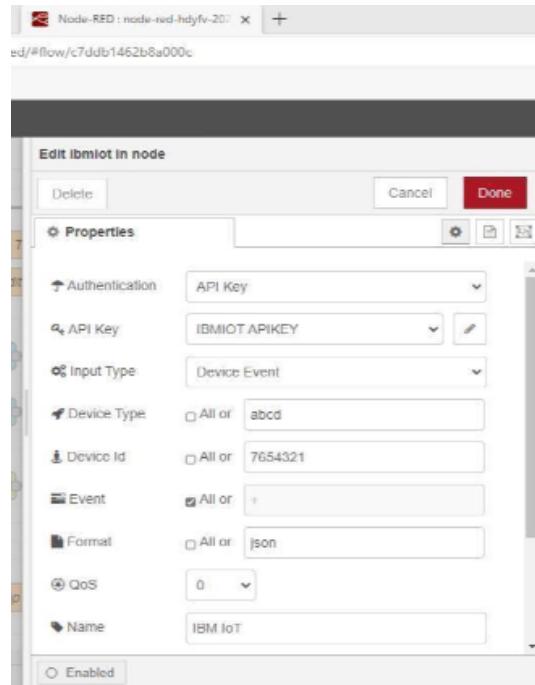


|                     |  |
|---------------------|--|
| <b>Team ID</b>      | <b>PNT2022TMID35659</b>                                    |
| <b>Project Name</b> | <b>SmartFarmer - IoT Enabled Smart Farming Application</b> |

## Sprint Delivery - 3

### Building Project

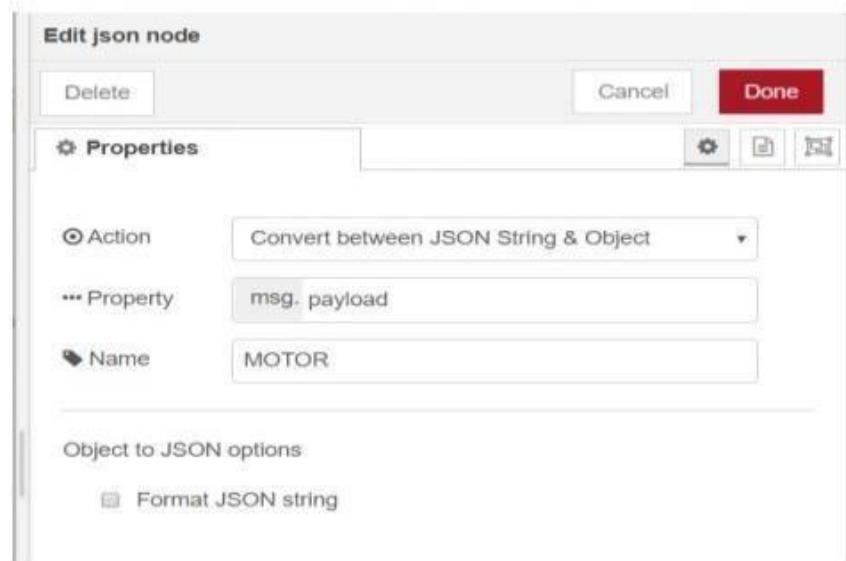
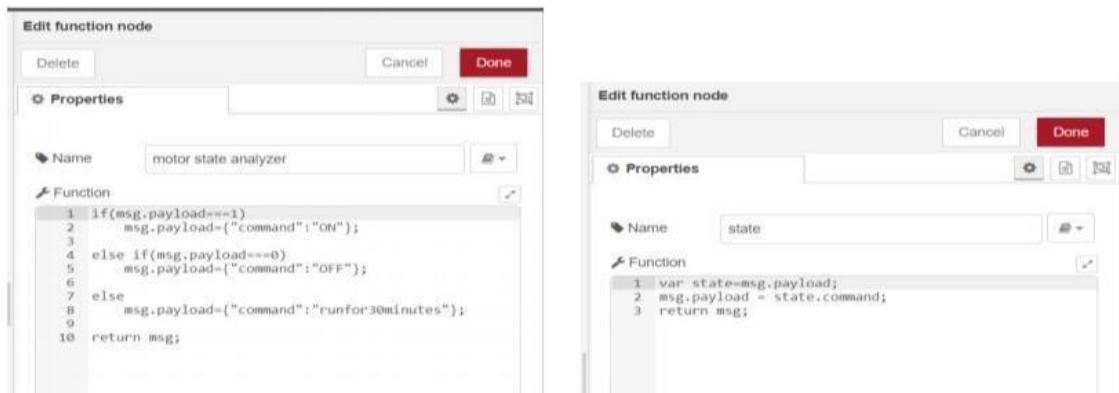
- **Configuration of Node-Red to send commands to IBM cloud**
  - ibmiot out node is used to send data from Node-Red to IBM Watson device.
  - So, after adding it to the flow we need to configure it with credentials of our Watson device.

