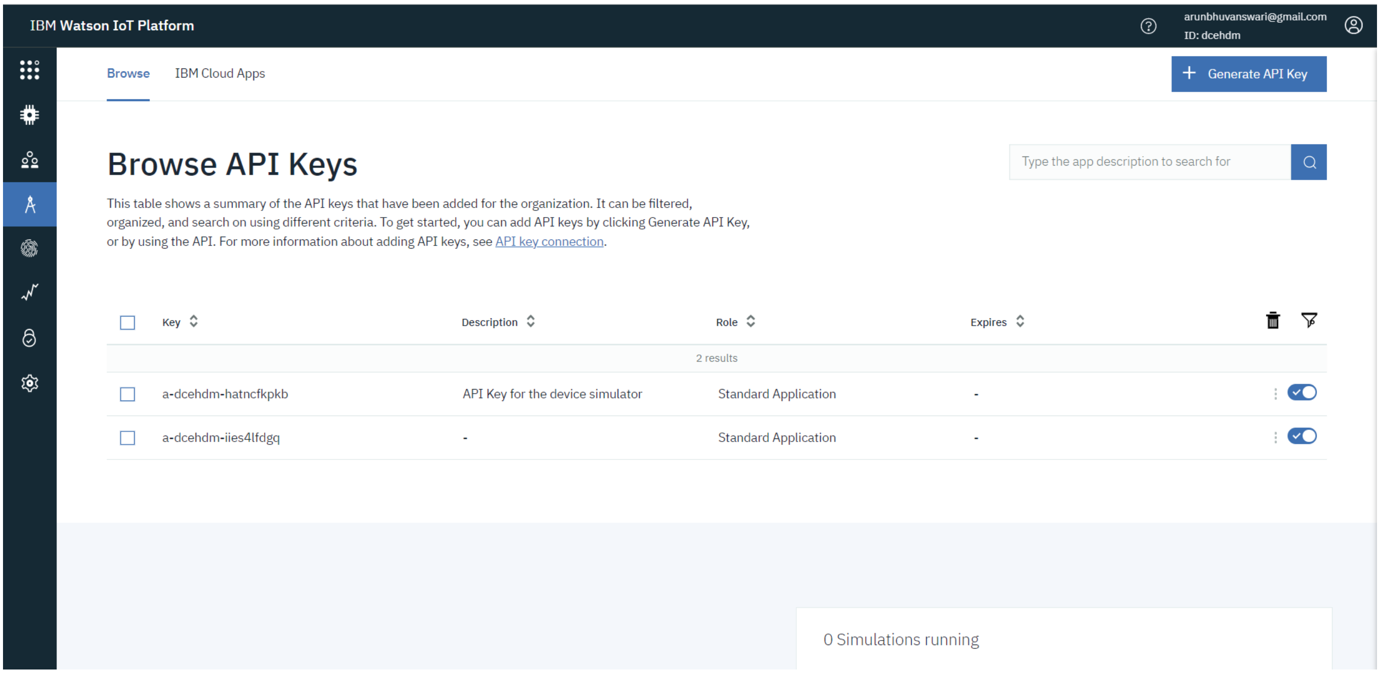
Build A Web Application Using Node-RED

Team ID	PNT2022TMID08726
Project Name	Smart Farmer - IoT Enabled Smart FarmingApplication

Open IBM Watson and click Apps and Generate API key



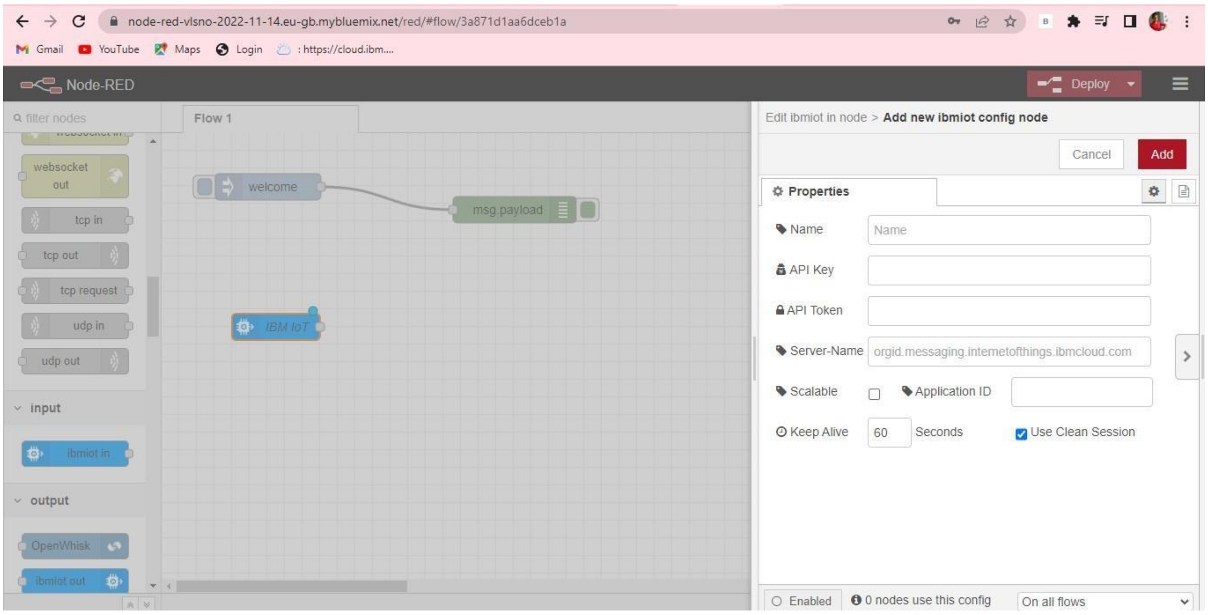
Browse API Keys

This table shows a summary of the API keys that have been added for the organization. It can be filtered, organized, and search on using different criteria. To get started, you can add API keys by clicking Generate API Key, or by using the API. For more information about adding API keys, see API key connection.

Key	Description	Role	Expires
		2 results	
a-dcehdm-hatncfkpkb	API Key for the device simulator	Standard Application	-
a-dcehdm-iies4lfdgq	-	Standard Application	-

0 Simulations running

First open Node RED workspace and drag IBM IOT input into the workspace. Itwill as Ask API key, device id ,device type etc.



