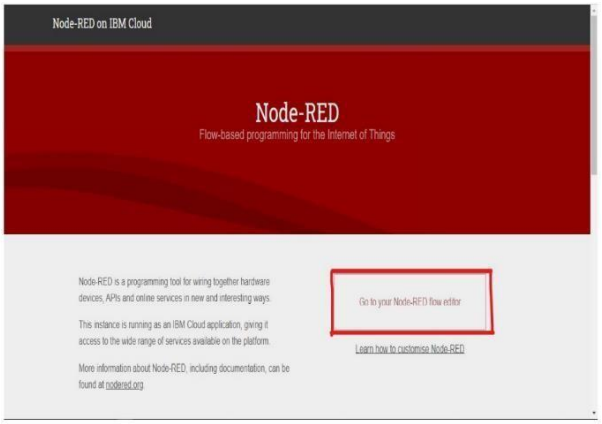
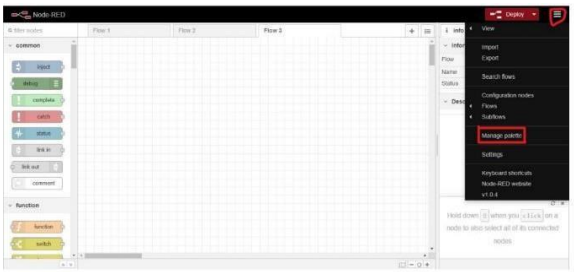
DEVELOPING WEB APPLICATION USING NODE-RED SERVICE

Team ID	**PNT2022TMID31899**
Project Name	**IoT Based Smart Crop Protection System For Agriculture**

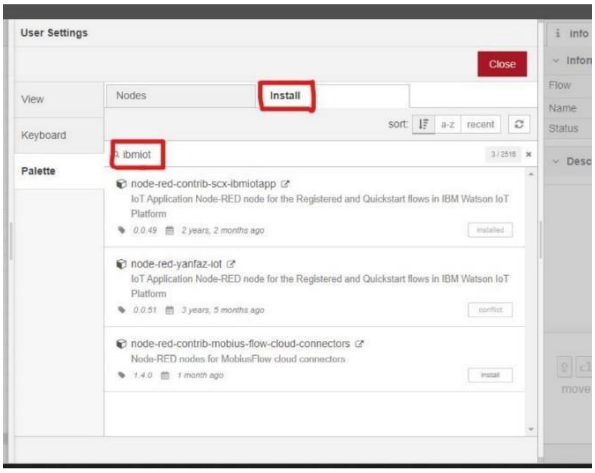
Step 1: Click on your Node-Red flow editor where you will be redirected to the Node-Red flow editor.



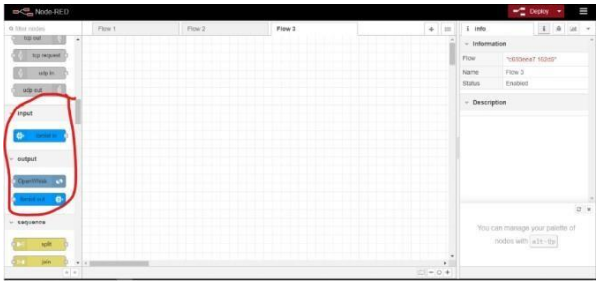
Step 2: To install IBM nodes in Node-Red flow editor click on manage palette in the new menu option which is on the top right on the screen.

