

Sprint 3

MIT App Inventor and Dashboard-

Application for project using MIT App, Design the Model and Test the App

| | |
|---------------|--|
| Date | 11 November 2022 |
| Team ID | PNT2022TMID01408 |
| Project Name | Project – Smart Farmer-IoT Enabled smart Farming Application |
| Maximum Marks | 4 Marks |

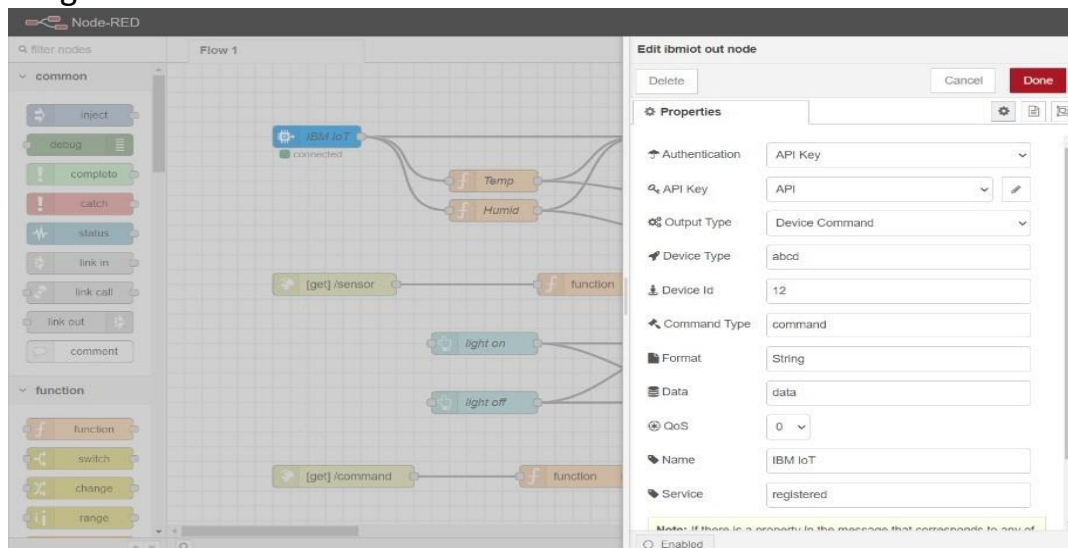
Configuration of Node-Red to send commands to IBM cloud

ibmiot out node I 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.Light On

2.Light Off



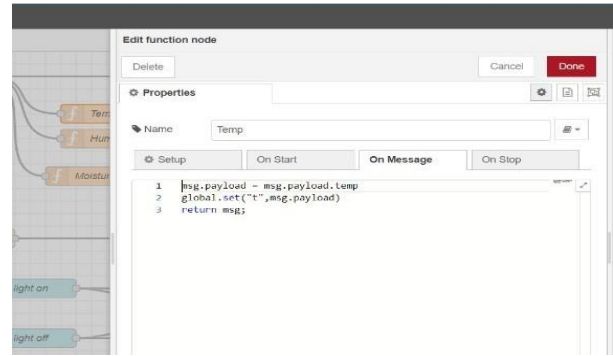
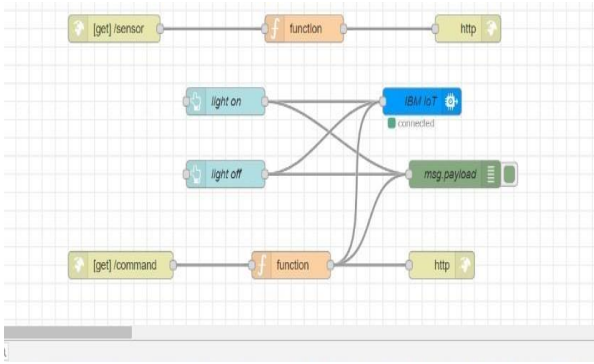
The Java script code for the analyses is:

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

```
msg.payload={"command": "ON"};
```

```
else if(msg.payload===0)
```

```
msg.payload={"command": "OFF"};
```