Edit ibmiot in node > Add new ibmiot config node

Name: Name

API Key:

API Token:

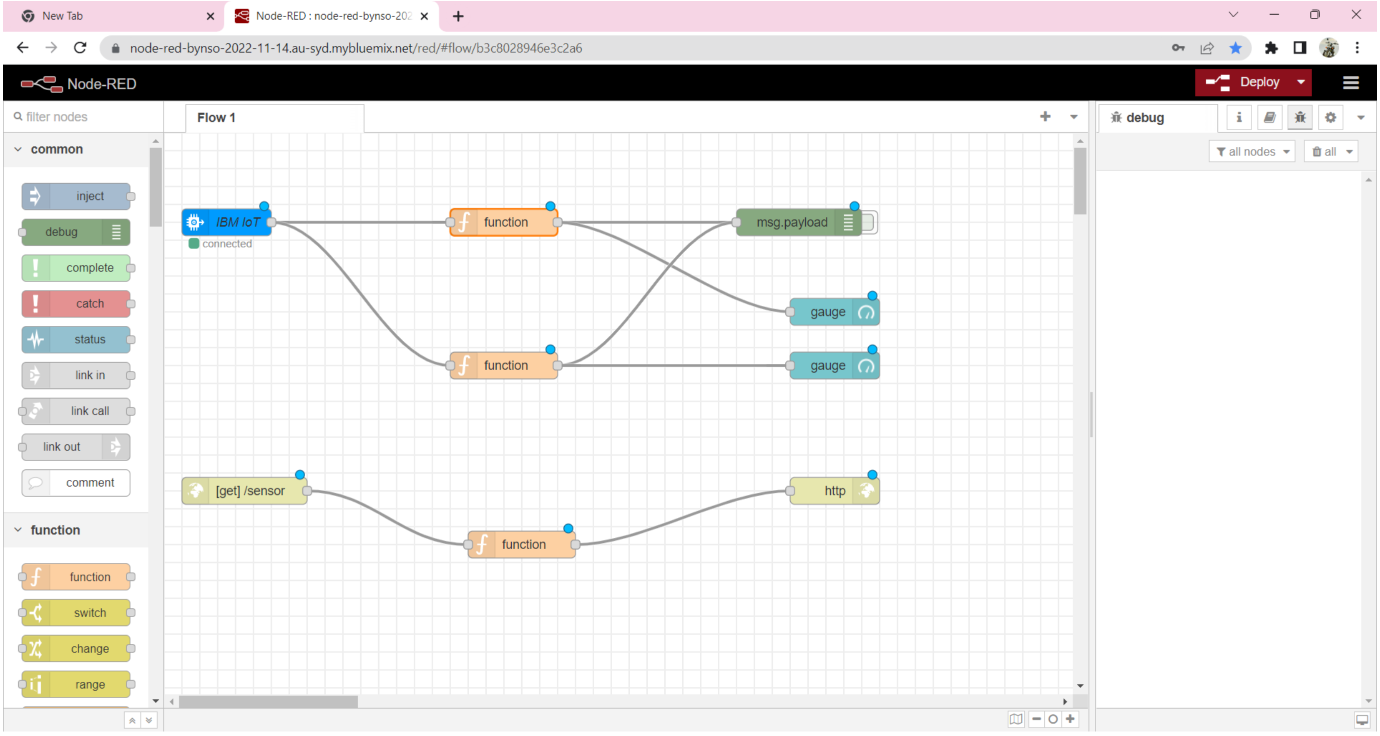
Server-Name: orgid.messaging.internetofthings.ibmcloud.com

Scalable □ Application ID

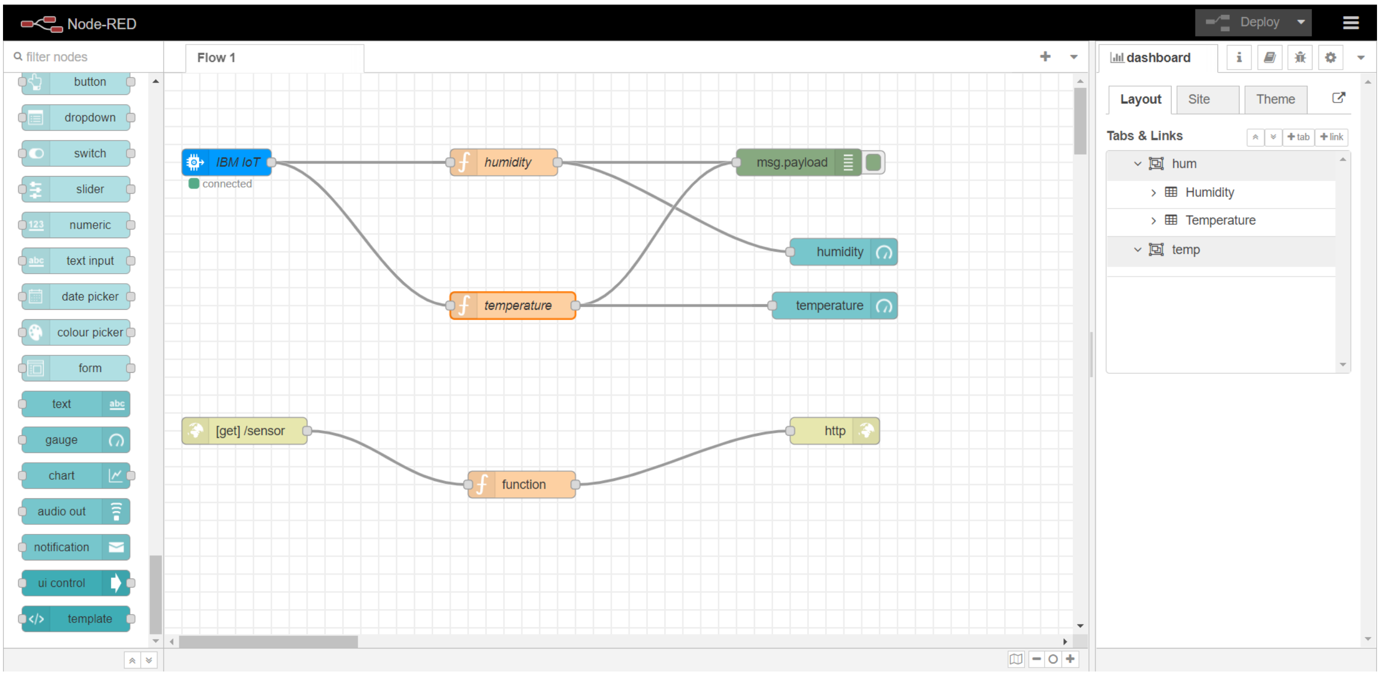
Keep Alive 60 Seconds ☑ Use Clean Session