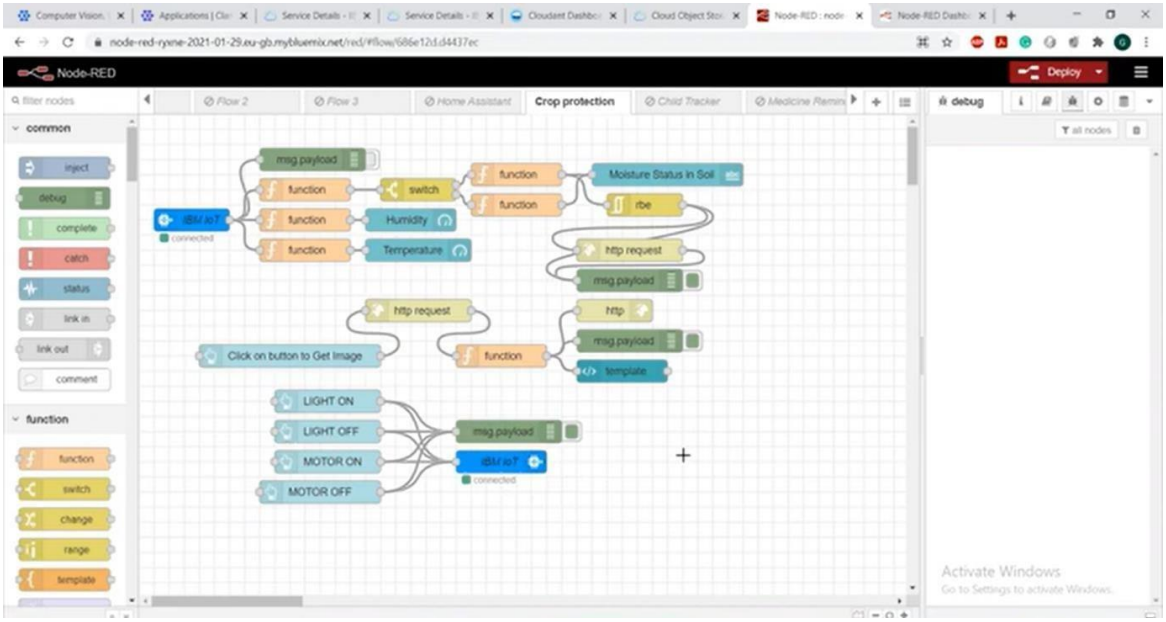


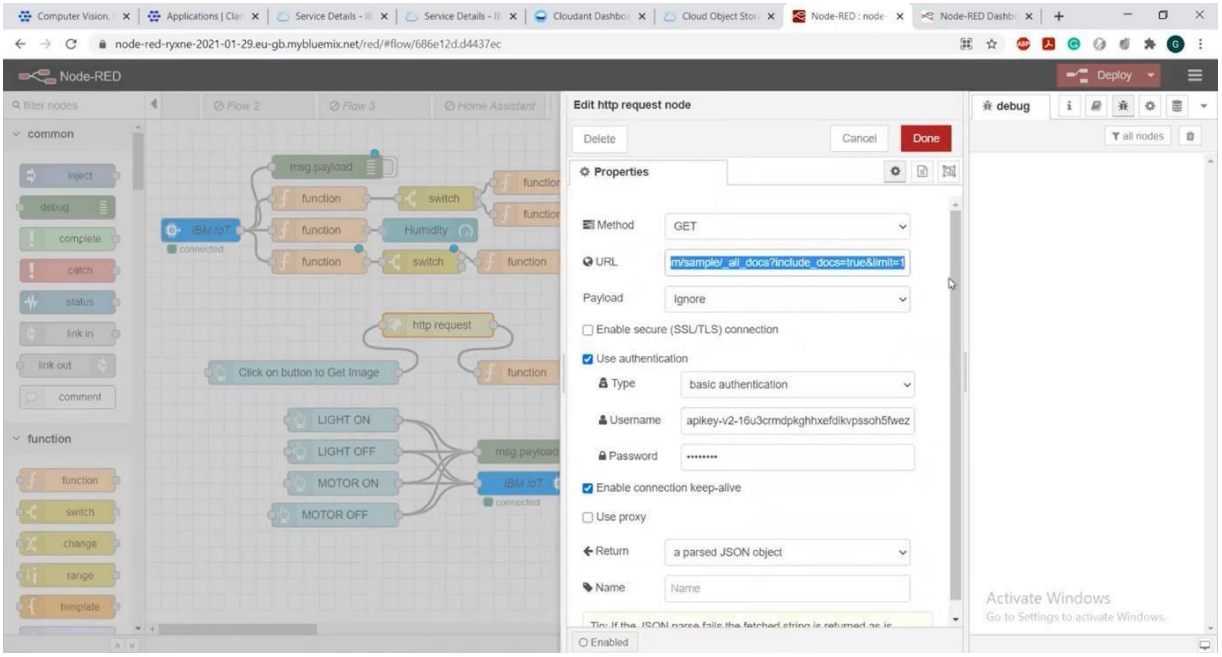
Step 3: In Install section search for ibmiot and install the ibm nodes to the flow editor.