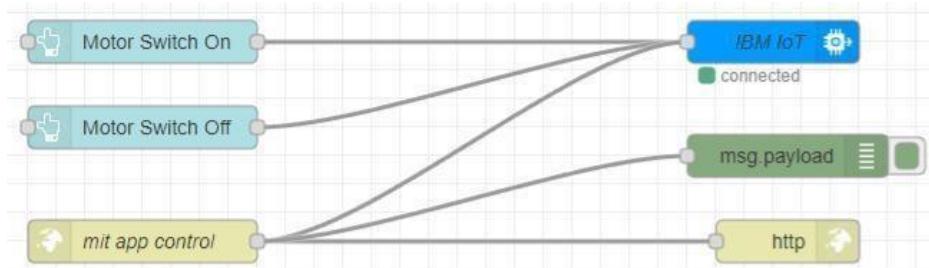


- Here we add two buttons in UI
  - 1 -> for motor on
  - 2 -> for motor off
- We used a function node to analyze the data received and assign commands to each number.
- The Java script code for the analyses is:

```
if(msg.payload==1)

msg.payload={"command": "ON"}; else if(msg.payload==0)
msg.payload={"command": "OFF"};
```



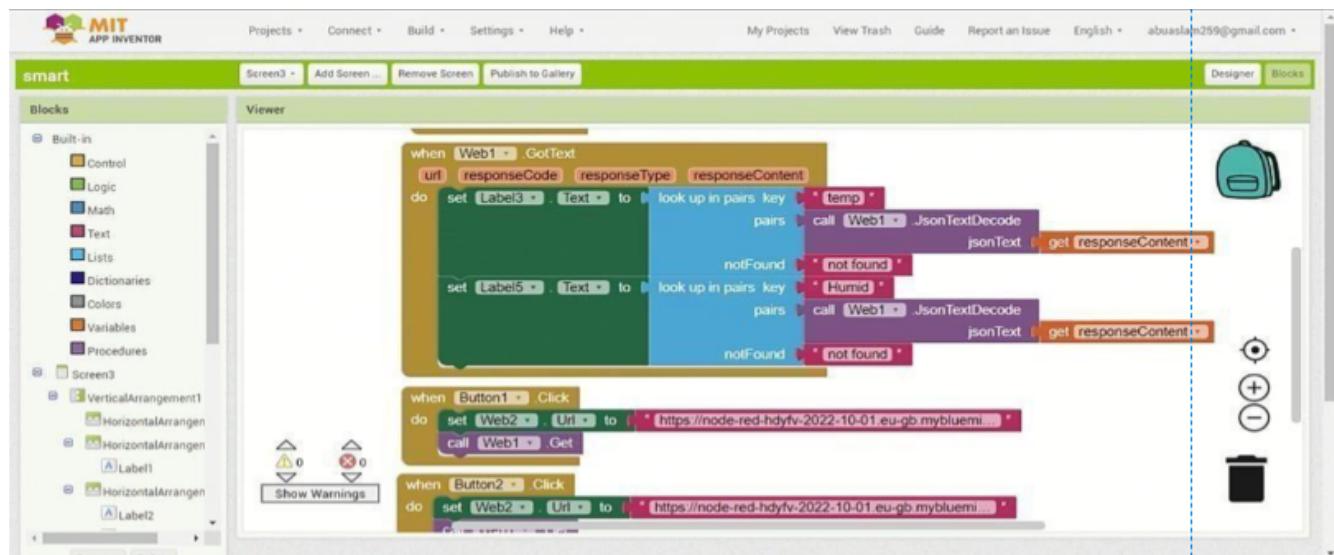


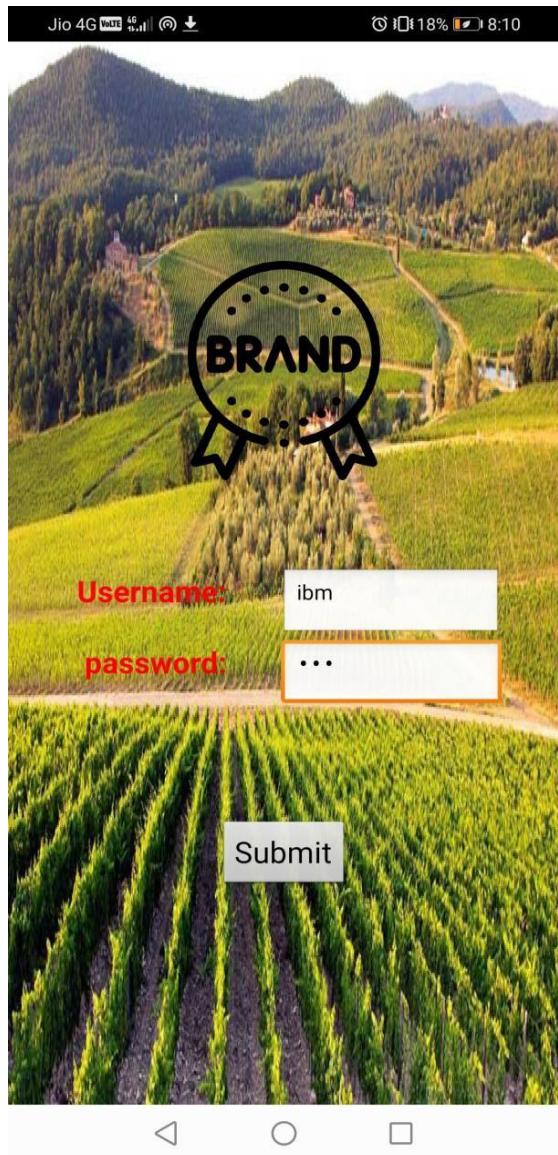
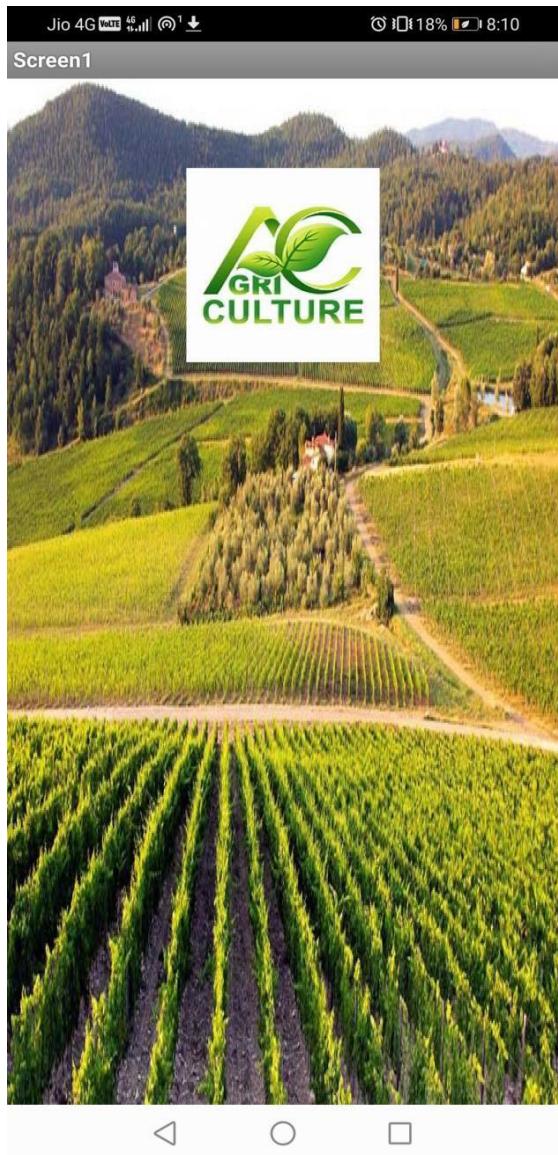
