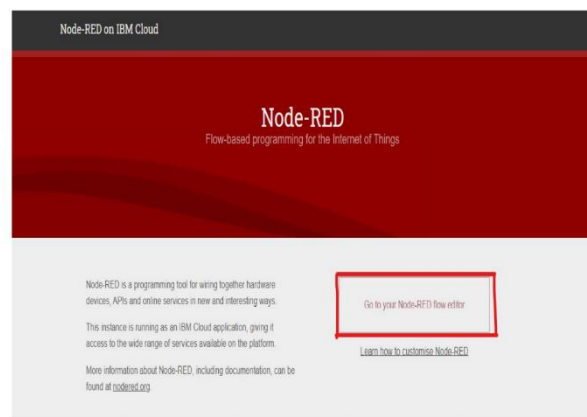


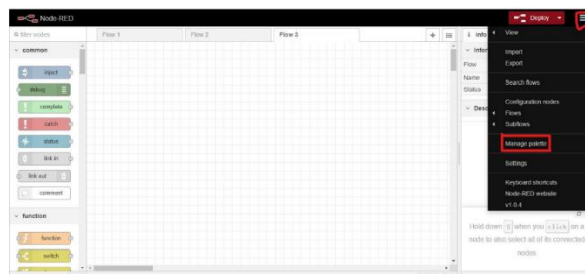
# DEVELOPING WEB APPLICATION USING NODE-RED SERVICE

<b>Team ID</b>	<b>PNT2022TMID40891</b>
<b>Project Name</b>	<b>IoT Based Smart Crop Protection System For Agriculture</b>

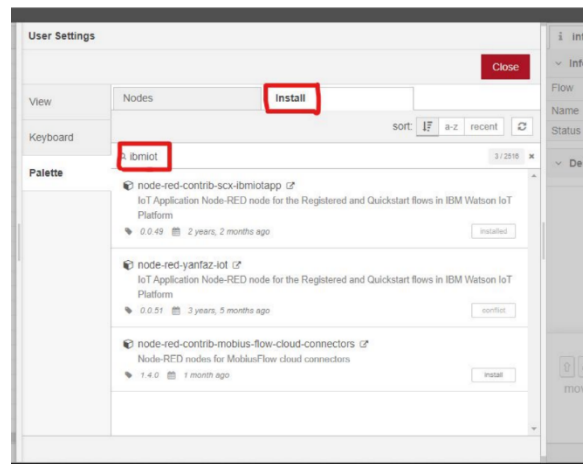
**Step 1:**Click on your Node-Red flow editor where you will be redirected to the Node-Red flow editor.



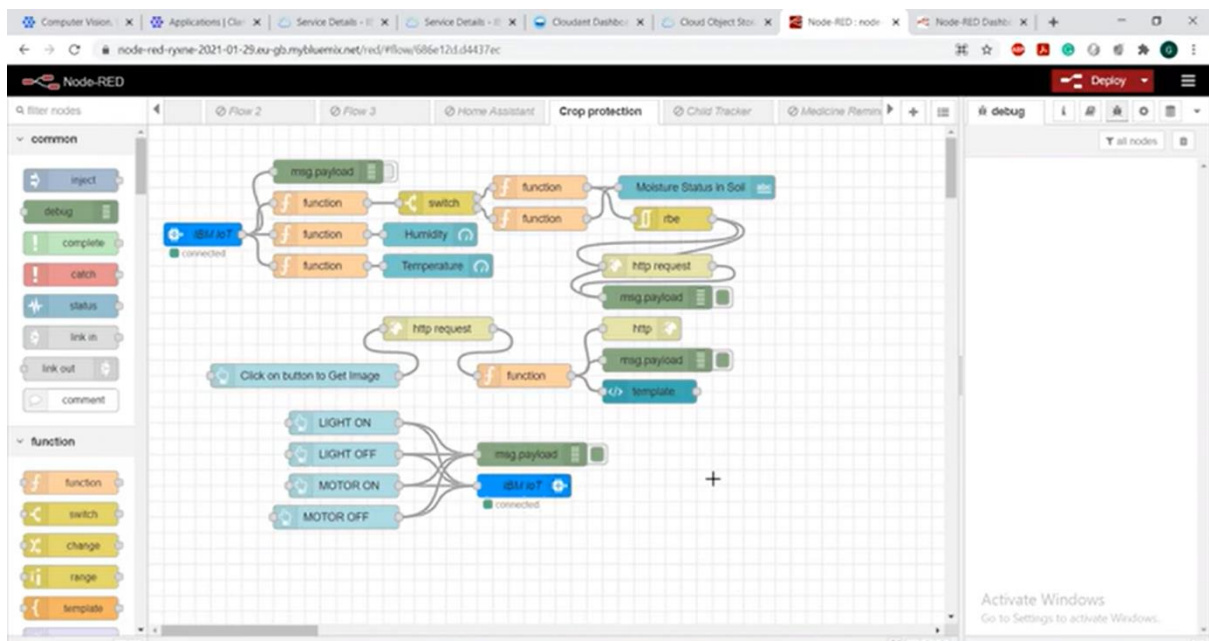
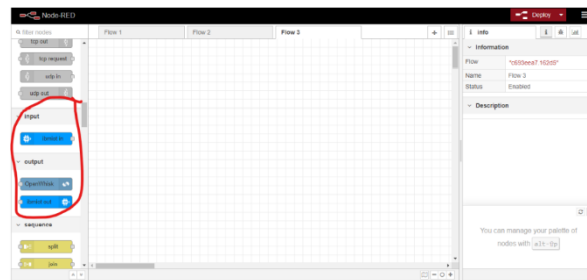
**Step 2:**To install IBM nodes in Node-Red flow editor click on manage palette in the new menu option which is on the top right on the screen.