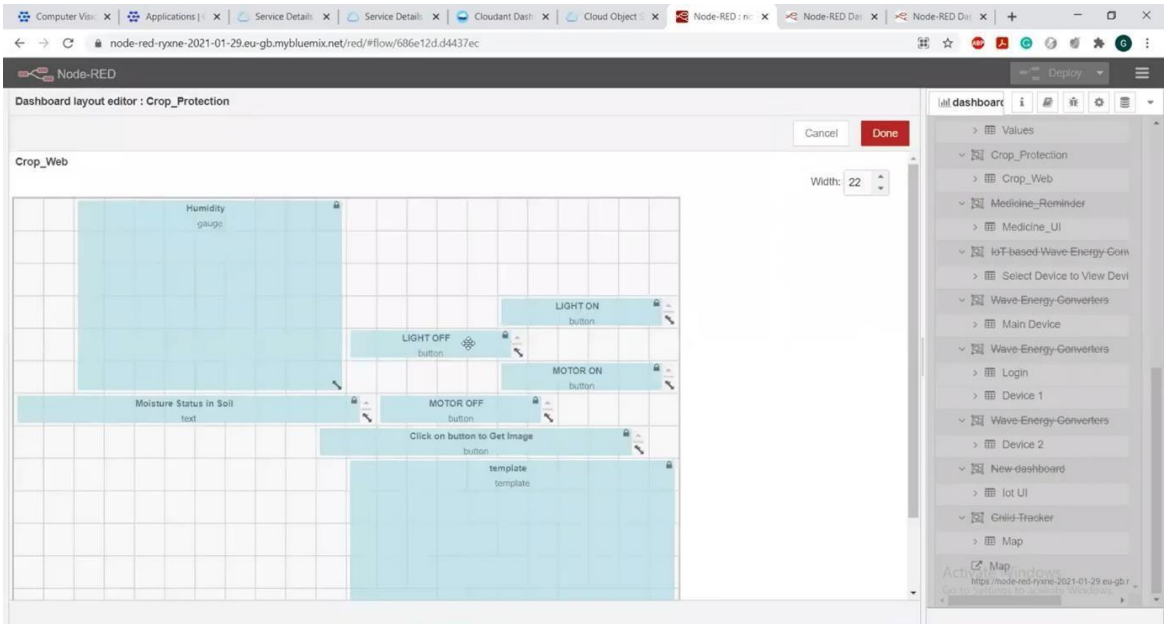


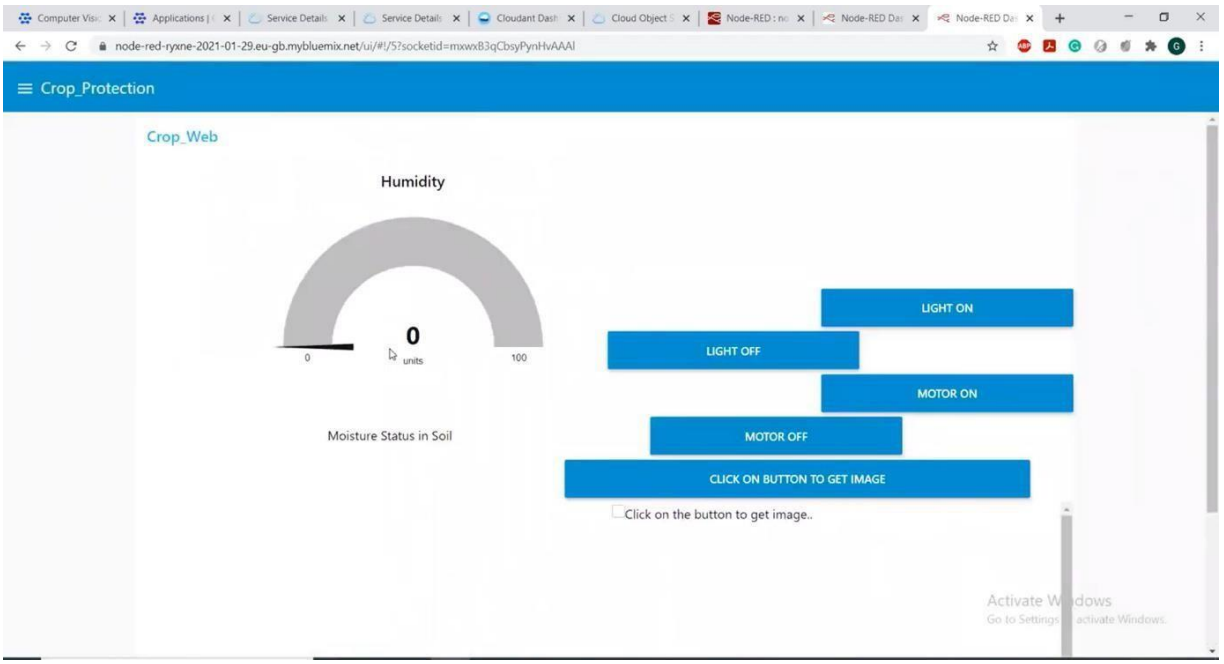
Step 4: Search for IBM nodes in the filter nodes section.