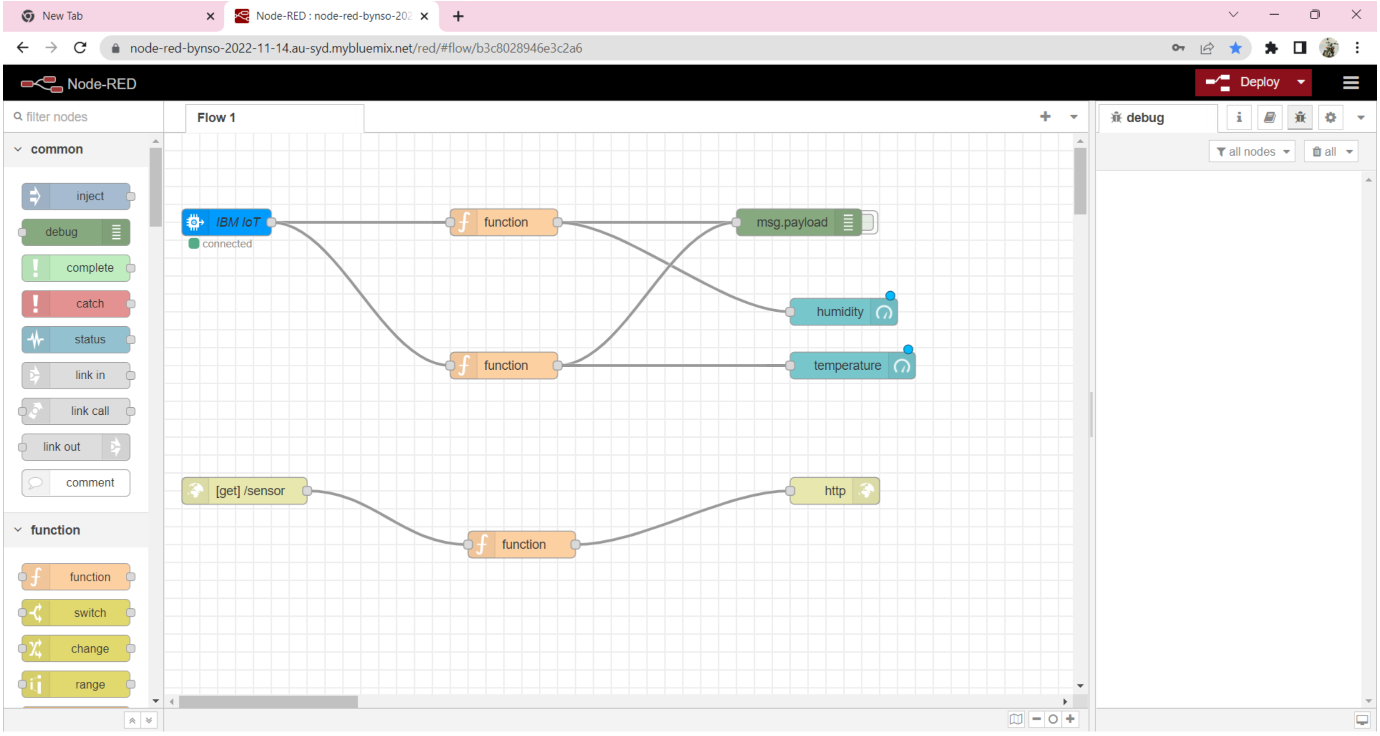
○ Enabled
0 nodes use this config
On all flows

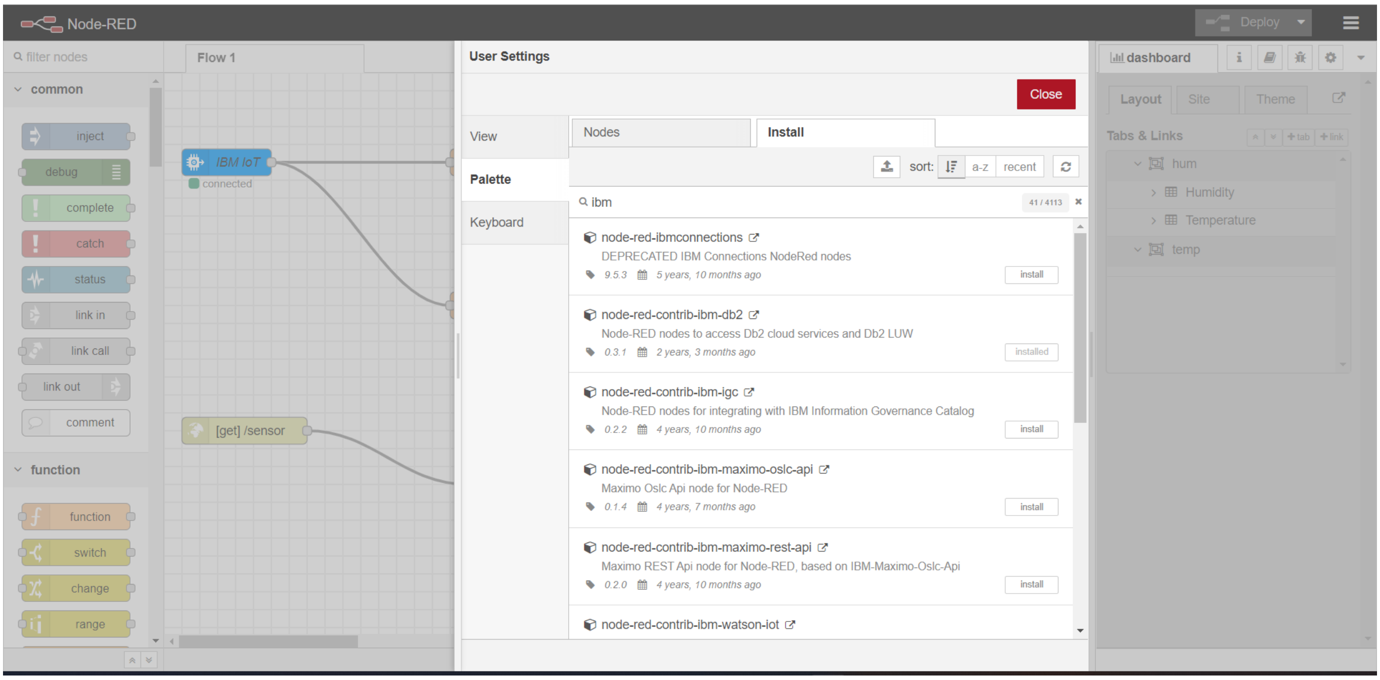
Output from IBM IOT



And take a function node and rename it







ibm 41 / 4113

node-red-ibmconnections
DEPRECATED IBM Connections NodeRed nodes
9.5.3 5 years, 10 months ago install