**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 interface showing a flow editor and the configuration for an HTTP request node.

**Flow Editor:** The flow starts with a 'Click on button to Get Image' node, which triggers an 'http request' node. The 'http request' node is configured to send a GET request to the URL `m/sample/ all_docs?include_docs=true&limit=1` using basic authentication with the username `apikey-v2-16u3cmdpkghxekdkvpssoh5fwez`. The response is returned as a parsed JSON object.

**Edit http request node 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-v2-16u3cmdpkghxekdkvpssoh5fwez`
  - Password: `*****`
- Enable connection keep-alive: ☒
- Use proxy: ☐
- Return: a parsed JSON object
- Name: Name

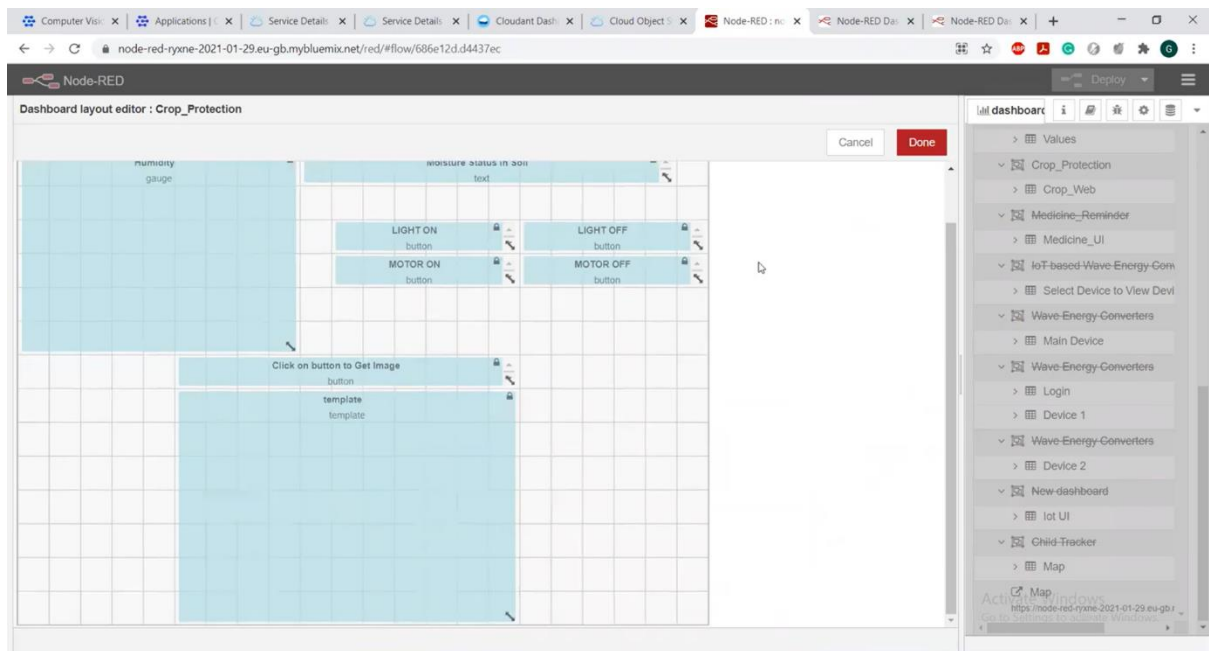
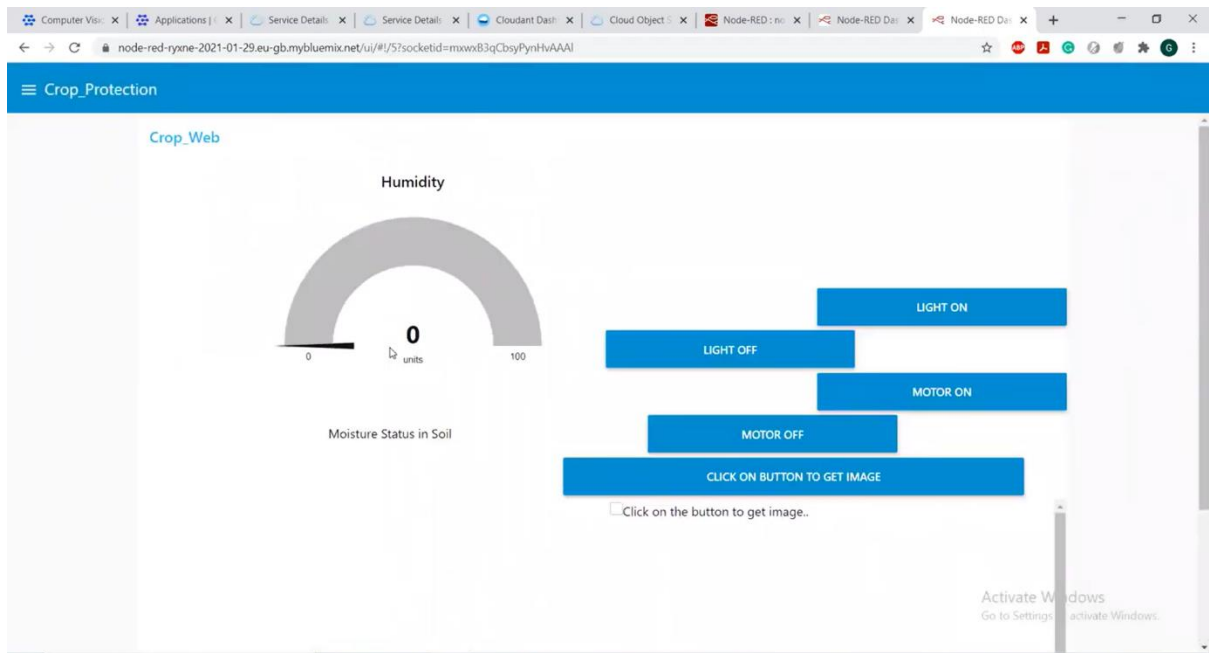
Node-RED interface showing the Dashboard layout editor for 'Crop\_Protection'.

