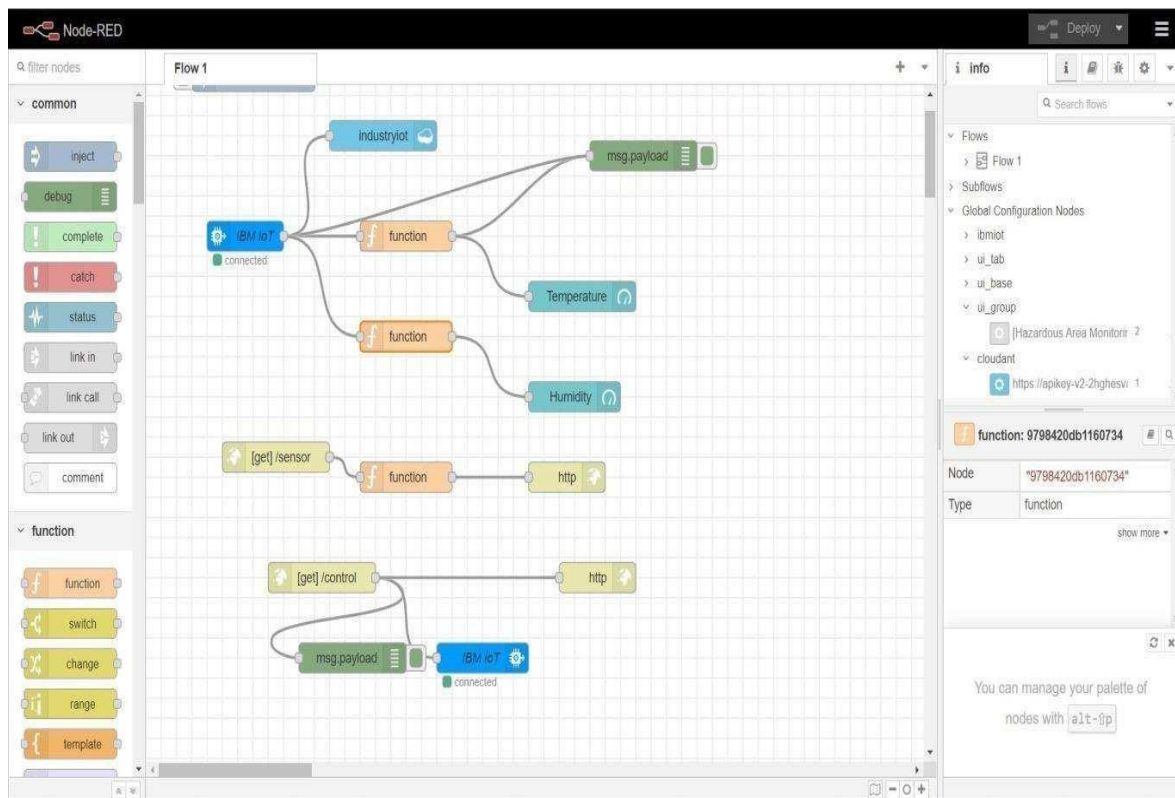


Develop The Web Application Using Node-RED

Team Id	PNT2022TMID26034
Project Name	Hazardous area monitoring for industrial plant powered by IOT
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Node red flow



Develop The Web Application Using Node-RED

Function block

The image shows the Node-RED web interface. On the left, the 'function' node is selected from the palette. The main workspace displays a flow with an 'inject' node connected to a 'function' node, which is then connected to an 'industryiot' node. The 'Edit function node' panel is open, showing the following JavaScript code:

```
1 msg.payload = msg.payload.temp;  
2 global.set('t',msg.payload)  
3 return msg;
```

The 'info' panel on the right shows the node's properties, including its ID '815cba7c7af38e65' and type 'function'.

The image shows the Node-RED web interface with a different function node configuration. The 'Edit function node' panel displays the following JavaScript code:

```
1 msg.payload = msg.payload.humid;  
2 global.set('h',msg.payload)  
3 return msg;
```

The 'info' panel on the right shows the node's properties, including its ID '9798420db1160734' and type 'function'. A hint at the bottom of the info panel suggests using 'ctrl-g i' to show the info tab or 'ctrl-g d' to show the debug tab.

