

BUILD A WEB APPLICATION USING NODE-RED

Team ID	PNT2022TMID46404
Project Name	Smart Farmer - IOT Enabled Smart Farming Application

STEP 1:

The screenshot shows the Node-RED web interface in a browser. The address bar indicates the URL: `node-red-euwts-2022-11-16.eu-gb.mybluemix.net/red/#flow/4b70e136996ac58c`. The interface includes a left sidebar with node categories (common, function), a central workspace with a flow titled 'Flow 1', and a right sidebar with a debug console.

The 'Flow 1' workspace contains the following nodes and connections:

- Input:** An `IBM IoT` node (blue) with a 'connected' status.
- Processing:** Three function nodes (orange) labeled `Temperature`, `Humidity`, and `soilmoisture`.
- Output:** Three output nodes (blue) labeled `Temperature`, `Humidity`, and `Soi moisture`.
- Message Handling:** A `msg.payload` node (green) is connected to the function nodes.

The debug console on the right shows the following log entries:

```

11/17/2022, 12:30:27 AM node: 3d1a1cf95beb4abf
iot-
2/type/smart_farming/ld/farm_today/ev/ev/1/fmt/json
:msg.payload: Object
> { Temperature: 46, Humidity: 36,
soil moisture: 93 }

11/17/2022, 12:30:30 AM node: 3d1a1cf95beb4abf
iot-
2/type/smart_farming/ld/farm_today/ev/ev/1/fmt/json
:msg.payload: Object
> { Temperature: 99, Humidity: 78,
soil moisture: 67 }

11/17/2022, 12:30:38 AM node: 3d1a1cf95beb4abf
iot-
2/type/smart_farming/ld/farm_today/ev/ev/1/fmt/json
:msg.payload: Object
> { Temperature: 47, Humidity: 87,
soil moisture: 3 }

11/17/2022, 12:30:39 AM node: 3d1a1cf95beb4abf
iot-
2/type/smart_farming/ld/farm_today/ev/ev/1/fmt/json
:msg.payload: Object
> { Temperature: 47, Humidity: 2

```

STEP 2:

The screenshot shows the IBM Watson IoT Platform 'Browse Devices' page. The page includes a navigation bar with 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main content area displays a table of devices with columns: Device ID, Status, Device Type, Class ID, Date Added, Descriptive Location, and Added By.

The table contains the following data:

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	Added By
Soil_moisture	Disconnected	Soil_Monitoring	Device	Nov 16, 2022 3:58 AM		bragathishwari15@gmail.com
Weather_today	Disconnected	Weather_device	Device	Nov 14, 2022 11:31 PM		bragathishwari15@gmail.com
farm_today	Connected	smart_farming	Device	Nov 16, 2022 11:08 PM		bragathishwari15@gmail.com

At the bottom of the page, it indicates '3 Simulations running'.

IBM Watson IoT Platform

bragathishwari15@gmail.com
ID: 4c0d8b

Add Device

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	Added By
Soil_moisture	Disconnected	Soil_Monitoring	Device	Nov 15, 2022 3:58 AM		bragathishwari15@gmail.com
Weather_today	Disconnected	Weather_device	Device	Nov 14, 2022 11:31 PM		bragathishwari15@gmail.com
farm_today	Connected	smart_farming	Device	Nov 16, 2022 11:08 PM		bragathishwari15@gmail.com

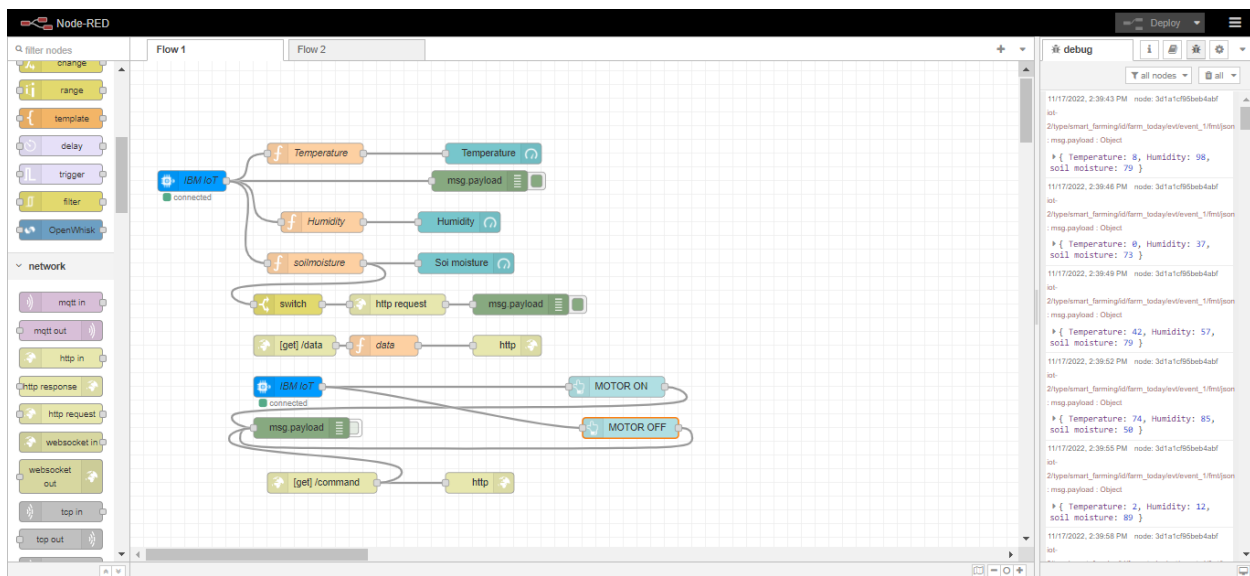
Identity Device Information Recent Events State Logs

