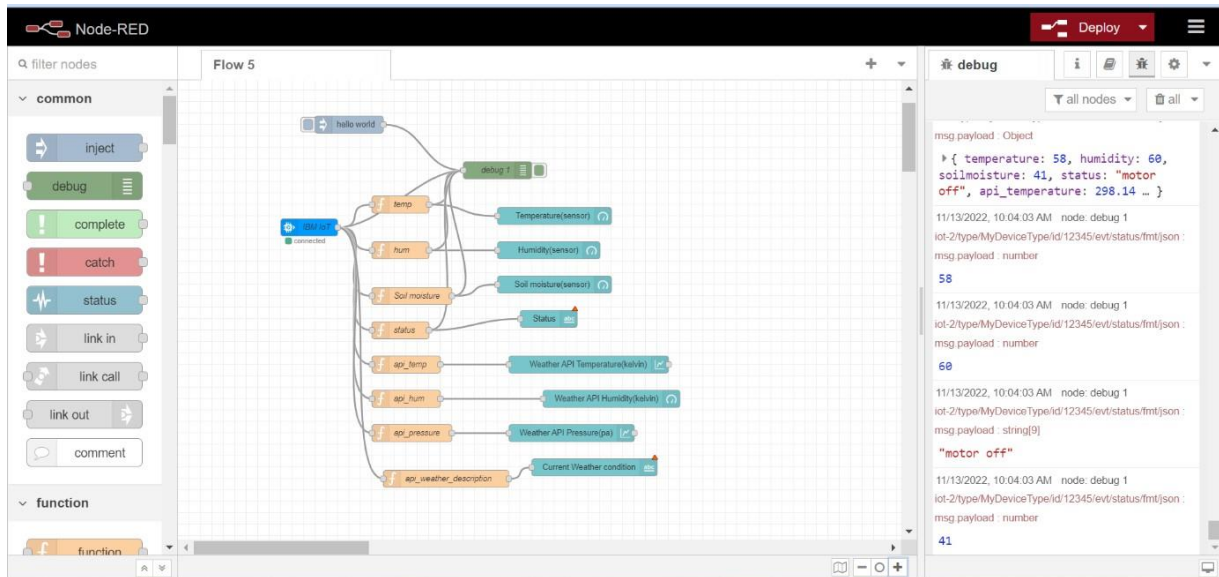


Project Development

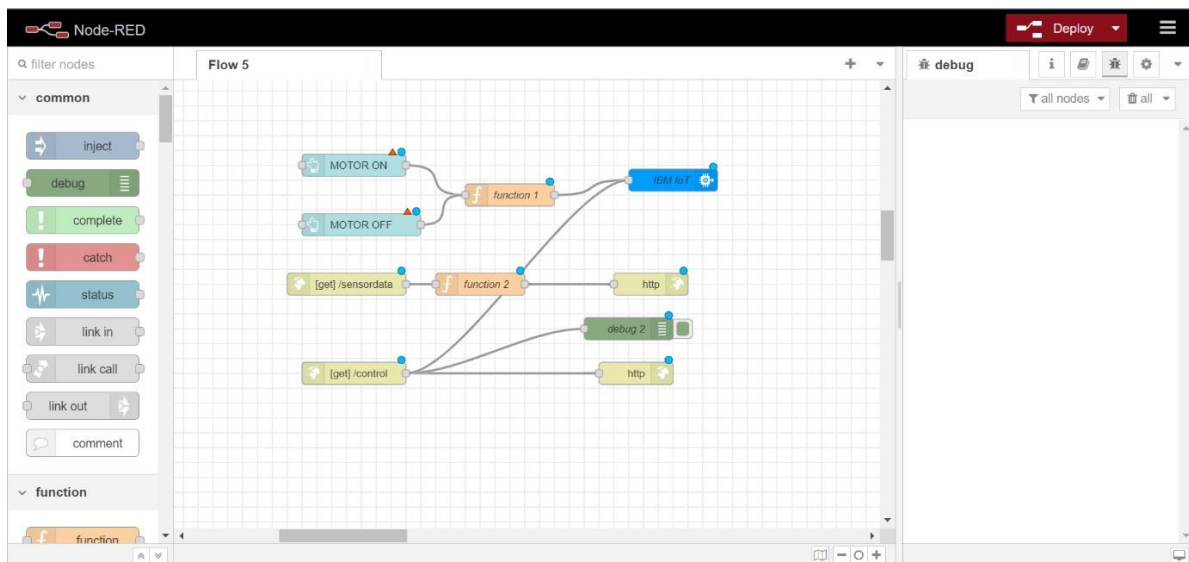
Delivery of Sprint-2

Date	5 NOV 2022
Team ID	PNT2022TMID48510
Project Name	Project -Smart farmer-IOT enabled smart Farming Application