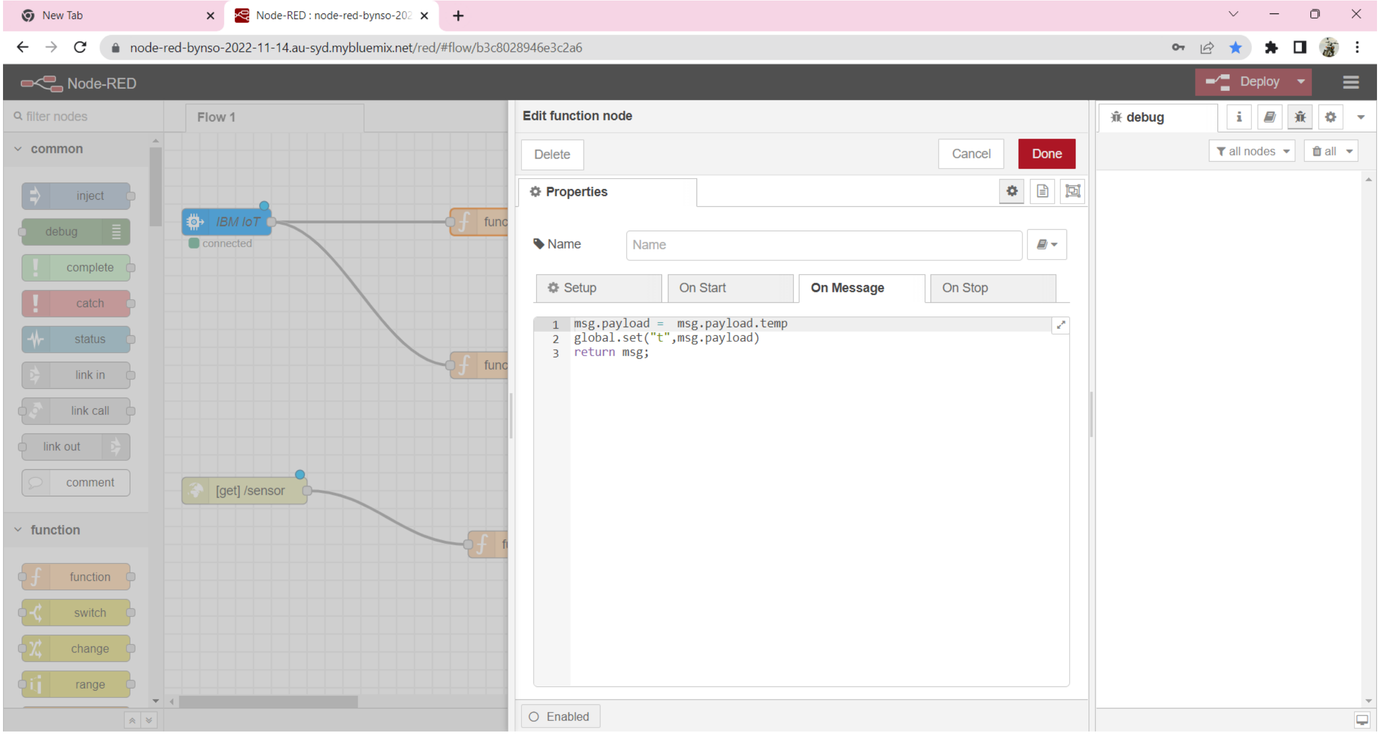
node-red-contrib-ibm-db2
Node-RED nodes to access Db2 cloud services and Db2 LUW
0.3.1 2 years, 3 months ago installed

node-red-contrib-ibm-igc
Node-RED nodes for integrating with IBM Information Governance Catalog
0.2.2 4 years, 10 months ago install

node-red-contrib-ibm-maximo-oslc-api
Maximo Oslc Api node for Node-RED
0.1.4 4 years, 7 months ago install

node-red-contrib-ibm-maximo-rest-api
Maximo REST Api node for Node-RED, based on IBM-Maximo-Oslc-Api
0.2.0 4 years, 10 months ago install

node-red-contrib-ibm-watson-iot



node-red-bynso-2022-11-14.au-syd.mybluemix.net/red/#flow/b3c8028946e3c2a6

Edit function node

Delete Cancel Done

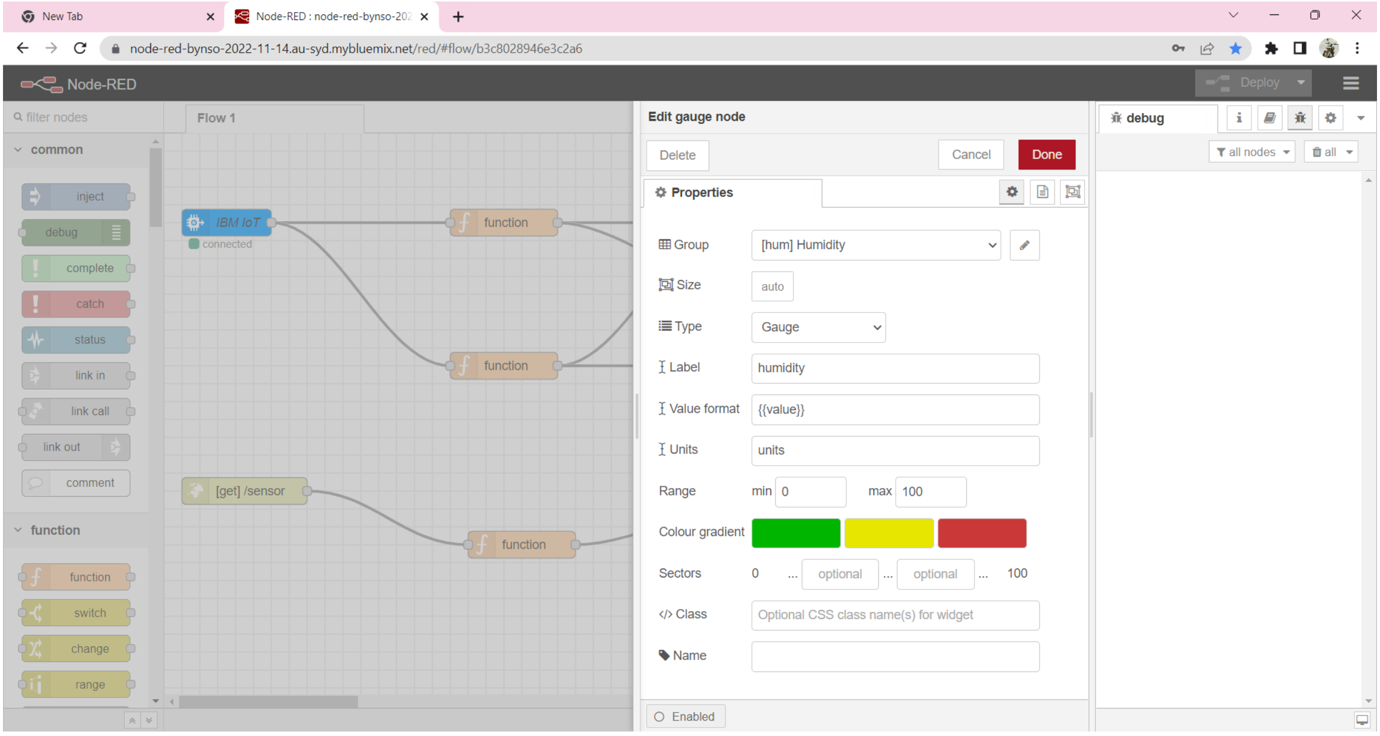
Properties

Name: Name

Setup | On Start | **On Message** | On Stop

```
msg.payload =  msg.payload.temp
global.set("t",msg.payload)
return msg;
```