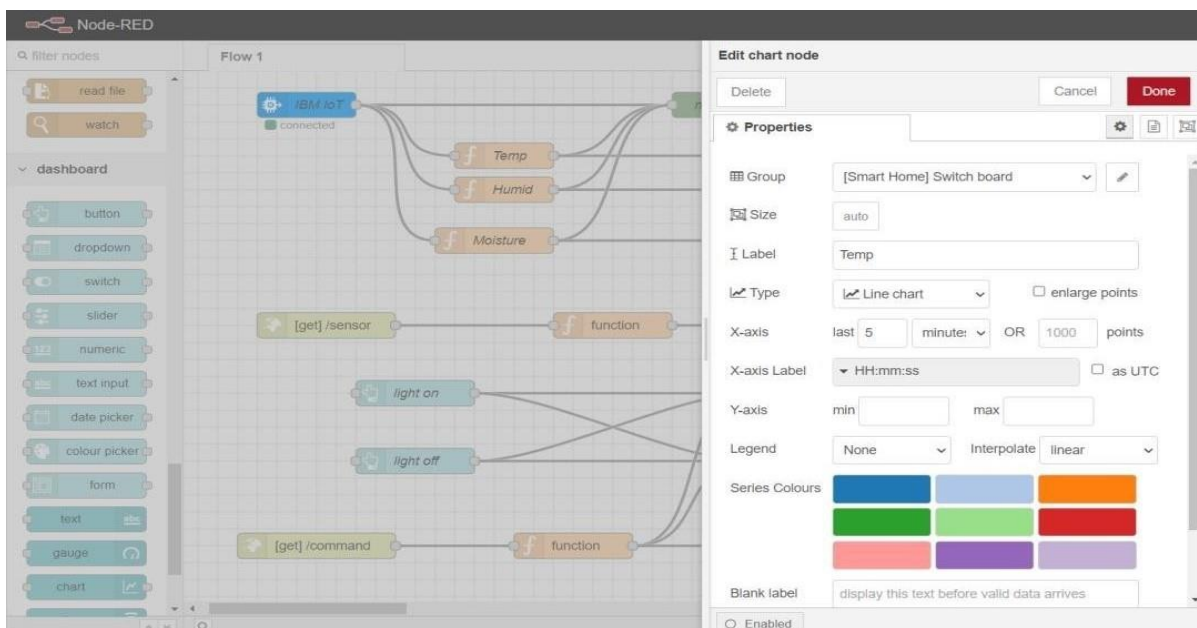


Adjusting User Interface

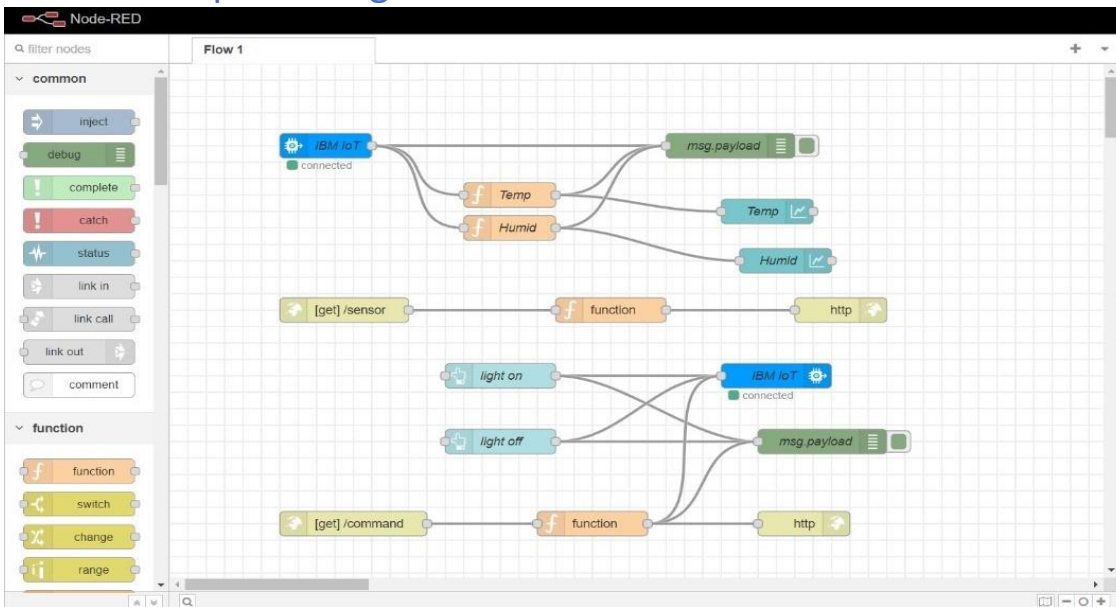
In order to display the parsed JSON data a Node-Red dashboard is created

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.