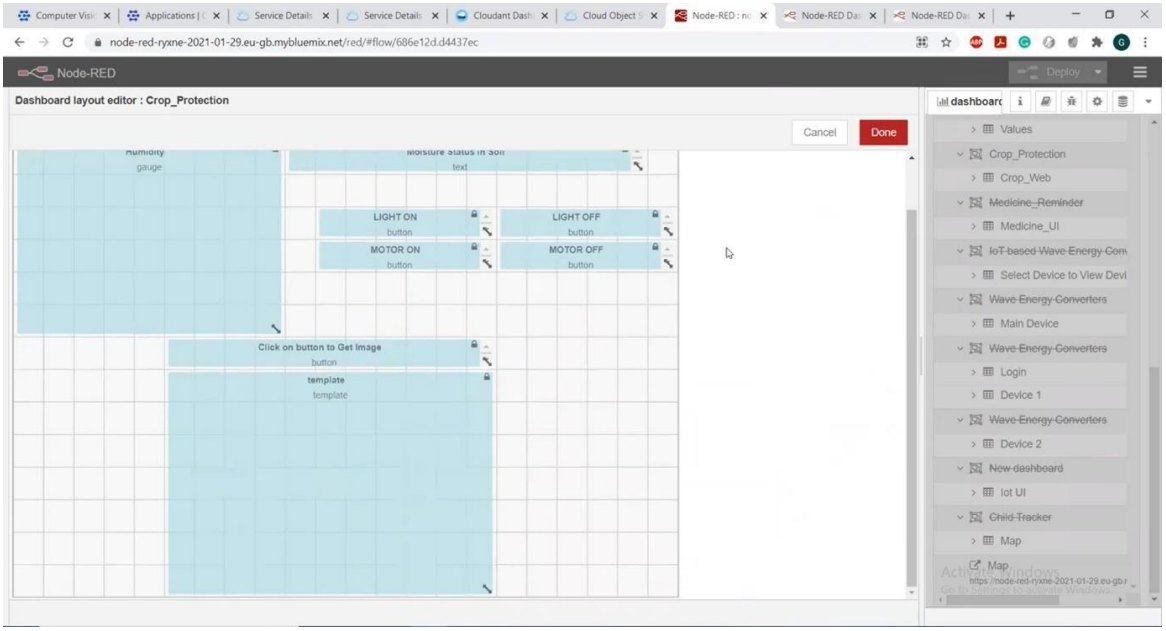


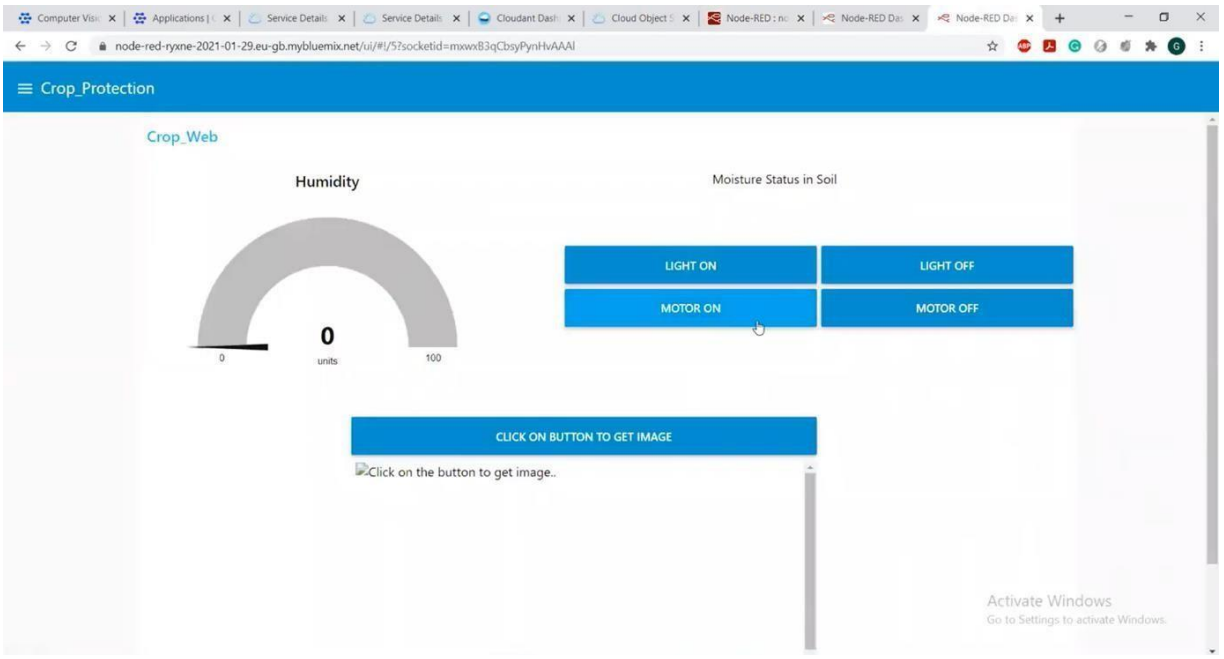


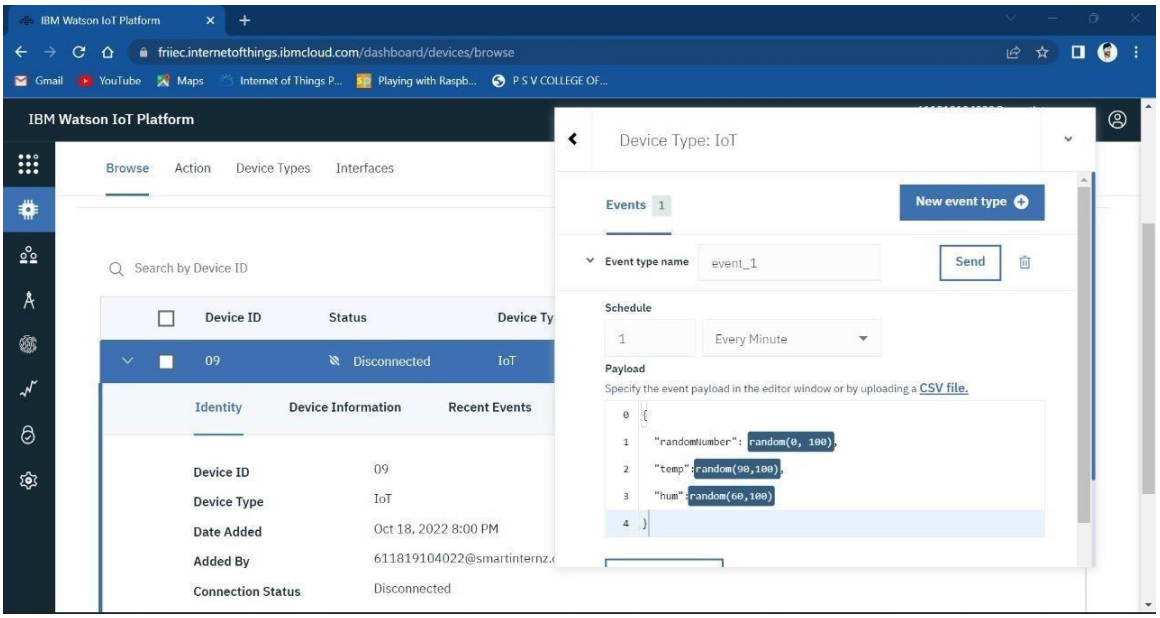

node-red-ryxne-2021-01-29.eu-gb.mybluemix.net/red/#flow/686e12d.d4437ec
Node-RED
Deploy
filter nodes
common
inject
debug
complete
catch
status
link in
link out
comment
function
switch
change
range
template
Flow 2
Flow 3
Home Assistant
msg.payload
function
switch
Humidity
IBM IoT
connected
http request
Click on button to Get Image
LIGHT ON
LIGHT OFF
MOTOR ON
MOTOR OFF
Edit http request node
Delete
Cancel
Done
Properties
Method
GET
URL
m/sample/_all_docs?include_docs=true&limit=1
Payload
Ignore
Enable secure (SSL/TLS) connection
Use authentication
Type
basic authentication
Username
apikey-v2-16u3crmdpkghhxefdikvpssoh5fwez
Password