○ Enabled



Edit gauge node

Delete Cancel Done

Properties

Group: [hum] Humidity

Size: auto

Type: Gauge

Label: humidity

Value format: {{value}}

Units: units

Range: min 0 max 100

Colour gradient: 🟩 🟨 🟥

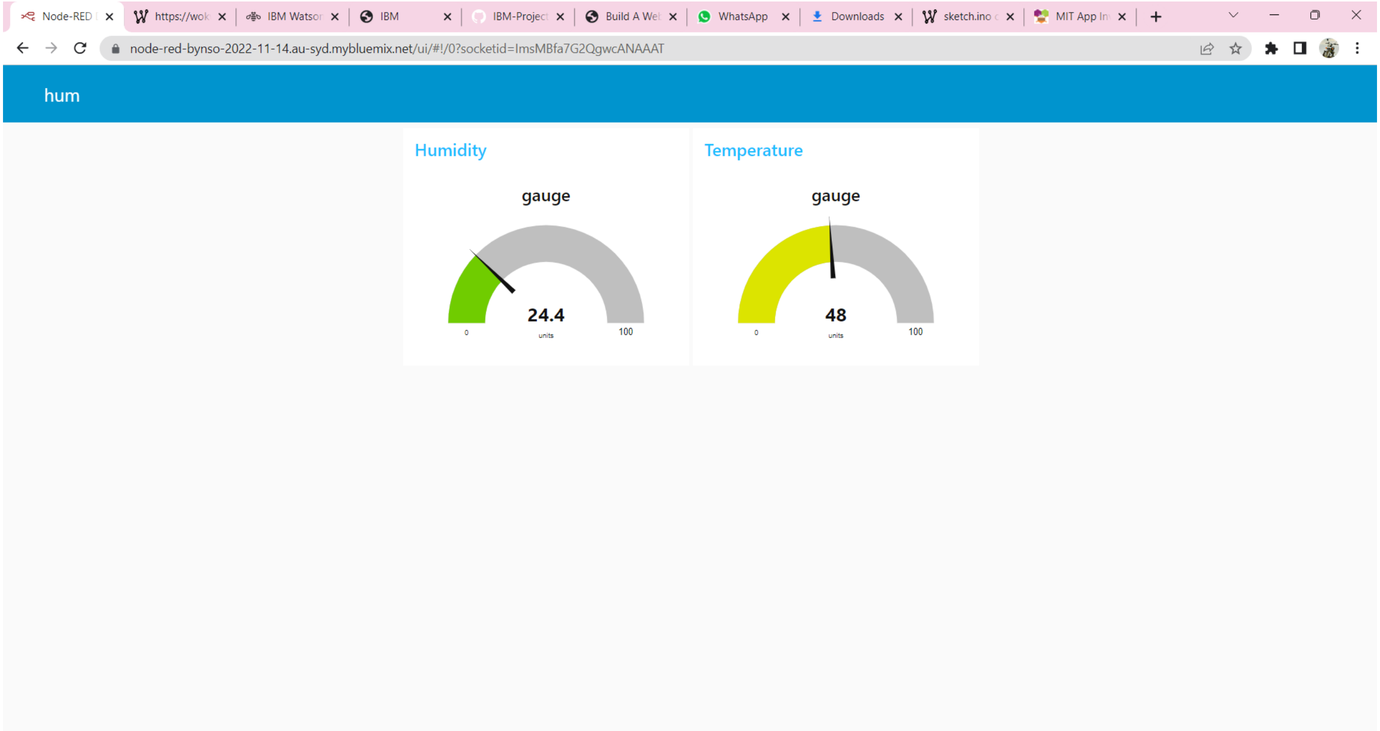
Sectors: 0 ... optional ... optional ... 100

Class: Optional CSS class name(s) for widget

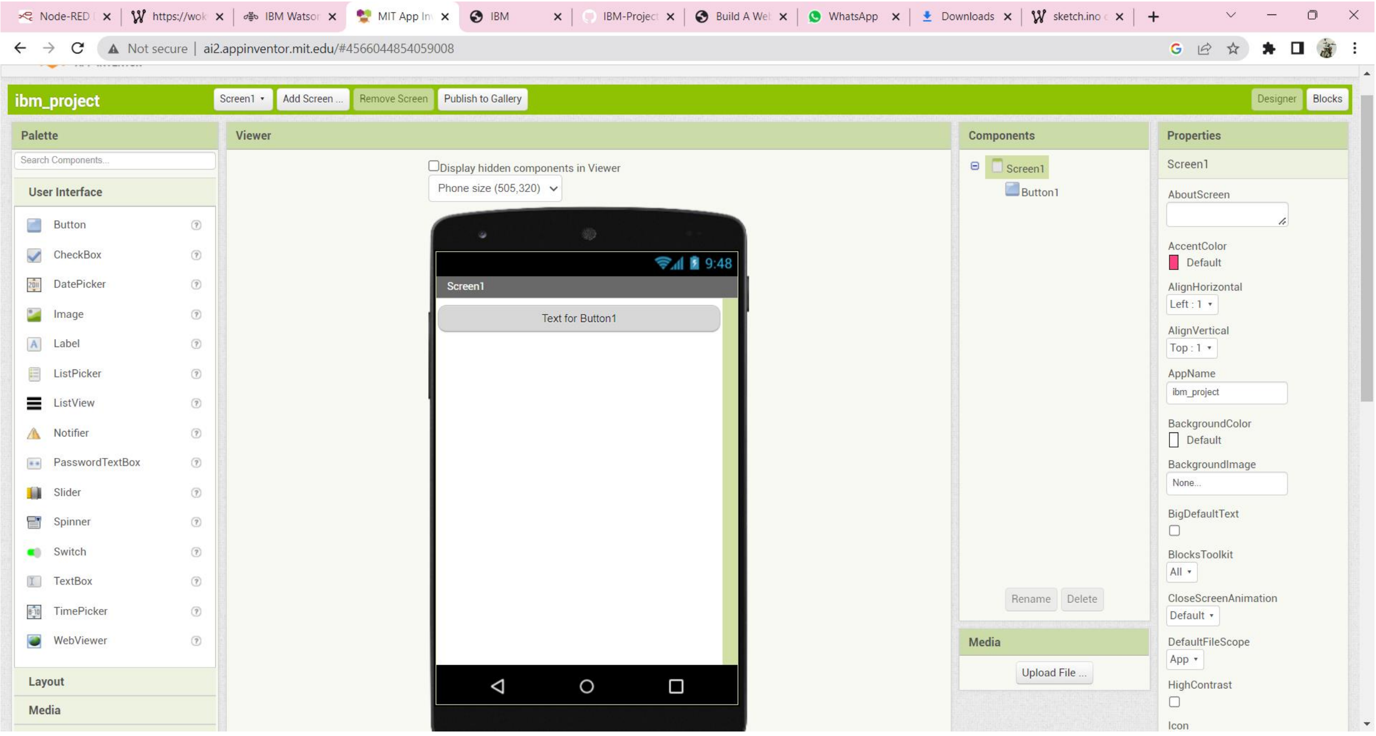
Name:

○ Enabled

Output



Mit App Inventor



AboutScreen

AccentColor: Default

AlignHorizontal: Left : 1

AlignVertical: Top : 1

AppName: ibm_project

BackgroundColor: Default

BackgroundImage: None...

BigDefaultText: □

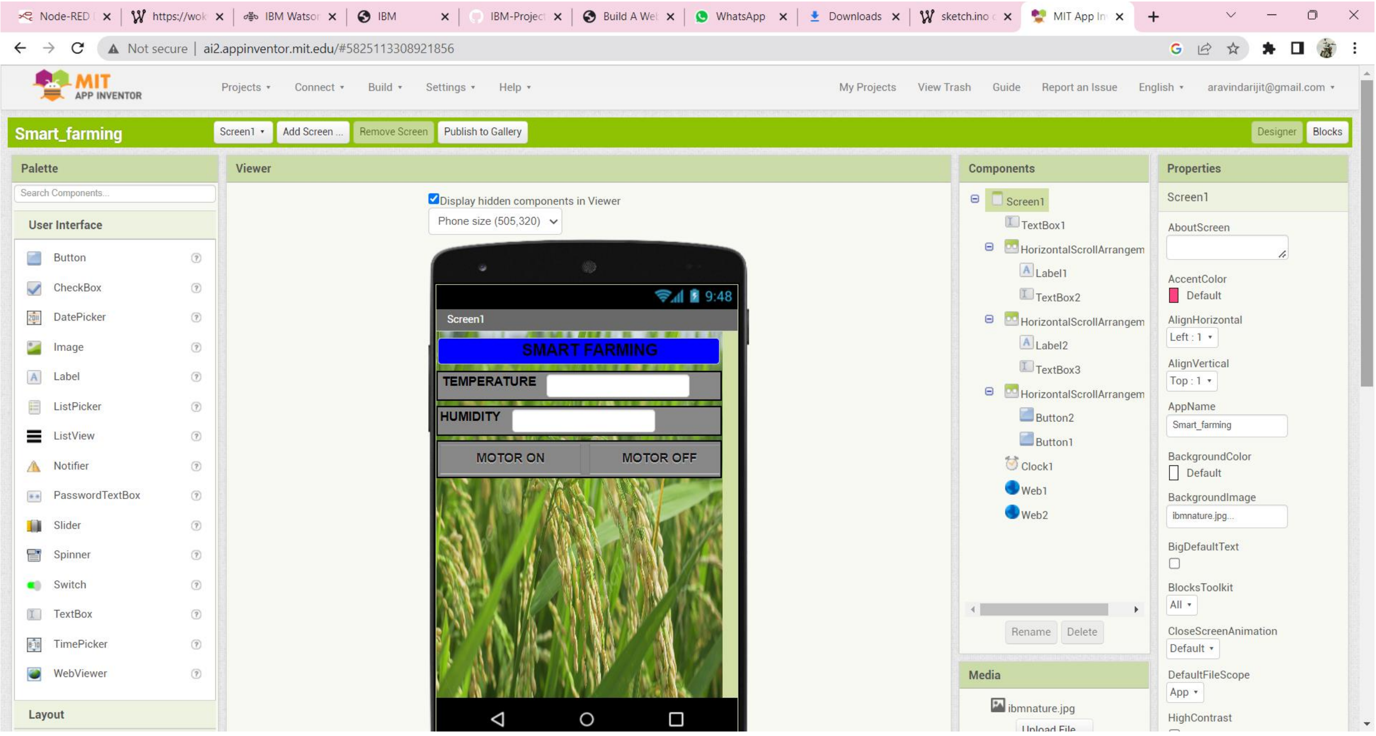
BlocksToolkit: All

CloseScreenAnimation: Default

DefaultFileScope: App

HighContrast: □

Icon



AboutScreen

AccentColor: Default

AlignHorizontal: Left : 1

AlignVertical: Top : 1

AppName: Smart_farming

BackgroundColor: Default

BackgroundImage: ibmnature.jpg...

