

SMART FARMING USING IOT

Build a web application using node Red service

TEAM ID: PTN2022TMID47004

The screenshot displays the Node-RED web interface in a browser. The address bar shows the URL: `169.51.205.205:31370/red/#flow/6ec96e32b97a2875`. The interface includes a left sidebar with a node palette, a central workspace for building flows, and a right sidebar with a debug console.

Flow 1:

- A **Hello Node-RED!** node (blue) is connected to a **msg.payload** node (green).
- An **IBM IoT** node (blue) is also connected to the **msg.payload** node.
- The **IBM IoT** node has a status indicator showing "connected".

Debug Console:

The debug console shows two messages received from the **IBM IoT** node:

```
11/18/2022, 12:15:10 AM node: f2f2649a.0d0d98  
iot-2/type/galaxy/id/98765/ev1/IoTSensor/rmt/json :  
msg.payload : Object  
{ temp: 110, Humid: 91 }  
  
11/18/2022, 12:15:20 AM node: f2f2649a.0d0d98  
iot-2/type/galaxy/id/98765/ev1/IoTSensor/rmt/json :  
msg.payload : Object  
{ temp: 92, Humid: 88 }
```

Node-RED: 169.51.205.205 x IBM Watson IoT Platform x sketchino copy - Wokwi Ard x 169.51.205.205:31370/comm x MIT App Inventor x

Not secure | 169.51.205.205:31370/red/#flow/6ec96e32b97a2875

Node-RED

filter nodes

Flow 1

debug

all nodes | all

11/18/2022, 1:13:53 AM node: f2f2649a.0d0d98
iot-2/type/galaxy/id/98765/evt/IoTSensor/fmt/json :
msg.payload : number
93

11/18/2022, 1:13:53 AM node: f2f2649a.0d0d98
iot-2/type/galaxy/id/98765/evt/IoTSensor/fmt/json :
msg.payload : number
89

11/18/2022, 1:14:03 AM node: f2f2649a.0d0d98
iot-2/type/galaxy/id/98765/evt/IoTSensor/fmt/json :
msg.payload : number
91

11/18/2022, 1:14:03 AM node: f2f2649a.0d0d98
iot-2/type/galaxy/id/98765/evt/IoTSensor/fmt/json :
msg.payload : number
87

11/18/2022, 1:14:45 AM node: e851059f0ac9b4d6
msg.payload : Object
{ empty }

11/18/2022, 1:15:10 AM node: e851059f0ac9b4d6
msg.payload : Object
{ command: "lighton" }

24°C
Partly cloudy

18-11-2022 01:32

The screenshot shows the Node-RED web interface in a browser. The top bar contains several open tabs, including 'Node-RED: 169.51.205.205', 'IBM Watson IoT Platform', 'sketchino copy - Wokwi Ard', '169.51.205.205:31370/comm', and 'MIT App Inventor'. The address bar shows the URL '169.51.205.205:31370/red/#flow/6ec96e32b97a2875'. The main workspace displays 'Flow 1' on a grid. The left sidebar has a 'filter nodes' search bar and categories for 'input', 'output', and 'sequence'. The 'input' category is expanded, showing nodes like 'tcp in', 'tcp out', 'tcp request', 'udp in', 'udp out', 'ibmiot in', and 'ibmiot out'. The 'output' category shows 'OpenWhisk' and 'ibmiot out'. The 'sequence' category shows a 'split' node. The main workspace contains a flow with the following nodes: a 'Hello Node-RED!' node, an 'IBM IoT' node (connected), two 'function' nodes, a 'msg.payload' node, a 'http' node, a '[get]/sensor' node, and a '[get]/command' node. The flow is as follows: 'Hello Node-RED!' connects to 'msg.payload'. 'IBM IoT' connects to the first 'function' node. The first 'function' node connects to 'msg.payload'. The second 'function' node connects to 'msg.payload'. The 'msg.payload' node connects to 'http'. The '[get]/sensor' node connects to the second 'function' node. The '[get]/command' node connects to 'http' and an 'IBM IoT' node (connected). The right sidebar shows a 'debug' console with a list of messages. The messages are from the 'iot-2/type/galaxy/id/98765/evt/IoTSensor/fmt/json' node and contain 'msg.payload : number' with values 93, 89, 91, 87, and an empty object. The last message is from the 'iot-2/type/galaxy/id/98765/evt/IoTSensor/fmt/json' node and contains 'msg.payload : Object { command: "lighton" }'. The bottom status bar shows the temperature '24°C', weather 'Partly cloudy', and the date '18-11-2022' and time '01:32'.