Develop The Web Application Using Node-RED

The screenshot displays the Node-RED web interface. On the left, a sidebar shows a palette of nodes categorized into 'common' and 'function'. The main workspace, titled 'Flow 1', contains a flow diagram with several nodes: an 'inject' node, an 'IBM IoT' node (labeled 'connected'), two 'function' nodes, a '[get]/sensor' node, another 'function' node, a '[get]/control' node, a 'msg.payload' node, and another 'IBM IoT' node (also labeled 'connected'). On the right, the 'Edit ibmiot in node' panel is open, showing the configuration for the selected 'IBM IoT' node. The 'Properties' section includes fields for 'Authentication' (set to 'API Key'), 'API Key' (set to 'Industryiot'), 'Input Type' (set to 'Device Event'), 'Device Type' (set to 'NodeMCU'), 'Device Id' (set to 'IoT001'), 'Event' (set to 'All or +'), 'Format' (set to 'json'), 'QoS' (set to '0'), 'Name' (set to 'IBM IoT'), and 'Service' (set to 'registered'). A yellow tooltip at the bottom of the panel provides instructions on using the 'Input Type' property. At the bottom of the panel, there is an 'Enabled' checkbox.

The screenshot displays the Node-RED web interface with the 'Edit function node' panel open. The main workspace, titled 'Flow 1', shows a flow diagram with nodes including 'inject', 'IBM IoT', 'function', '[get]/sensor', '[get]/control', 'msg.payload', and another 'IBM IoT' node. The 'Edit function node' panel on the right shows the configuration for a selected function node. The 'Properties' section includes a 'Name' field. Below the properties, there are tabs for 'Setup', 'On Start', 'On Message', and 'On Stop'. The 'On Message' tab is active, showing a JavaScript code editor with the following code:

```
1 msg.payload = msg.payload.humid;
2 global.set('h',msg.payload)
3 return msg;
```

At the bottom of the panel, there is an 'Enabled' checkbox. On the far right, an 'info' panel is visible, showing a search bar and a list of flows and nodes. The 'function: 9798420db1160734' node is highlighted, and its details are shown below, including the node ID and type. At the bottom of the info panel, there is a note about showing the Info tab with 'ctrl-g i' or the Debug tab with 'ctrl-g d'.

Develop The Web Application Using Node-RED

The screenshot shows the Node-RED web interface. On the left, the 'filter nodes' sidebar is open, showing 'common' and 'function' categories. The main workspace displays a flow named 'Flow 1'. The flow starts with an 'IBM IoT' node (blue) connected to three 'function' nodes (orange). One 'function' node is connected to an 'industryiot' node (blue). Another 'function' node is connected to a '[get]/sensor' node (green), which is then connected to another 'function' node (orange). The third 'function' node is connected to a '[get]/control' node (green), which is then connected to a 'msg.payload' node (green) and an 'IBM IoT' node (blue). The 'Edit gauge node' panel is open on the right, showing the configuration for a 'Gauge' widget. The 'Label' is 'Humidity', 'Value format' is '({value})', 'Units' is '%', 'Range' is 'min 0 max 100', and 'Colour gradient' is set to a green-yellow-red gradient. The 'Info' panel on the far right shows the node's details: 'Node' is '*a214ca6c4eabe' and 'Type' is 'ui_gauge'.

The screenshot shows the Node-RED web interface with the same flow as the previous image. The 'Edit gauge node' panel is open, showing the configuration for a 'Gauge' widget. The 'Label' is 'Temperature', 'Value format' is '({value})', 'Units' is 'c', 'Range' is 'min 0 max 100', and 'Colour gradient' is set to a green-yellow-red gradient. The 'Info' panel on the far right shows the node's details: 'Node' is '*50e22bf31d3e6148' and 'Type' is 'ui_gauge'. Below the node details, there is a note: 'Hold down [Shift] when you click on a node to also select all of its connected nodes'.