BigDefaultText: □

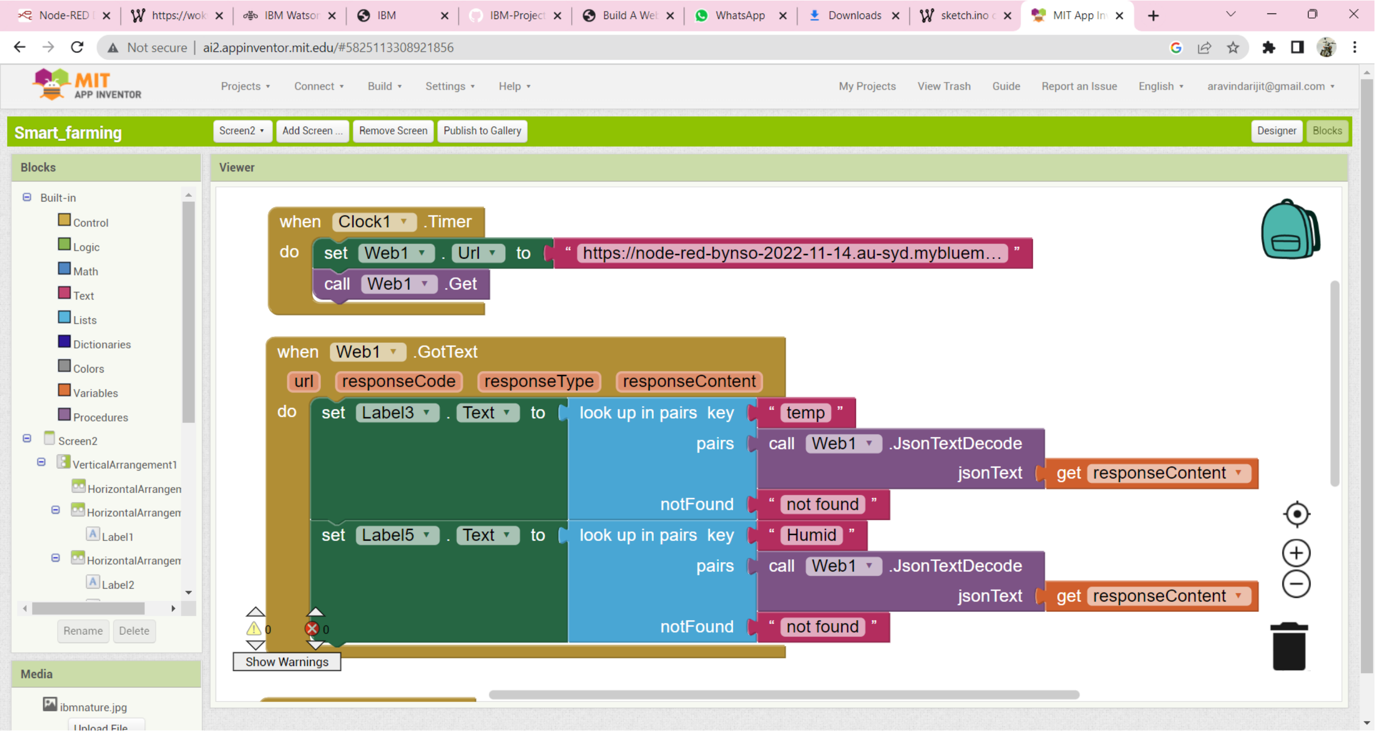
BlocksToolkit: All

CloseScreenAnimation: Default

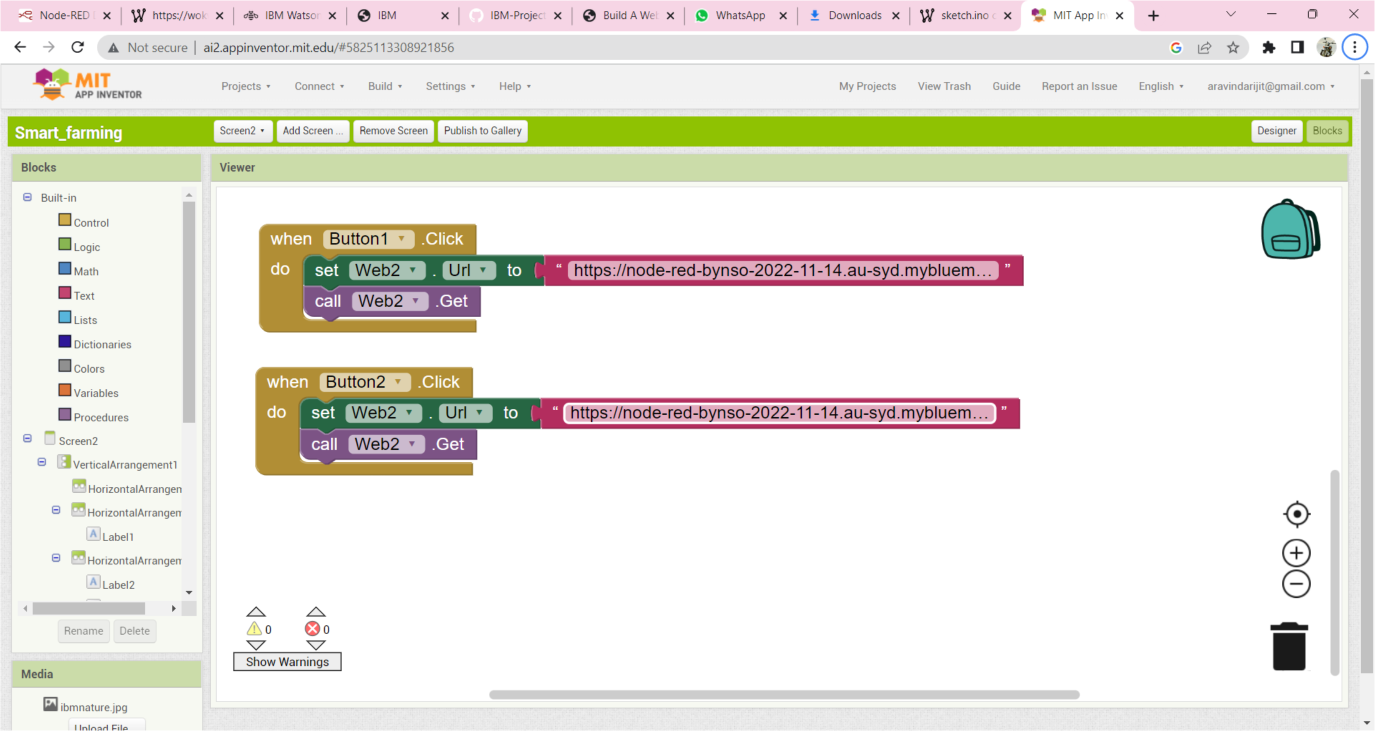
DefaultFileScope: App

HighContrast

Blocks:

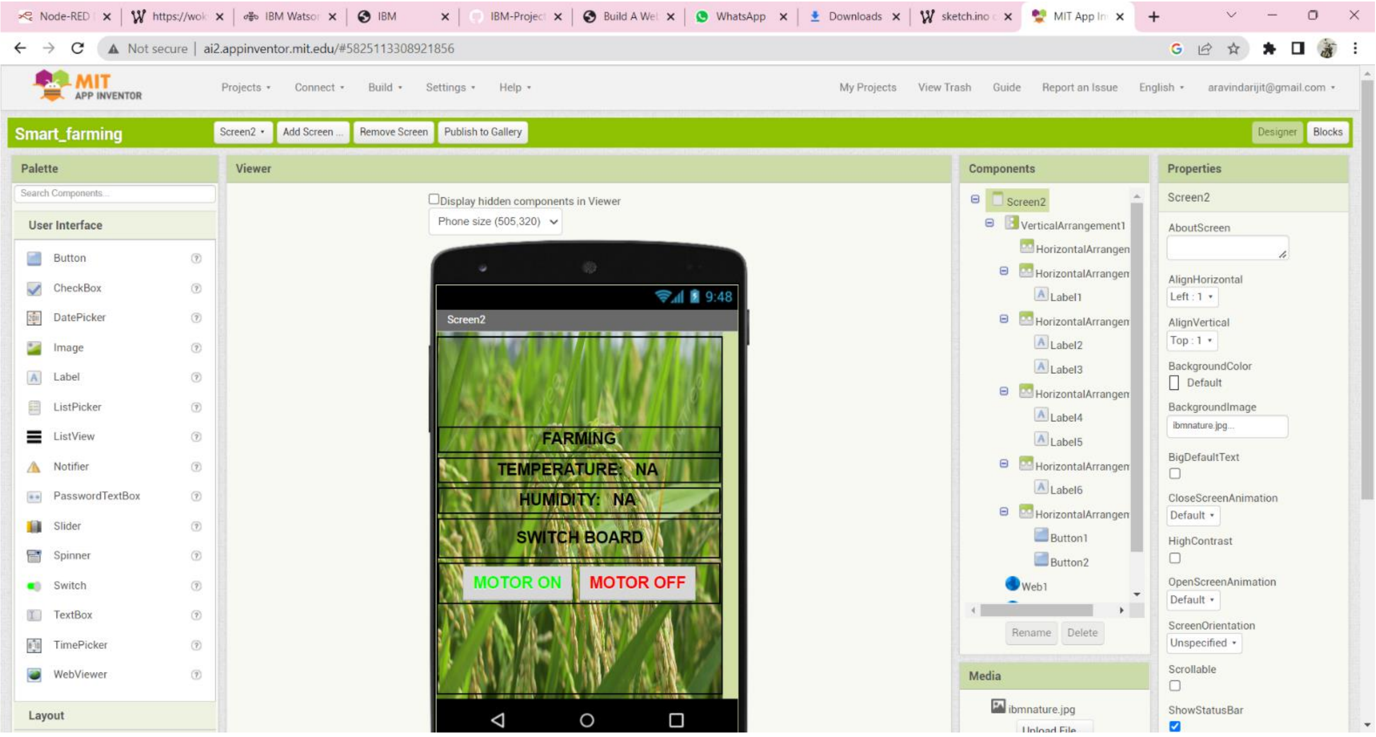


```
when Clock1 .Timer
do  set Web1 . Url to " https://node-red-bynso-2022-11-14.au-syd.mybluem... "
    call Web1 .Get

when Web1 .GotText
  url  responseCode  responseType  responseContent
do  set Label3 . Text to  look up in pairs  key  " temp "
                                            pairs  call Web1 .JsonTextDecode
                                                          jsonText  get responseContent
                                            notFound  " not found "
    set Label5 . Text to  look up in pairs  key  " Humid "
                                            pairs  call Web1 .JsonTextDecode
                                                          jsonText  get responseContent
                                            notFound  " not found "
```

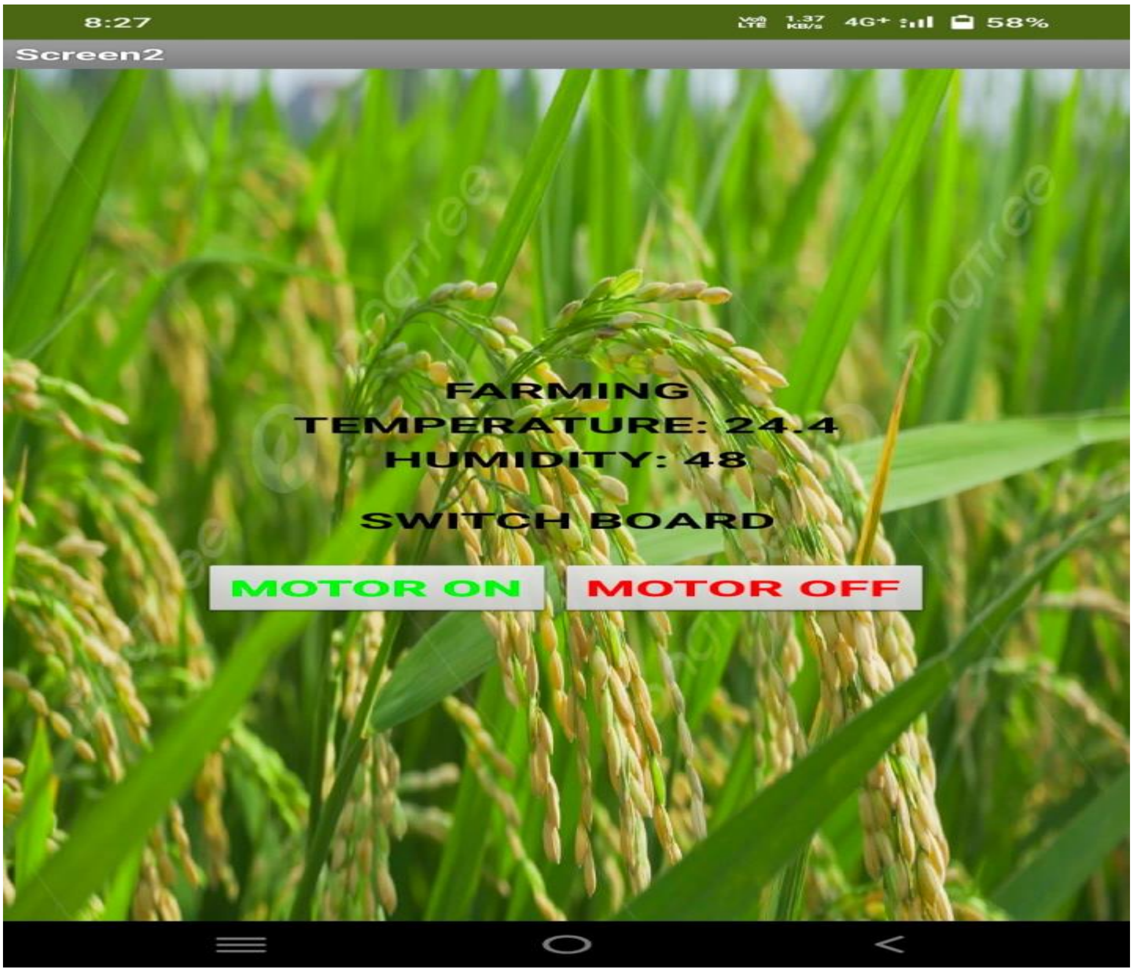


```
when Button1 .Click
do  set Web2 . Url to " https://node-red-bynso-2022-11-14.au-syd.mybluem... "
    call Web2 .Get

when Button2 .Click
do  set Web2 . Url to " https://node-red-bynso-2022-11-14.au-syd.mybluem... "
    call Web2 .Get
```

Output:



Mobile screen:


8:27
4G+
58%
Screen2
FARMING
TEMPERATURE: 24.4
HUMIDITY: 48
SWITCH BOARD
MOTOR ON
MOTOR OFF