

Build A Web Application Using Node - Red

Date	17 November 2022
Team ID	PNT2022TMID39877
Project Name	Project – Smart Farmer - IoT Enabled Smart Farming Application

Configuration Of IBM Cloud With Node – Red:

Edit ibmiot in node

Buttons: Delete, Cancel, Done

Properties

- Authentication: API Key
- API Key: IBMIOT APIKEY
- Input Type: Device Event
- Device Type: ☐ All or abcd
- Device Id: ☐ All or 7654321
- Event: ☒ All or +
- Format: ☐ All or json
- QoS: 0
- Name: IBM IoT

☐ Enabled

- We Added Two Buttons In The Application In Order To Access The Motor

1 = Motor On

0 = Motor Off

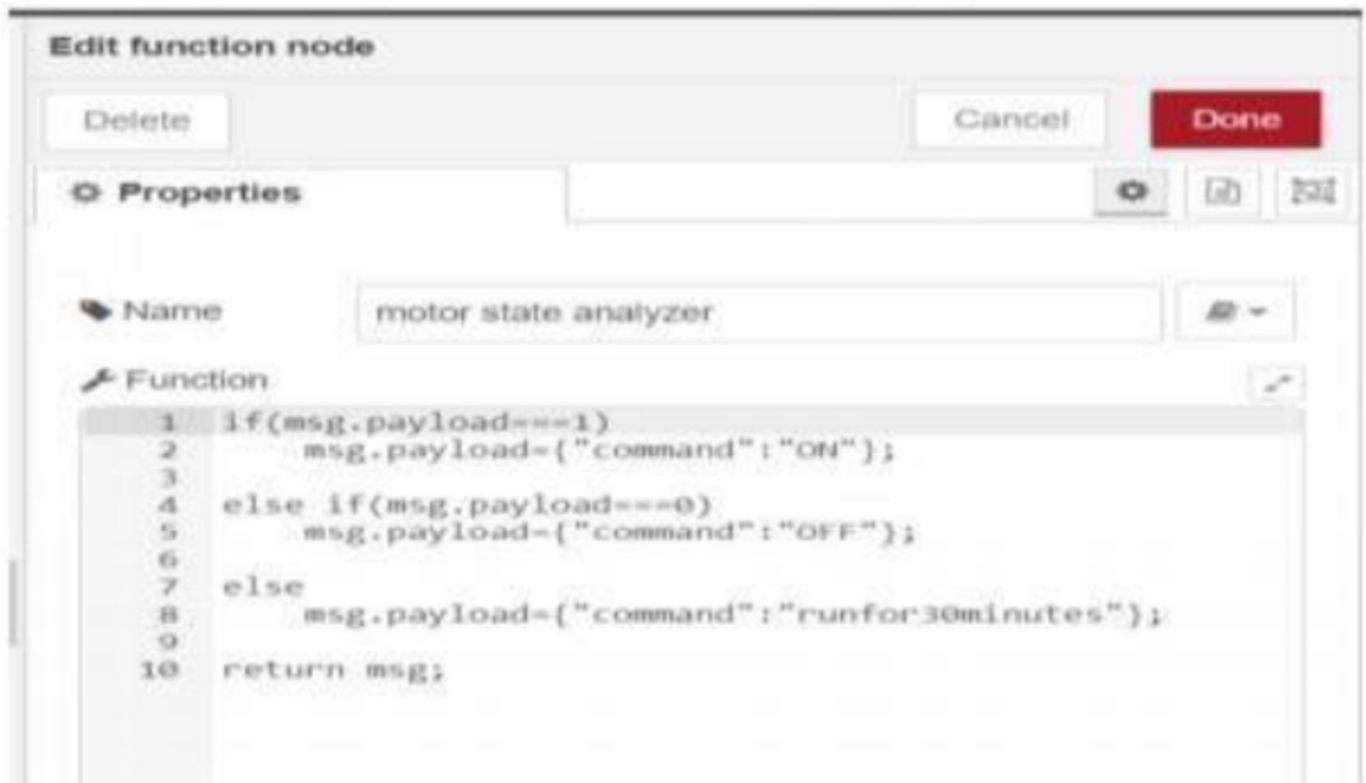
- We Used A Function Node To Analyses And Receive And Analysis Of Data

The Node – Red Code :

```
if(msg.payload===1)
    msg.payload={"command":"ON"};
else if(msg.payload===0)
    msg.payload={"command":"OFF"};
```

JSON UI Interface:

1. In order To Use A Virtual Environment We Can Develop A Platform In Node – Red In Order To Show The Gauges, Text And Buttons To Control The Equipments.