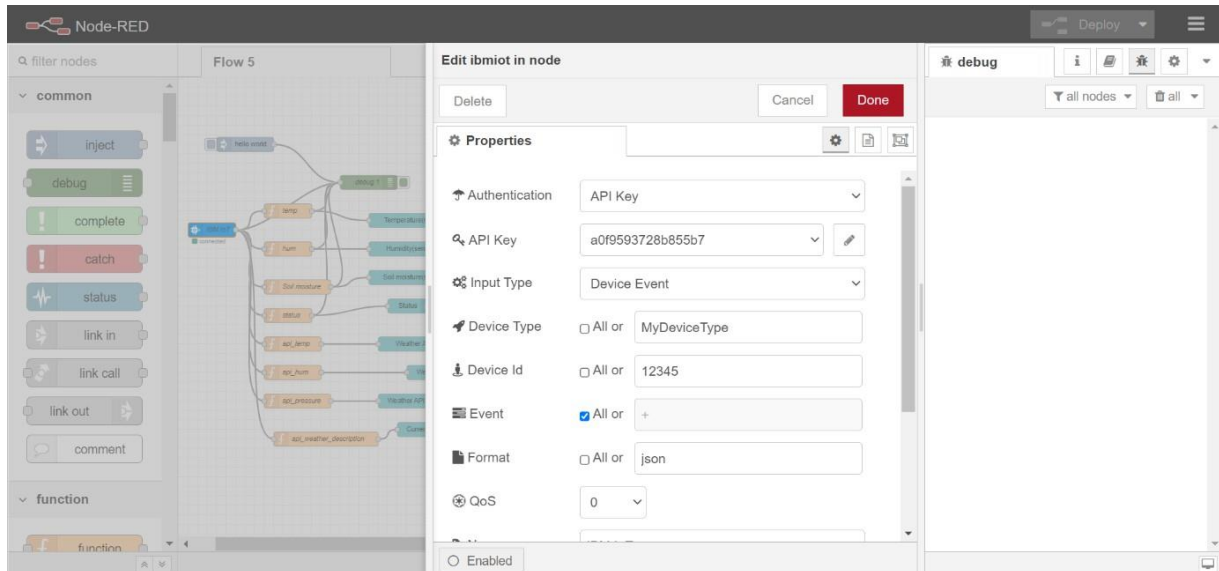
Flow:1



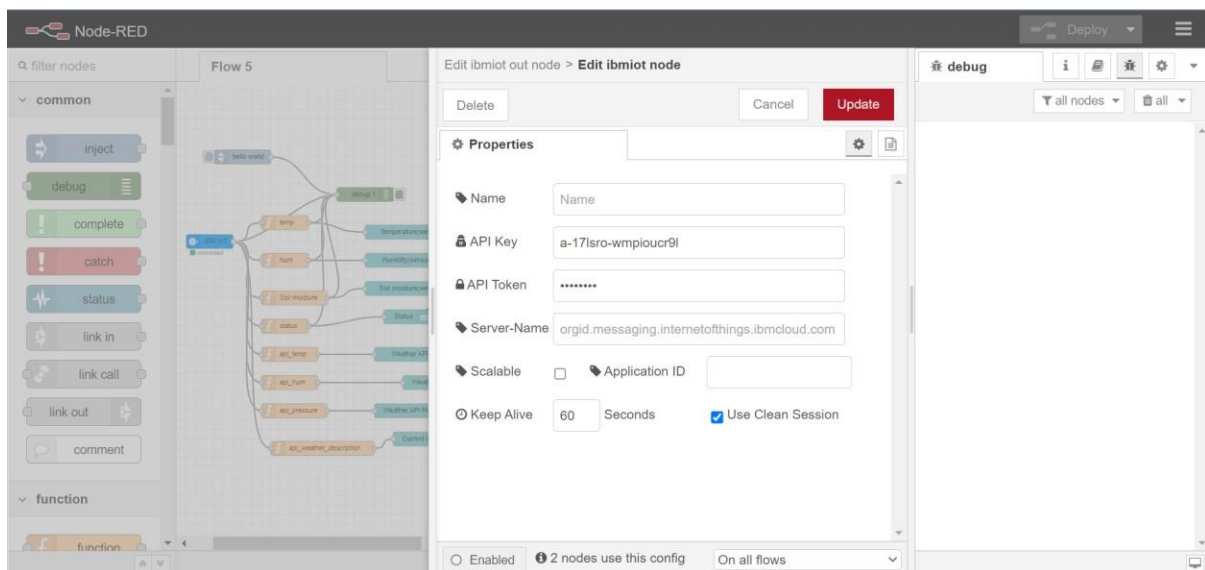
Flow:2



Flow:1 Configuring All Nodes With IBM IOT Platform



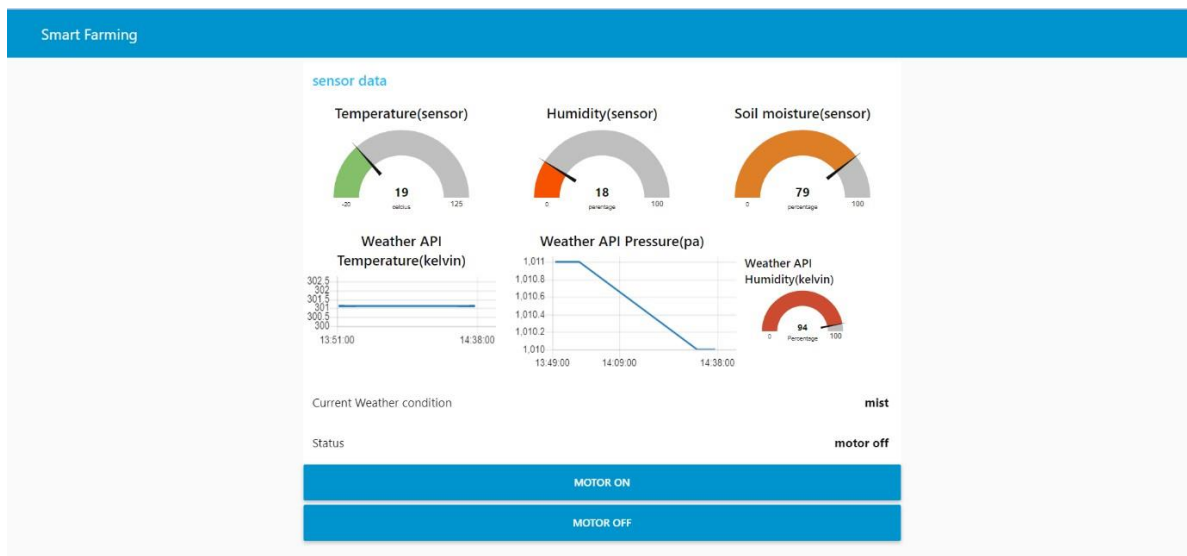
Flow:2 Configuring All Nodes With IBM IOT Platform



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': 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': -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

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The left sidebar contains icons for various platform features. The main content area shows a device with ID '12345' and status 'Connected'. Below this, a table lists recent events with columns 'Event' and 'Value'. An 'Event Payload' modal is open, displaying a JSON object with sensor data. The modal also shows the event name 'status' and the time received 'Nov 13, 2022 10:30 AM'. On the right, a section titled 'Added By' shows the email '211719106001@smartinternz.com'.

IBM Watson IoT Platform

211719106001@smartinternz.com
ID: 17isro

Browse Action Device Types Interfaces

Device ID Status

12345 Connected

Identity Device Information

The recent events listed show the live stream of data from the device.

Event	Value
