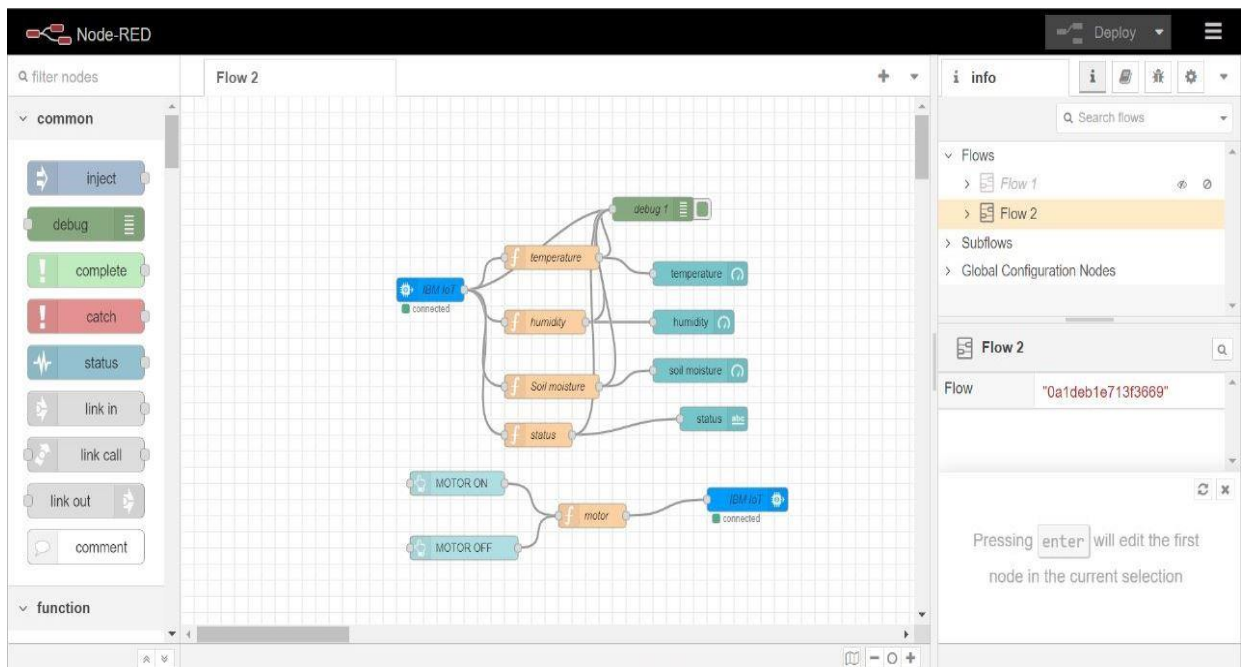


Project Development

Delivery of Sprint-2

Team ID	PNT2022TMID26519
Project Name	SmartFarmer - IoT Enabled Smart Farming Application
Team Members Name	Monish Kumar V, Sanjay Kumar V , Mohana Priya K , Swetha G

Flow:1



Flow:1 Configuring All Nodes With IBM IOT Platform

The screenshot shows the Node-RED interface with the 'Edit ibmiot in node' dialog open. The node is configured with the following properties:

- Authentication: API Key
- API Key: farming
- Input Type: Device Event
- Device Type: ☐ All or ☒ NodeMCU
- Device Id: ☐ All or ☐ 12345
- Event: ☒ All or ☐ +
- Format: ☐ All or ☒ json
- QoS: 0
- Name: IBM IoT
- Service: registered

The node is connected to a flow that includes a 'MOTOR ON' node and a 'motor' node. The flow is named 'Flow 1'.

Flow:2 Configuring All Nodes With IBM IOT Platform

The screenshot shows the Node-RED interface with the 'Edit ibmiot out node' dialog open. The node is configured with the following properties:

- Authentication: API Key
- API Key: farming
- Output Type: Device Command
- Device Type: NodeMCU
- Device Id: 12345
- Command Type: cmd
- Format: json
- Data: data
- QoS: 0
- Name: IBM IoT
- Service: registered

The node is connected to a flow that includes a 'MOTOR ON' node and a 'motor' node. The flow is named 'Flow 2'.

Execution of Python Program

```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.8_3.8.2800.0_x64_qbz5n2kfra8p0\python3.8.exe
erature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 2, 'humidity': 93, 'soilmoisture': 52, 'status': 'motor off', 'api_tempe
rature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 100, 'humidity': 100, 'soilmoisture': 63, 'status': 'motor off', 'api_te
mperature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': -3, 'humidity': 9, 'soilmoisture': 28, 'status': 'motor off', 'api_tempe
rature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 96, 'humidity': 93, 'soilmoisture': 24, 'status': 'motor off', 'api_tempe
rature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': -5, 'humidity': 64, 'soilmoisture': 99, 'status': 'motor off', 'api_tempe
rature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 8, 'humidity': 40, 'soilmoisture': 24, 'status': 'motor off', 'api_tempe
rature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 15, 'humidity': 25, 'soilmoisture': 70, 'status': 'motor off', 'api_tempe
rature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 116, 'humidity': 59, 'soilmoisture': 65, 'status': 'motor off', 'api_tem
perature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 72, 'humidity': 71, 'soilmoisture': 13, 'status': 'motor off', 'api_tempe
rature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 104, 'humidity': 82, 'soilmoisture': 90, 'status': 'motor off', 'api_tem
perature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 63, 'humidity': 82, 'soilmoisture': 98, 'status': 'motor off', 'api_tempe
rature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 27, 'humidity': 57, 'soilmoisture': 21, 'status': 'motor off', 'api_tempe
rature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': 107, 'humidity': 57, 'soilmoisture': 44, 'status': 'motor off', 'api_tem
perature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
Published data Successfully: %s {'temperature': -15, 'humidity': 67, 'soilmoisture': 41, 'status': 'motor off', 'api_tem
perature': 298.14, 'api_pressure': 1013, 'api_humidity': 94, 'api_weather_description': 'mist'}
```

Web UI Output



IBM Watson IoT Platform Device Connect & Live Data