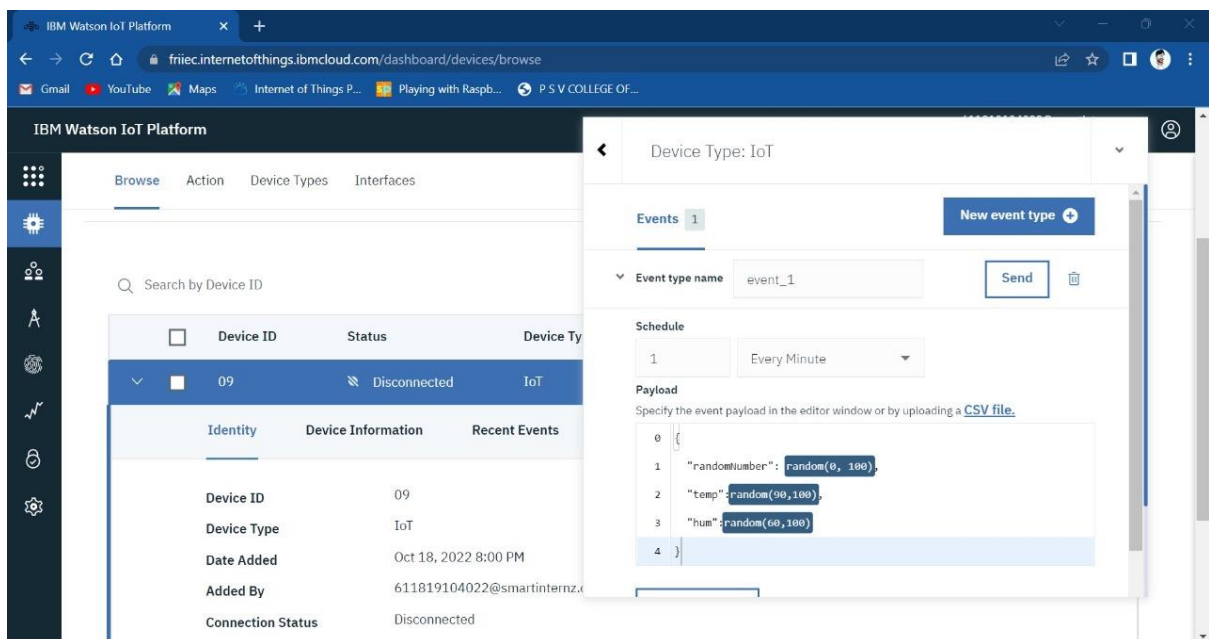
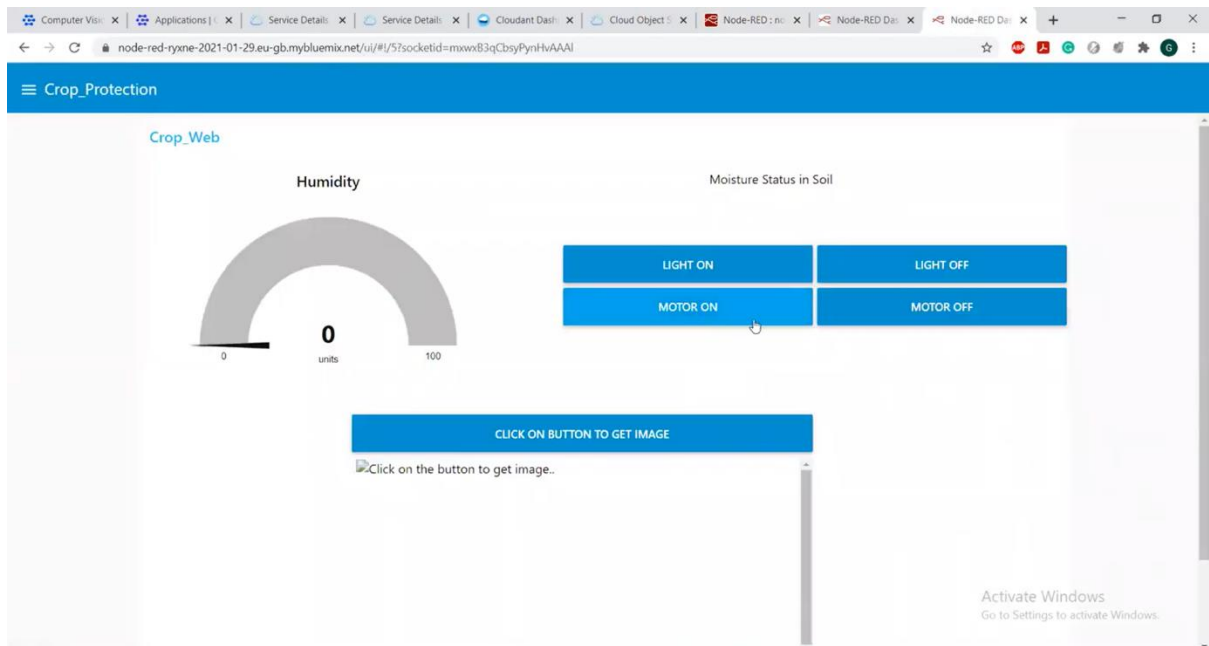
**Dashboard layout editor: Crop\_Protection**