Enable connection keep-alive
Use proxy
Return
a parsed JSON object
Name
Enabled
debug
all nodes
Activate Windows
Go to Settings to activate Windows.

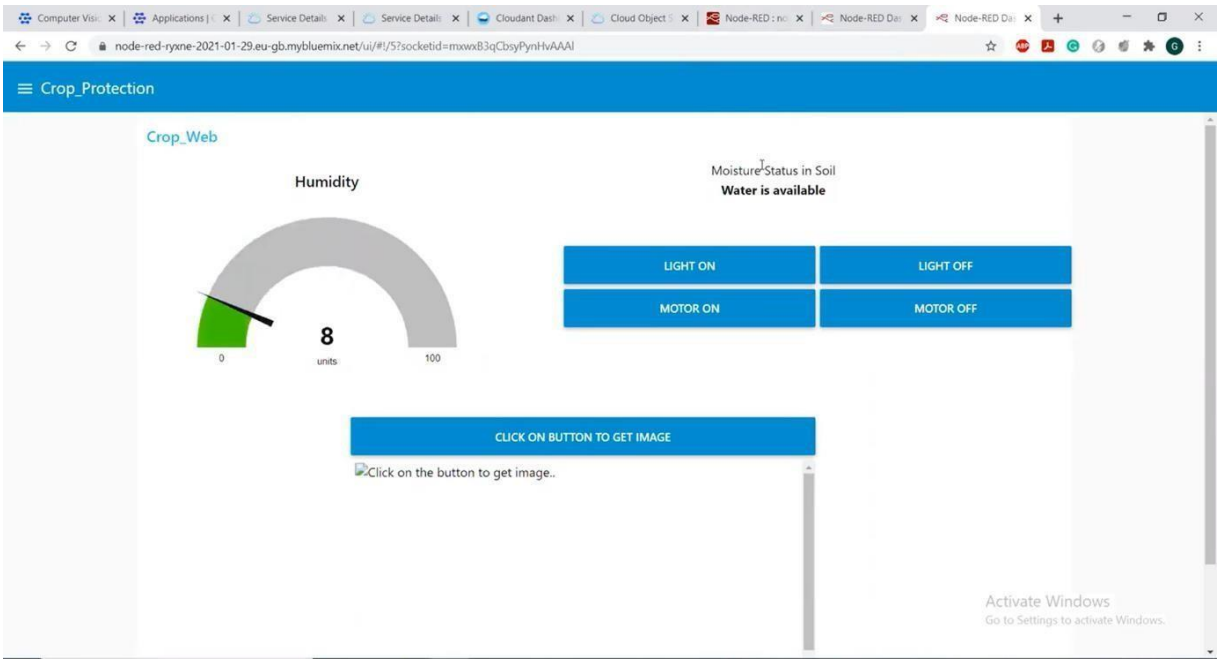

node-red-ryxne-2021-01-29.eu-gb.mybluemix.net/red/#flow/686e12d.d4437ec
Node-RED
Deploy
Dashboard layout editor : Crop_Protection
Cancel
Done
Crop_Web
Width: 22
Humidity
gauge
LIGHT ON
button
LIGHT OFF
button
MOTOR ON
button
Moisture Status in Soil
text
MOTOR OFF
button
Click on button to Get Image
button
template
template
dashboard
Values
Crop_Protection
Crop_Web
Medicine_Reminder
Medicine_UI
IoT based Wave Energy Conv
Select Device to View Devi
Wave Energy Converters
Main Device
Wave Energy Converters
Login
Device 1
Wave Energy Converters
Device 2
New dashboard
Iot UI
Child Tracker
Map
Map