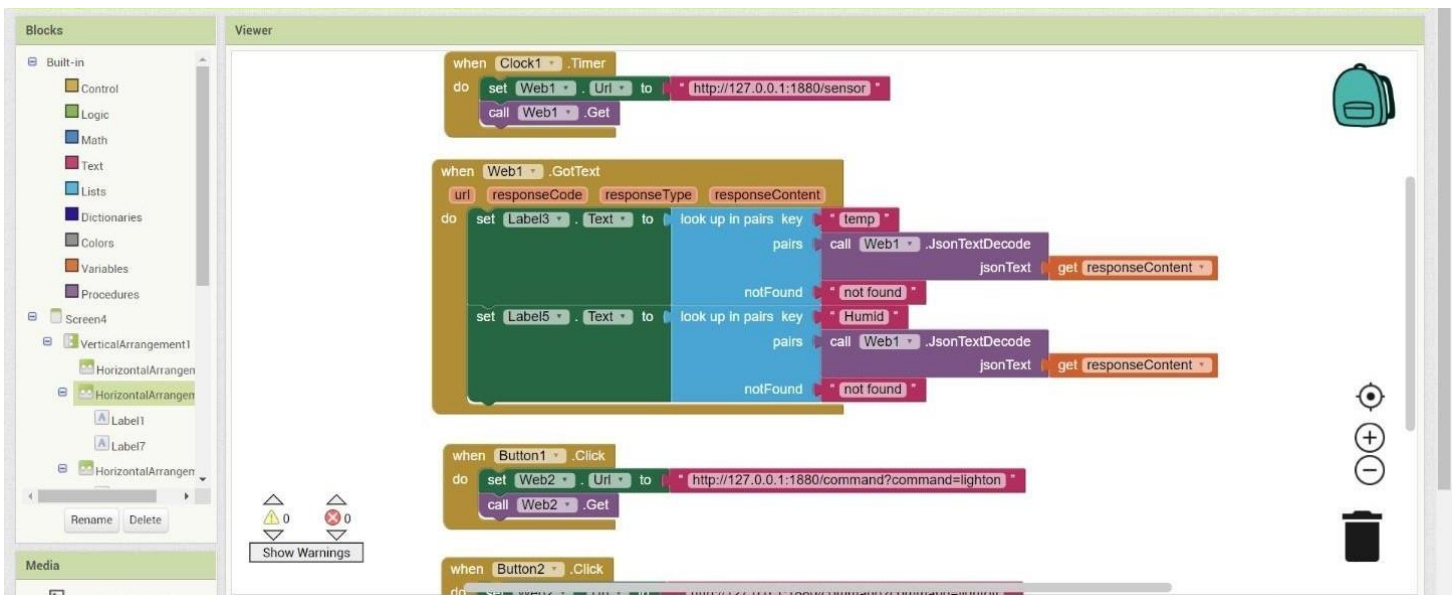
Below images are the Gauge, text and button node configurations.



Complete Program Flow



MOBILE APP WEB : BLOCK DIAGRAM



SCREEN – 1

Document from Brindha Sprint 3.pdf IBM IBM-Project-4663-1658737188/ MIT App Inventor

Not secure | ai2.appinventor.mit.edu/#6694407156662272

Display hidden components in Viewer Phone size (505,320)

Screen1

Username: Brindha Password:

Screen1

- TableArrangement1
 - Label1
 - TextBox1
 - Label2
 - TextBox2
- Notifier1

Media

- farm.webp
- Upload File ...

TextBox2

BackgroundColor Default

Enabled ☒

FontBold ☒

FontItalic ☐

FontSize 14.0

FontTypeface default

Height Automatic

Width Automatic

Hint Hint for TextBox2

MultiLine ☐

NumbersOnly ☐

ReadOnly ☐

Text

Sprint 3.pdf ibm assignment....docx Assignment-3.docx ibm assignment-....docx humi.jpeg tem.jpg Show all

Search the web

ENG IN 15:46 11-11-2022

SCREEN - 2

Sent Mail - brindhaselvan1231@... x IBM x IBM-Project-4663-1658737188/... x MIT App Inventor x +

Not secure | ai2.appinventor.mit.edu/#5038875941404672

Palette

Search Components...

User Interface

- Button
- CheckBox
- DatePicker
- Image
- Label
- ListPicker
- ListView
- Notifier
- PasswordTextBox
- Slider
- Spinner
- Switch
- TextBox
- TimePicker
- WebView

Layout

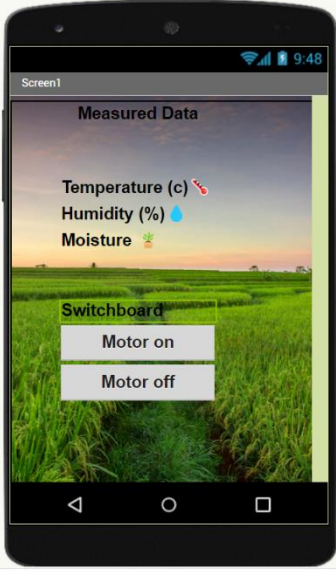
Media

Drawing and Animation

Viewer

☐ Display hidden components in Viewer

Phone size (505,320)



Screen1

Measured Data

Temperature (c)

Humidity (%)

Moisture

Switchboard

Motor on

Motor off

Components

- Screen1
 - TableArrangement1
 - Button1
 - Label2
 - Label4
 - Label6
 - Button2
 - Label1
 - Label5

Rename Delete

Media

farm.webp

Upload File ...

Properties

Label5

BackgroundColor

☐ None

FontBold

☒

FontItalic

☐

FontSize

20

FontTypeface

sans serif

HTMLFormat

☐

HasMargins

☒

Height

Automatic...

Width

Automatic...

Text

Switchboard

TextAlignment

left : 0

TextColor

Default

Visible

☒

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Web APP UI Home Tab

Smart Home

Switch board



LIGHT ON

LIGHT OFF



Garden