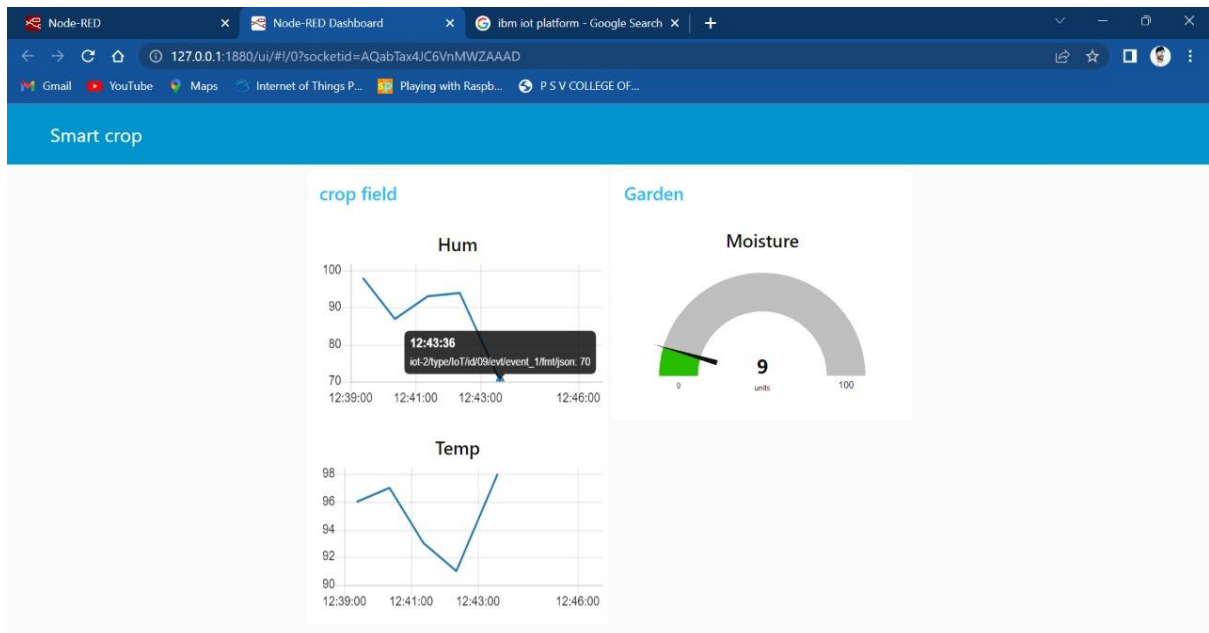
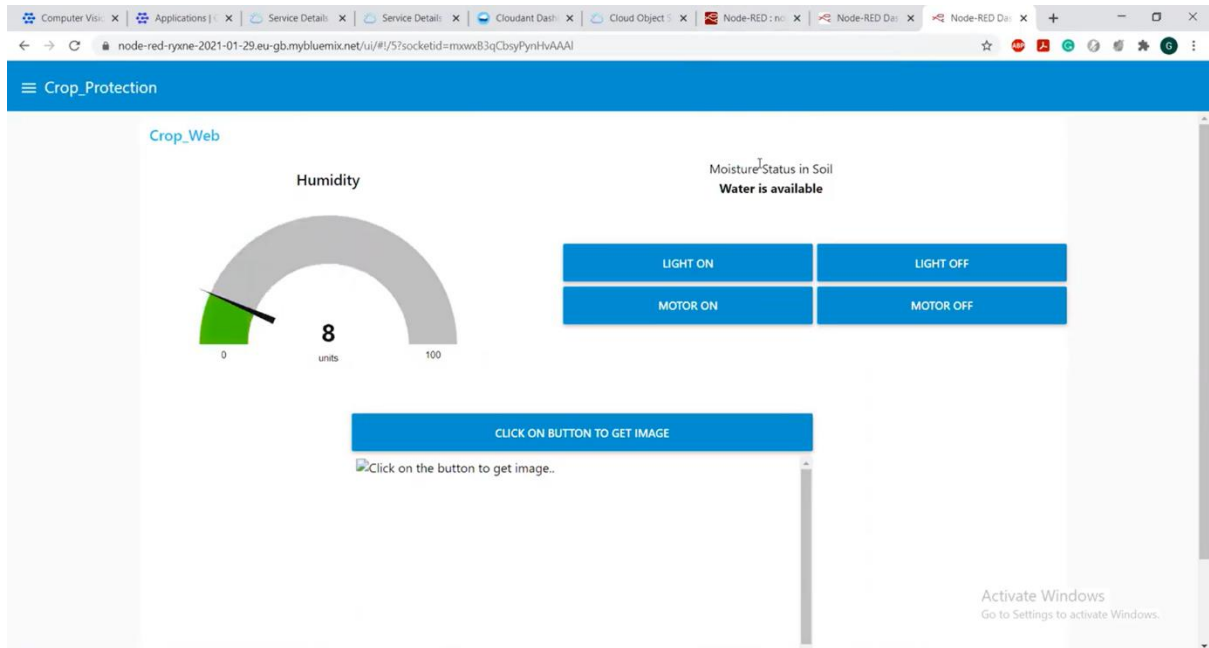
The dashboard layout includes the following widgets:

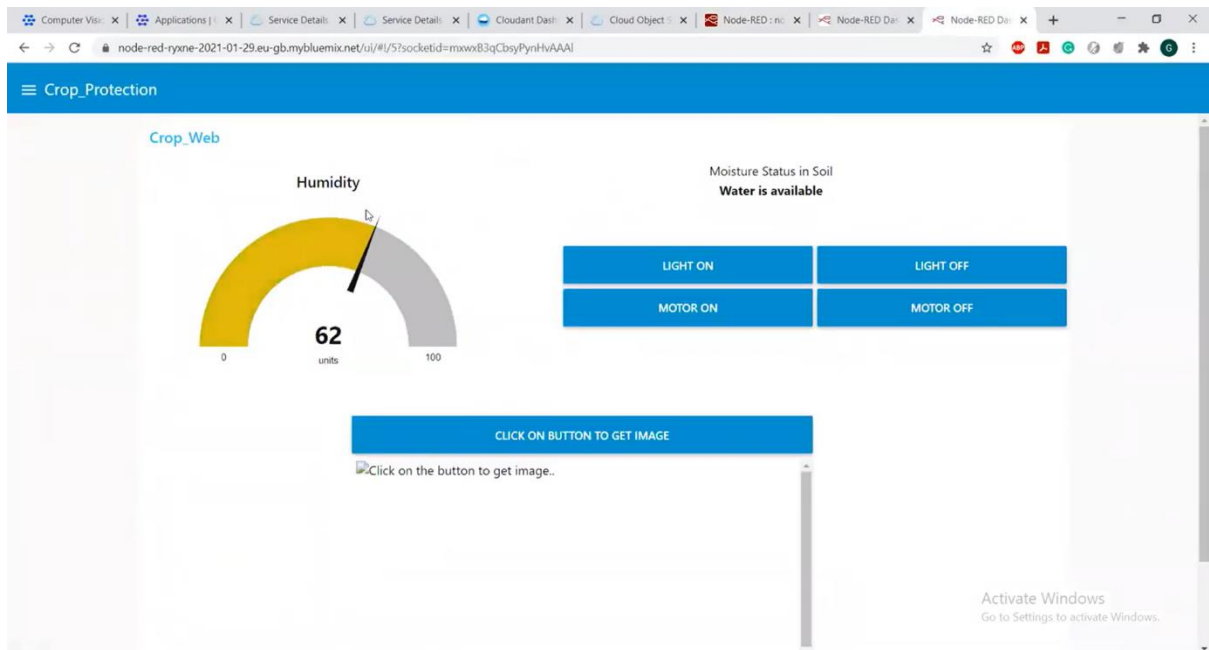
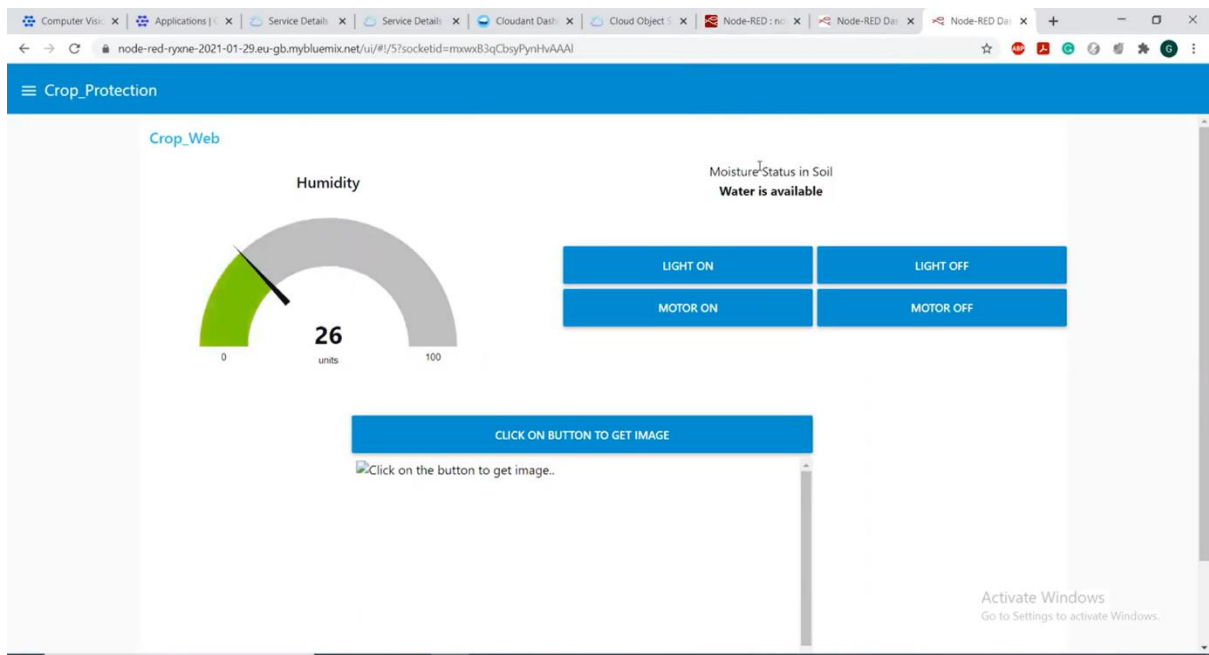
- Humidity gauge
- Moisture Status in Soil text
- LIGHT ON button
- LIGHT OFF button
- MOTOR ON button
- MOTOR OFF button
- Click on button to Get Image button
- template