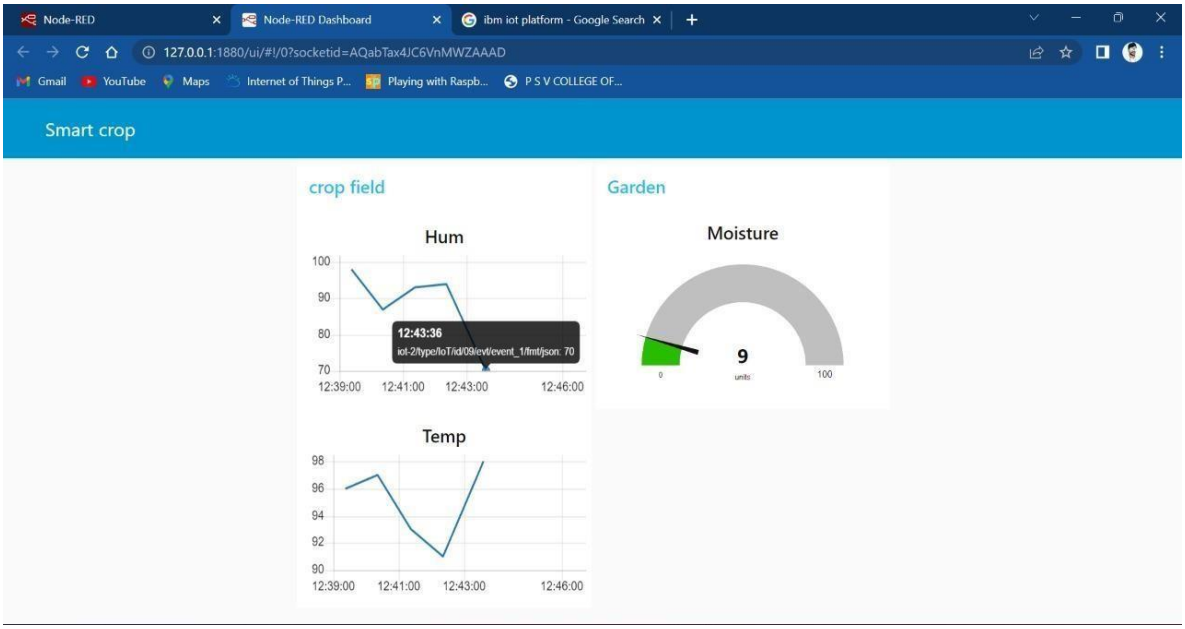

node-red-ryxne-2021-01-29.eu-gb.mybluemix.net/ui/#!/5?socketid=mxwxB3qCbsyPynHvAAAI
Crop_Protection
Crop_Web
Humidity
0
units
0
100
Moisture Status in Soil
LIGHT ON
LIGHT OFF
MOTOR ON
MOTOR OFF
CLICK ON BUTTON TO GET IMAGE
Click on the button to get image..

