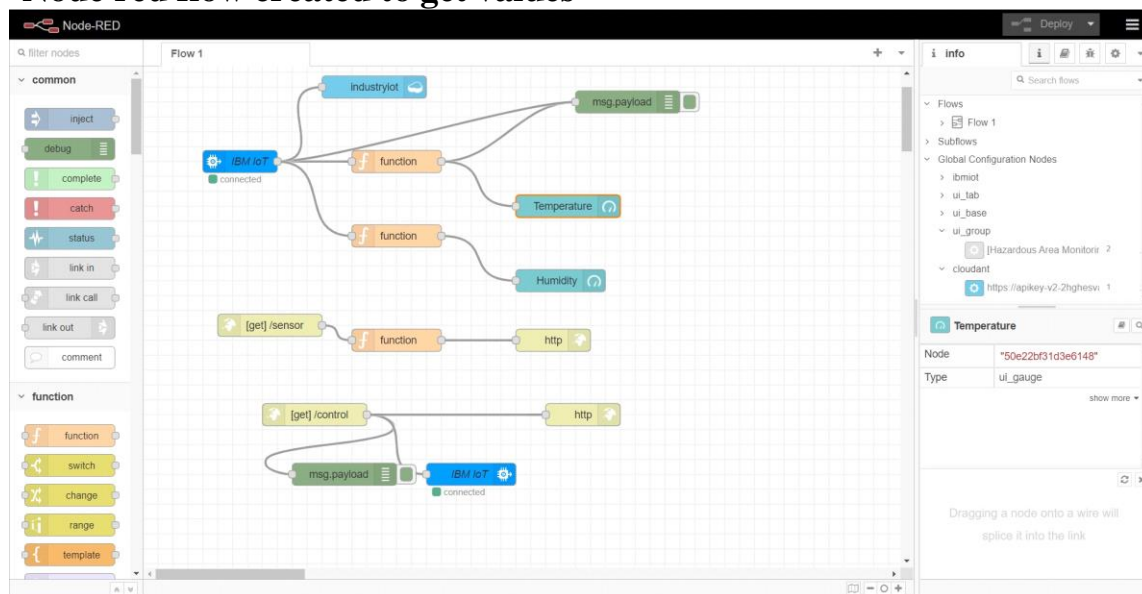


# Configure The Application To Receive The Data From Cloud

Date	10 November 2022
Team Id	PNT2022TMID43711
Title	Hazardous Area Monitoring for Industrial Plant using IoT

## Node red flow created to get values



## Configuring function to fetch the desired value

Flow 1

```
graph LR; IoT[IBM IoT] --> F1(function); IoT --> F2(function); IoT --> F3(function); IoT --> GET1[GET /sensor]; IoT --> GET2[GET /control]; GET1 --> F4(function); GET2 --> F5(function); F4 --> MP[msg.payload]; F5 --> MP; MP --> OUT[Output];
```

Edit function node

Delete

Cancel

Done

Properties

Name

Name

Setup

On Start

On Message

On Stop

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

Enabled

Flow 1

```
graph LR; IoT[IBM IoT] --> F1(function); IoT --> F2(function); IoT --> F3(function); IoT --> GET1[GET /sensor]; IoT --> GET2[GET /control]; GET1 --> F4(function); GET2 --> F5(function); F4 --> MP[msg.payload]; F5 --> MP; MP --> OUT[Output];
```

Edit function node

Delete

Cancel

Done

Properties

Name

Name

Setup

On Start

On Message

On Stop

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

Enabled

## App Blocks to render the values and display it in app

The screenshot displays the MIT App Inventor web interface for a project named "IoT\_Interface". The interface is divided into three main sections: a left sidebar with a "Blocks" palette, a central "Viewer" area, and a right sidebar with a "Designer" tab.

**Blocks Palette:** The "Built-in" category is expanded, showing various block categories like Control, Logic, Math, Text, Lists, Dictionaries, Colors, Variables, and Procedures. The "Screen1" category is also visible, containing blocks for HorizontalArrangement, Image1, VerticalScrollArrangement, Label1, and Label2. A "Media" section at the bottom allows for downloading or uploading images.

**Viewer Area:** This area shows the visual representation of the app's logic. It contains four distinct logic blocks:

- Initial Timer:** A "when Clock1 -> Timer" block followed by a "do" block containing "set Web1 -> Url" (set to "http://159.122.177.234:30241/sensor") and "call Web1 -> Get".
- Web1 GetText:** A "when Web1 -> GetText" block with a "do" block. It uses a "responseCode" block to set "TextBox1 -> Text" based on a "look up in pairs" key. It also uses "responseContent" blocks to call "Web1 -> JsonTextDecode" and "get responseContent" to retrieve "temperature" and "humidity" data, which are then displayed in "TextBox2" and "Label1" respectively. "not found" error handling is included for both data types.
- Button1 Click:** A "when Button1 -> Click" block with a "do" block containing "set Web2 -> Url" (set to "http://159.122.177.234:30241/control?command=rot") and "call Web2 -> Get".
- Button2 Click:** A "when Button2 -> Click" block with a "do" block containing "set Web2 -> Url" (set to "http://159.122.177.234:30241/control?command=rot") and "call Web2 -> Get".

**Right Sidebar:** The "Designer" tab is active, showing a visual representation of the app's layout. It includes a "Show Warnings" button and a "Privacy Policy and Terms of Use" link at the bottom.