Edit function node

Delete

Cancel

Done

⚙ Properties

⚙

📄

🔗

👤 Name

state

👤 +

🔧 Function

✓

1 var state=msg.payload;

2 msg.payload = state.command;

3 return msg;

Edit json node

Delete

Cancel

Done

⚙ Properties

⚙

📄

🔗

🕒 Action

Convert between JSON String & Object

▼

⋮ Property

msg. payload

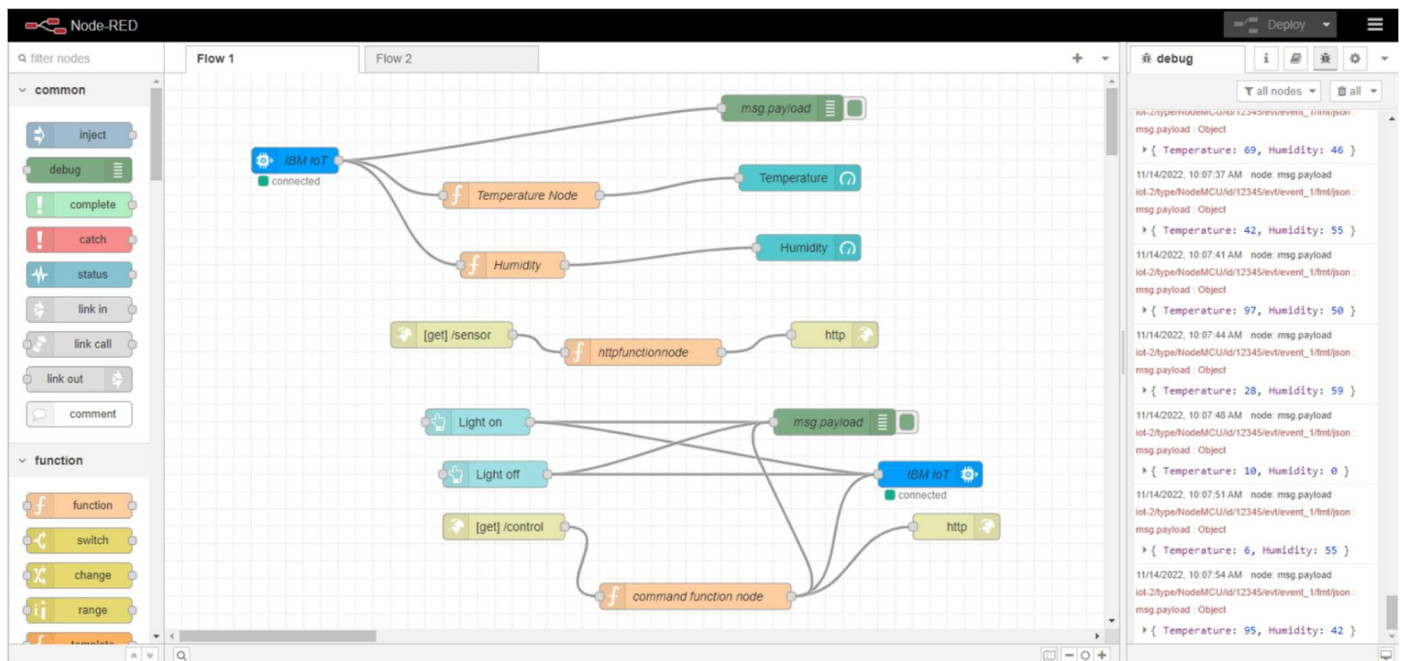
👤 Name

MOTOR

Object to JSON options

📄 Format JSON string

COMPLETE PROGRAM FLOW DIAGRAM :



WEB USER INTERFACE :