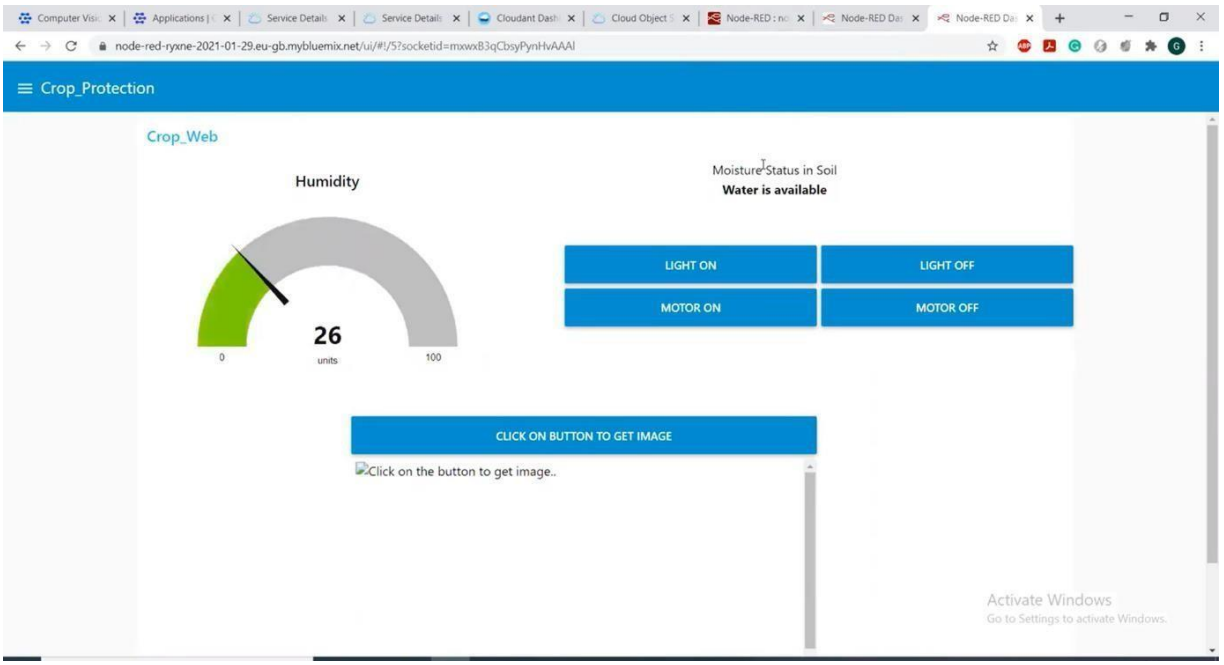

node-red-ryxne-2021-01-29.eu-gb.mybluemix.net/red/#flow/686e12d.d4437ec
Node-RED
Deploy
Dashboard layout editor : Crop_Protection
Cancel
Done
gauge
text
LIGHT ON
button
LIGHT OFF
button
MOTOR ON
button
MOTOR OFF
button
Click on button to Get Image
button
template
template
dashboard
Values
Crop_Protection
Crop_Web
Medicine_Reminder
Medicine_UI
IoT based Wave Energy Conv
Select Device to View Devi
Wave Energy Converters
Main Device
Wave Energy Converters
Login
Device 1
Wave Energy Converters
Device 2
New dashboard
Iot UI
Child Tracker
Map
Map

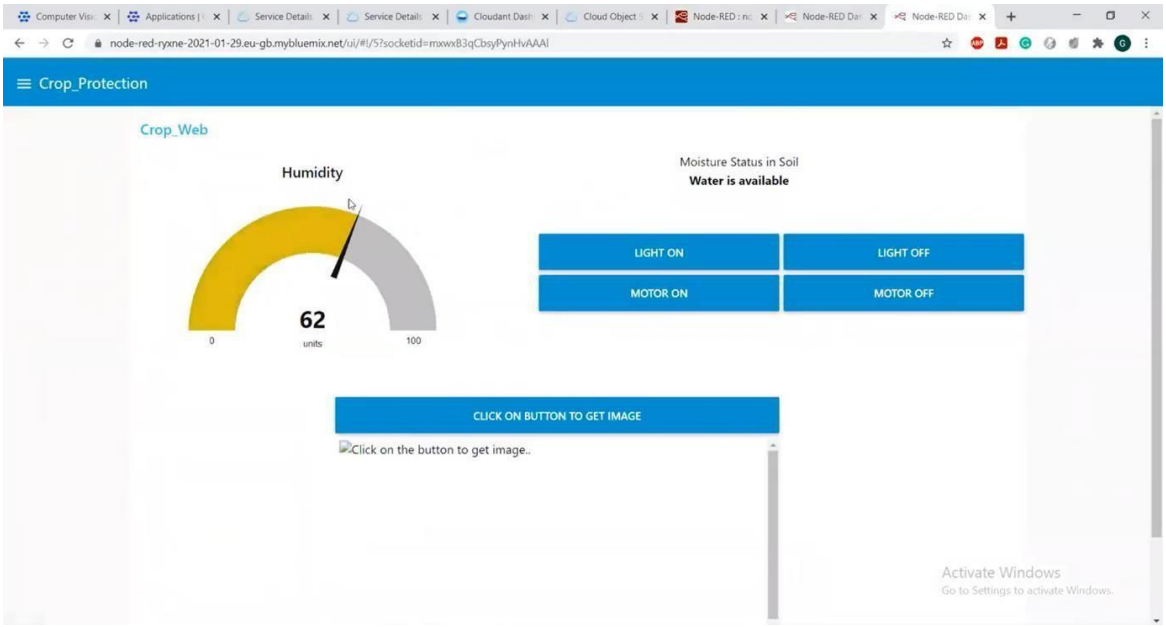

node-red-ryxne-2021-01-29.eu-gb.mybluemix.net/ui/#!/5?socketid=mxwxB3qCbsyPynHvAAAI
Crop_Protection
Crop_Web
Humidity
0
units
0
100
Moisture Status in Soil
LIGHT ON
LIGHT OFF
MOTOR ON
MOTOR OFF
CLICK ON BUTTON TO GET IMAGE
Click on the button to get image..
Activate Windows
Go to Settings to activate Windows.

