⚙ **Properties**   ⚙ 📄 🔲

⊞ Group   [weather] weather   ⌄   ✏

🔲 Size   auto

I Label   weather

I Value format   {{msg.payload}}

⊞ Layout

| label **value** | label **value** | label **value** |

| label   **value** ⊙ | label
value |

🏷 Name

○ Enabled

Edit function node

Delete
Cancel
Done

⚙ **Properties**

🏷 Name
Name

⚙ Setup | On Start | **On Message** | On Stop

```
1   if(msg.payload.weather == 'Smoke')
2   {
3   msg.payload = 'Please Wear Mask'
4   return msg
5   }
6   if(msg.payload.weather == 'Haze')
7   {
8   msg.payload = 'The climate is good'
9   return msg
10  }
11  if(msg.payload.weather == 'Clear')
12  {
13  msg.payload = 'Have a good day.'
14  return msg
15  }
16  return null;
```

○ Enabled

Output-