- This is the program flow for sending commands to IBM cloud.

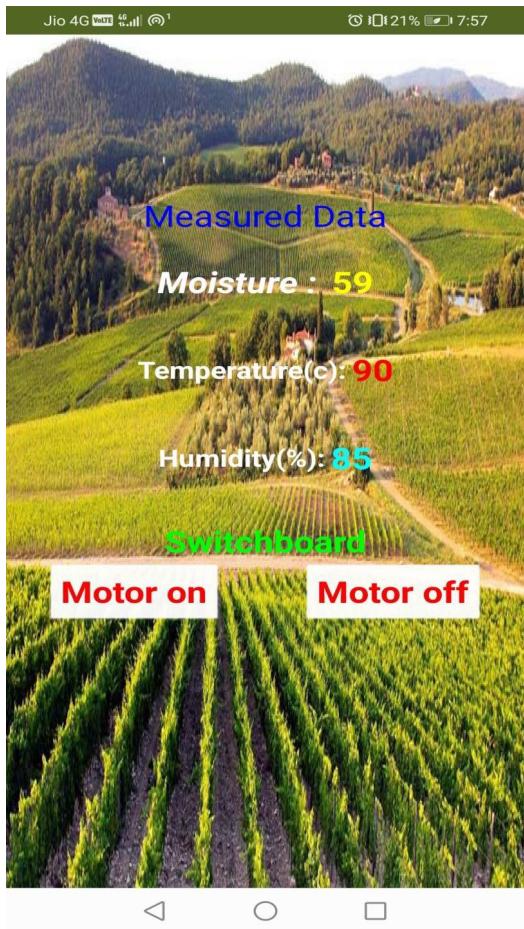
## • Adjusting User Interface

- In order to display the parsed JSON data a Node-Red dashboard is created.
- Here we are using Gauges, text and button nodes to display in the UI and helps to monitor the parameters and control the farm equipment.
- Below images are the Gauge, text and button node configurations.

## • MOBILE APP WEB :







- Web APP UI Home Tab