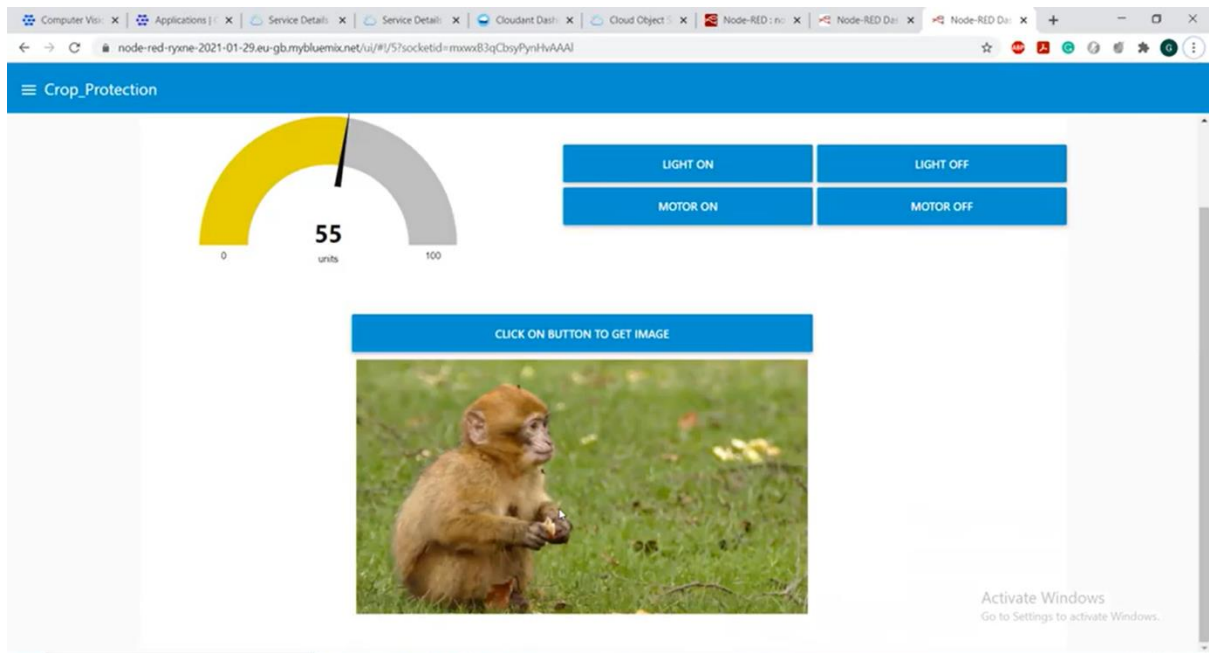
The width of the selected widget is set to 22.











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