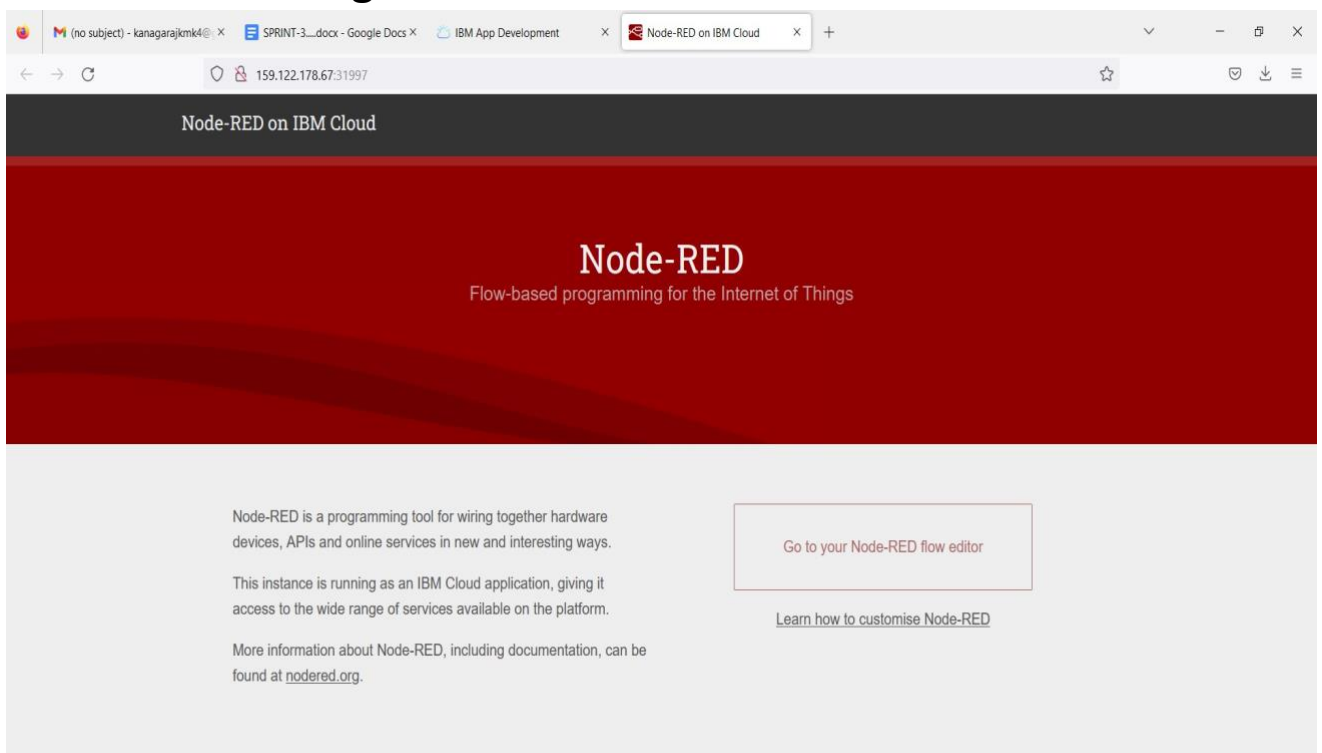


SPRINT-3

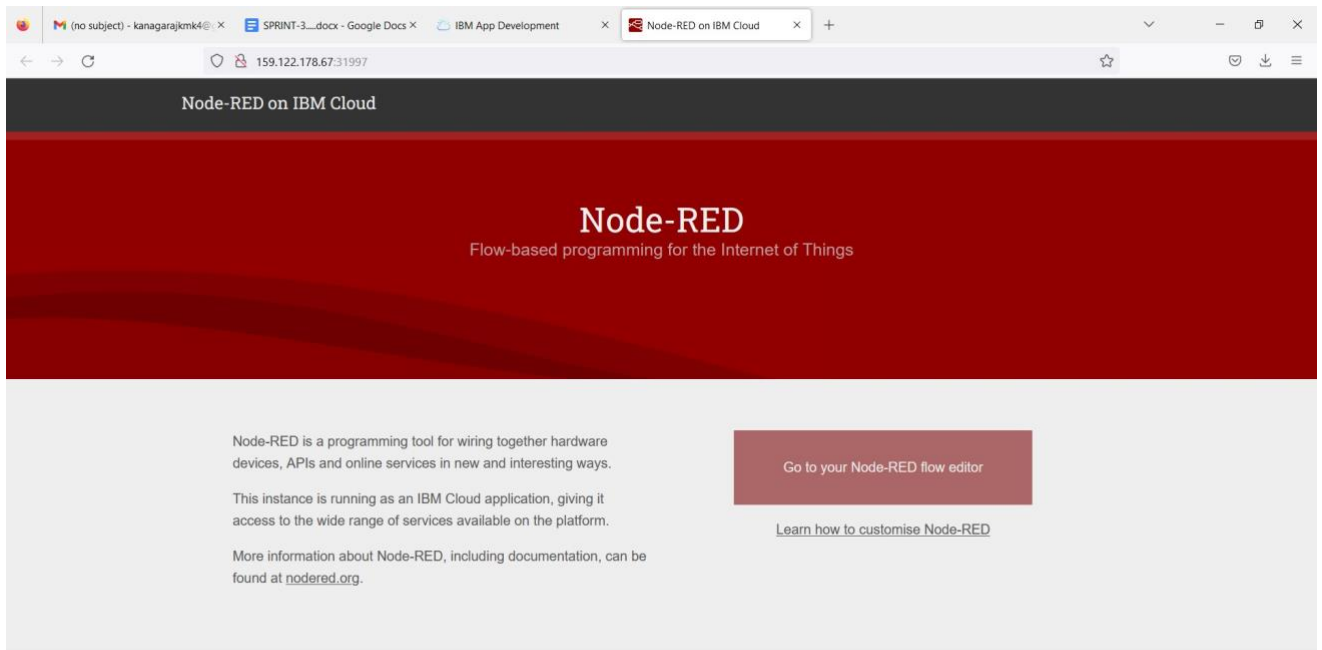
Team Id	PNT2022TMID16510
Project Name	Smart Farmer-IoT enabled smart farming application
TEAM	MUTHUKUMAR.V(TL) SURESH BABU G.S(TM) KARTHICK(TM) MANOJ KUMAR(TM)

NODE -RED FLOW:

Node Red Login:

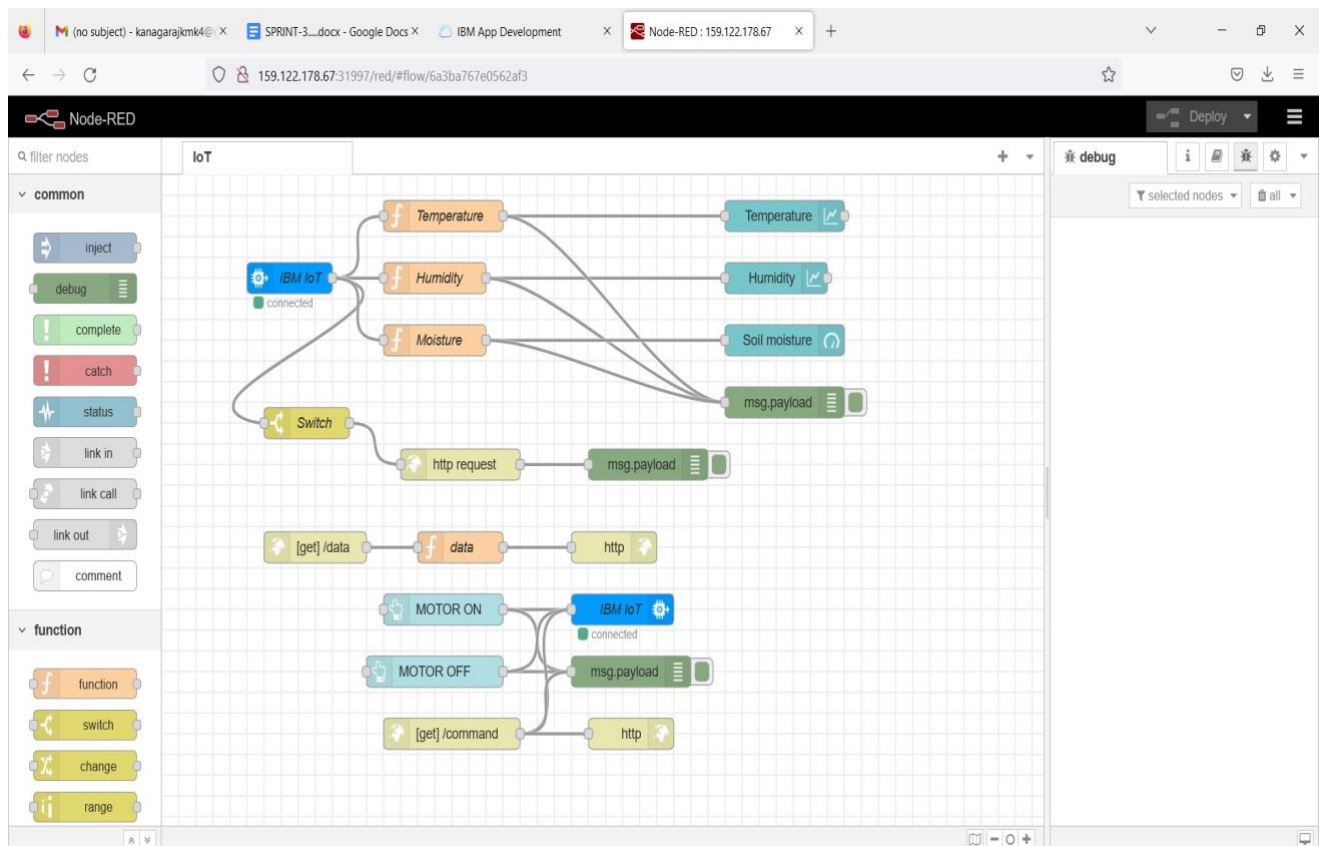


Click the Go to your Node-Red flow editor:



159.122.178.67:31997/red/

Creating the Project Flow:



CONFIGURE THE NODE WITH CREDENTIALS:

The screenshot shows the Node-RED web interface in a browser. The main workspace displays a flow with an 'IBM IoT' node connected to 'Temperature', 'Humidity', and 'Moisture' nodes. The 'Edit IBM IoT in node' panel is open on the right, showing the configuration for the 'IBM IoT' node. The 'Properties' section includes:

- Authentication: API Key
- API Key: IoT IN
- Input Type: Device Event
- Device Type: All or +
- Device Id: All or device id e.g. ab12cd231a21
- Event: All or +
- Format: All or json
- QoS: 0
- Name: IBM IoT
- Service: registered

A yellow warning box at the bottom of the configuration panel states: "Use the Input Type property to configure this node to receive Events sent by IoT Devices, Commands sent to IoT Devices, Status Messages". The 'Enabled' checkbox is checked.

NODE-RED WORKING: IBM WATSON FLOW:

The screenshot shows the Node-RED web interface with the 'IBM Watson IoT Platform' flow. The main workspace displays a flow with an 'IBM IoT' node connected to 'temp', 'Humid', and 'moist' nodes. The 'temp' node is connected to a 'Temperature Gauge' node, which is then connected to a 'Temp' node. The 'Humid' node is connected to a 'Humidity' node, which is then connected to a 'Humid' node. The 'moist' node is connected to a 'Moisture' node, which is then connected to a 'Moist' node. The 'Switch' node is connected to an 'http request' node, which is then connected to a 'msg.payload' node. The 'data' node is connected to a 'data' node, which is then connected to an 'http' node. The 'MOTOR ON' and 'MOTOR OFF' nodes are connected to an 'IBM IoT' node, which is then connected to a 'msg.payload' node. The 'command' node is connected to an 'http' node. The 'debug' console on the right shows the following log entries:

```
122
18/11/2022, 9:15:30 pm node: Temp
iot-2?type=abcd/id/12345/evntoTSensor/rmt/json :
msg payload : number

94
18/11/2022, 9:15:30 pm node: Humid
iot-2?type=abcd/id/12345/evntoTSensor/rmt/json :
msg payload : number

99
18/11/2022, 9:15:30 pm node: Moist
iot-2?type=abcd/id/12345/evntoTSensor/rmt/json :
msg payload : number

178
18/11/2022, 9:15:40 pm node: Temp
iot-2?type=abcd/id/12345/evntoTSensor/rmt/json :
msg payload : number

108
18/11/2022, 9:15:40 pm node: Humid
iot-2?type=abcd/id/12345/evntoTSensor/rmt/json :
msg payload : number

65
18/11/2022, 9:15:40 pm node: Moist
iot-2?type=abcd/id/12345/evntoTSensor/rmt/json :
msg payload : number

117
```

IBM Watson IoT Platform dashboard showing a list of devices. The selected device (ID: 12345) is in a 'Connected' state. Below the device list, the 'Recent Events' tab is active, displaying a stream of data from an IoT sensor.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
1234	Disconnected	abcd	Device	Nov 18, 2022 12:03 AM	
12345	Connected	abcd	Device	Nov 17, 2022 11:43 PM	

Event	Value	Format	Last Received
IoTSensor	{"temp":96,"Humid":92,"moist":142}	json	a few seconds ago
IoTSensor	{"temp":98,"Humid":79,"moist":118}	json	a few seconds ago
IoTSensor	{"temp":109,"Humid":79,"moist":117}	json	a few seconds ago
IoTSensor	{"temp":99,"Humid":72,"moist":167}	json	a few seconds ago
IoTSensor	{"temp":105,"Humid":93,"moist":108}	json	a few seconds ago

Our Node-Red flow is working successfully...