The recent events listed show the live stream of data that is coming and going from this device.

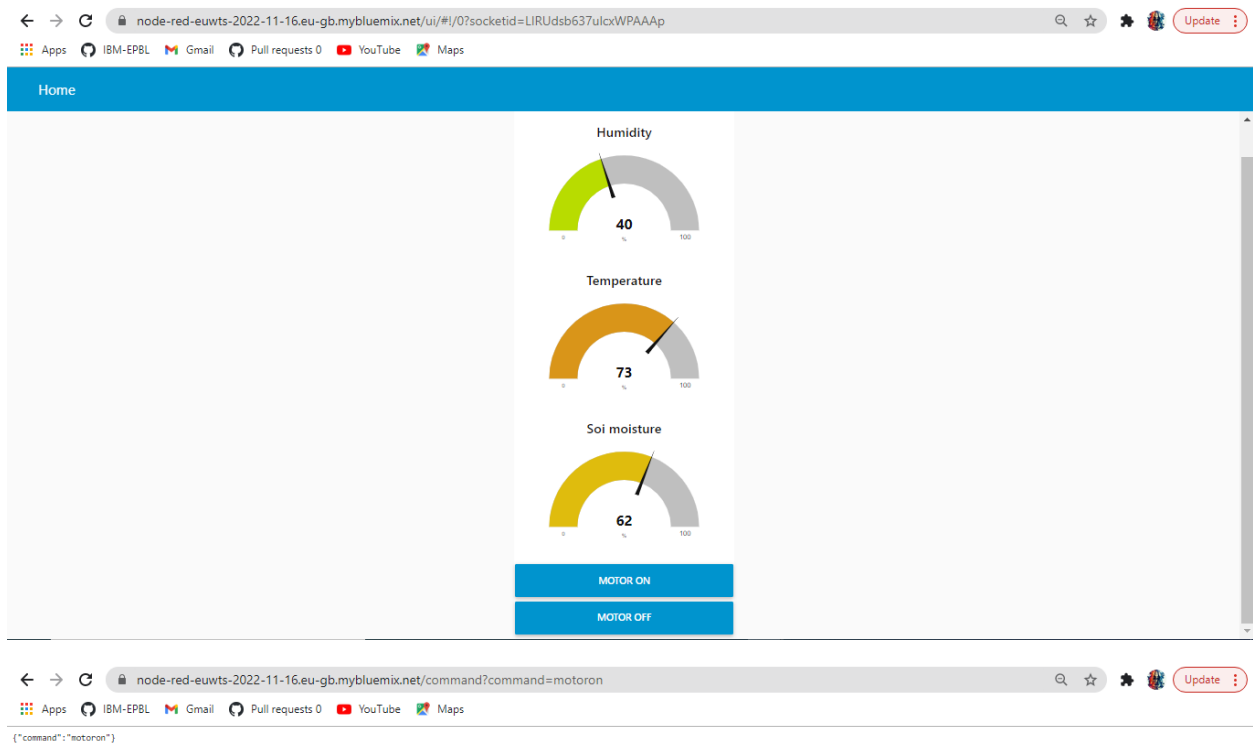
Event	Value	Format	Last Received
event_1	{ "Temperature":32,"Humidity":50,"soil moisture":...	json	a few seconds ago
event_1	{ "Temperature":38,"Humidity":89,"soil moisture":...	json	a few seconds ago
event_1	{ "Temperature":53,"Humidity":78,"soil moisture":...	json	a few seconds ago
event_1	{ "Temperature":1,"Humidity":80,"soil moisture":...	json	a few seconds ago
event_1	{ "Temperature":66,"Humidity":0,"soil moisture":...	json	a few seconds ago

3 Simulations running

STEP 3:



STEP 4:



FINALLY WE BUILD A WEB APPLICATION USING NODE-RED