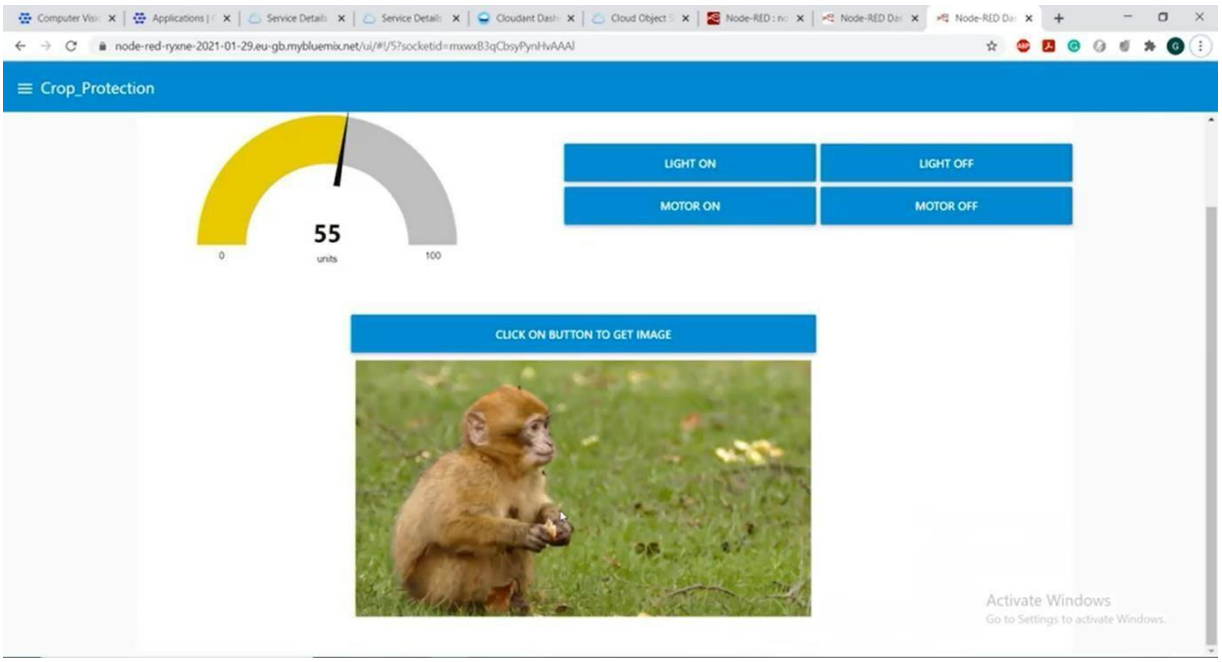

IBM Watson IoT Platform
friiec.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
Browse
Action
Device Types
Interfaces
Search by Device ID
Device ID
Status
09
Disconnected
IoT
Identity
Device Information
Recent Events
Device ID 09
Device Type IoT
Date Added Oct 18, 2022 8:00 PM
Added By 611819104022@smartinternz.
Connection Status Disconnected
Device Type: IoT
Events 1
New event type
Event type name event_1
Send
Schedule
1
Every Minute
Payload
Specify the event payload in the editor window or by uploading a CSV file.
{
"randomNumber": random(0, 100),
"temp":random(90,100),
"hum":random(60,100)
}


node-red-ryxne-2021-01-29.eu-gb.mybluemix.net/ui/#!/5?socketid=mxwxB3qCbsyPynHvAAAl
Crop_Protection
Crop_Web
Humidity
8
units
0
100
Moisture Status in Soil
Water is available
LIGHT ON
LIGHT OFF
MOTOR ON
MOTOR OFF
CLICK ON BUTTON TO GET IMAGE
Click on the button to get image..
Activate Windows
Go to Settings to activate Windows.


Node-RED
Node-RED Dashboard
ibm iot platform - Google Search
127.0.0.1:1880/ui/#!/0?socketid=AQabTax4JC6VnMWZAAAD
Gmail
YouTube
Maps
Internet of Things P...
Playing with Raspb...
P S V COLLEGE OF...
Smart crop
crop field
Hum
100
90
80
70
12:43:36
iot-2/type/IoT/id/09/evt/event_1/fmt/json: 70
12:39:00
12:41:00
12:43:00
12:46:00
Temp
98
96
94
92
90
Garden
Moisture
9
units
0
100


node-red-ryxne-2021-01-29.eu-gb.mybluemix.net/ui/#!/5?socketid=mxwxB3qCbsyPynHvAAAI
Crop_Protection
Crop_Web
Humidity
26
0
units
100
Moisture Status in Soil
Water is available
LIGHT ON
LIGHT OFF
MOTOR ON
MOTOR OFF
CLICK ON BUTTON TO GET IMAGE
Click on the button to get image..
Activate Windows
Go to Settings to activate Windows.


node-red-ryxne-2021-01-29.eu-gb.mybluemix.net/ui/#!/5?socketid=mxwxB3qCbsyPynHvAAAI
Crop_Protection
Crop_Web
Humidity
62
0
units
100
Moisture Status in Soil
Water is available
LIGHT ON
LIGHT OFF
MOTOR ON
MOTOR OFF
CLICK ON BUTTON TO GET IMAGE
Click on the button to get image..
Activate Windows
Go to Settings to activate Windows.



Thus we developed a web application using node-red service.