status	{"temperature": 82, "humidity": 84, "soilmoisture": 16, "status": "motor off", "api_temperature": 209.14, "api_pressure": 1013, "api_humidity": 84, "api_weather_description": "mist"}
status	{"temperature": 74, "humidity": 84, "soilmoisture": 16, "status": "motor off", "api_temperature": 209.14, "api_pressure": 1013, "api_humidity": 84, "api_weather_description": "mist"}
status	{"temperature": 77, "humidity": 84, "soilmoisture": 16, "status": "motor off", "api_temperature": 209.14, "api_pressure": 1013, "api_humidity": 84, "api_weather_description": "mist"}
status	{"temperature": 72, "humidity": 84, "soilmoisture": 16, "status": "motor off", "api_temperature": 209.14, "api_pressure": 1013, "api_humidity": 84, "api_weather_description": "mist"}
status	{"temperature": 102, "humidity": 84, "soilmoisture": 16, "status": "motor off", "api_temperature": 209.14, "api_pressure": 1013, "api_humidity": 84, "api_weather_description": "mist"}

Event Payload

Event Name: status

Time Received: Nov 13, 2022 10:30 AM

```
1 {  
2   "temperature": 118,  
3   "humidity": 84,  
4   "soilmoisture": 16,  
5   "status": "motor off",  
6   "api_temperature": 209.14,  
7   "api_pressure": 1013,  
8   "api_humidity": 84,  
9   "api_weather_description": "mist"  
10 }
```

Added By

211719106001@smartinternz.com