

Sprint Delivery-3

TeamID	PNT2022TMID41344
ProjectName	Smart Farmer-IOT Enabled Smart Farming Application

Configuration of Node-Red to send command to IBM cloud

The screenshot displays the Node-RED web interface in a browser. The top navigation bar shows the URL: `node-red-pncrv-2022-11-18.au-syd.mybluemix.net/red/#flow/bee50b12d426291e`. The main workspace shows a flow with an 'IBM IoT' node connected to a '[get]/sensor' node. The 'IBM IoT' node is highlighted, and its configuration panel is open on the right. The configuration panel includes fields for Name (API), API Key (a-s6icg4-tbchgi7akg), API Token (masked), Server-Name (orgid.messaging.internetofthings.ibmcloud.com), Scalable (unchecked), Application ID (empty), Keep Alive (60 Seconds), and Use Clean Session (checked). The 'debug' console on the far right shows a series of messages, including a successful response with a random number, temperature, and humidity.

Here we add two buttons in UI

- 1) for light on
- 2) for light off

We used a function node to analysis the data received and assign command to each number

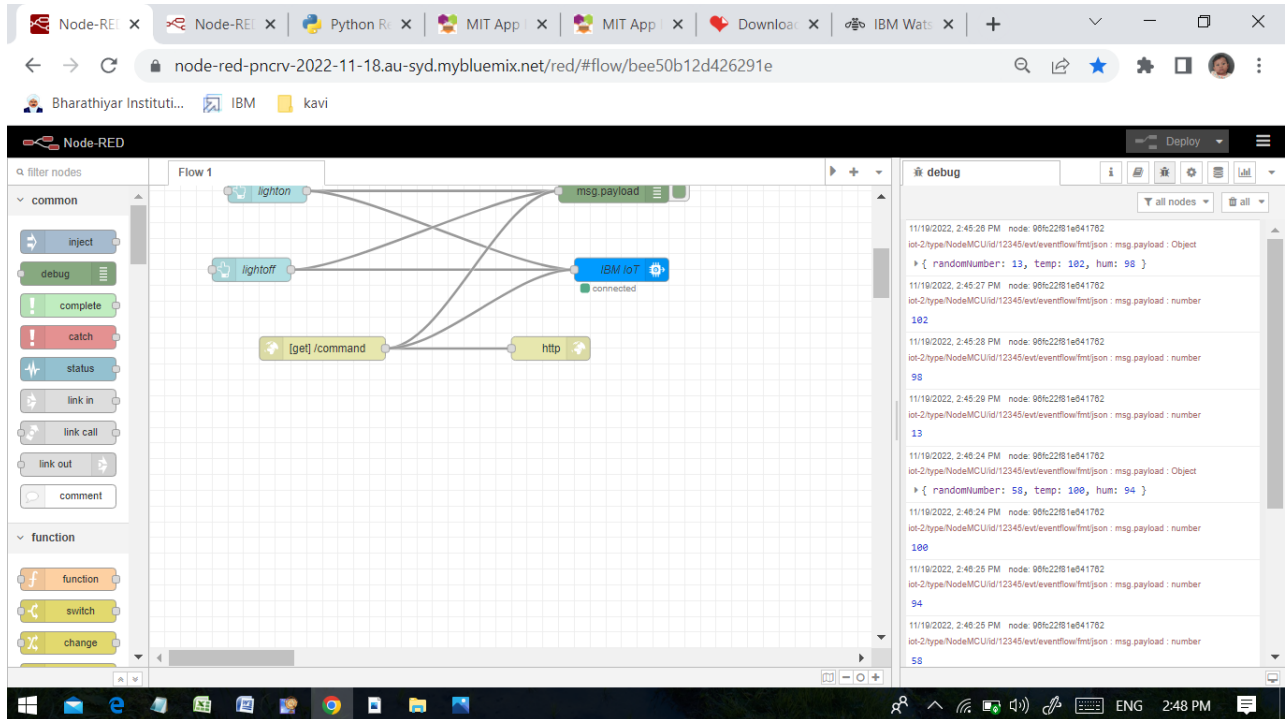
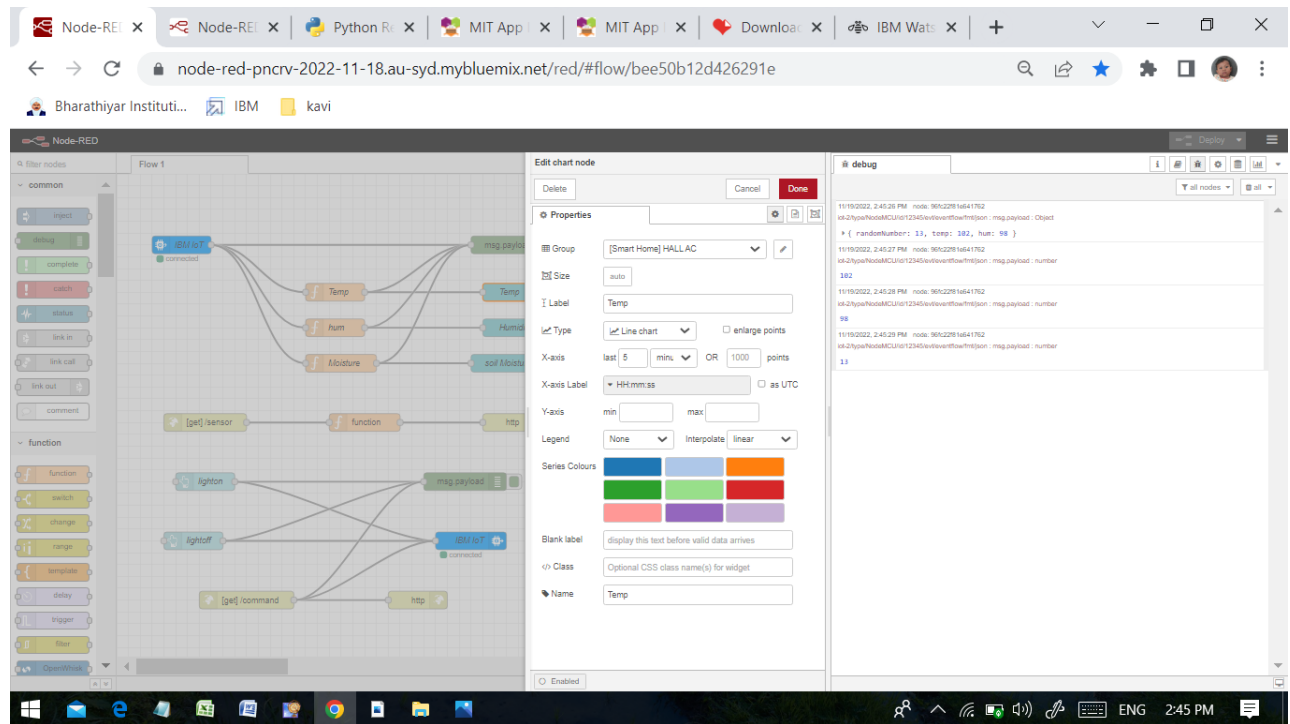
Java scrip code for the analyses is:

```
if(msg.payload==1) msg.payload={"command":"ON"};
elseif(msg.payload==0)
msg.payload={"command":"OFF"};
```

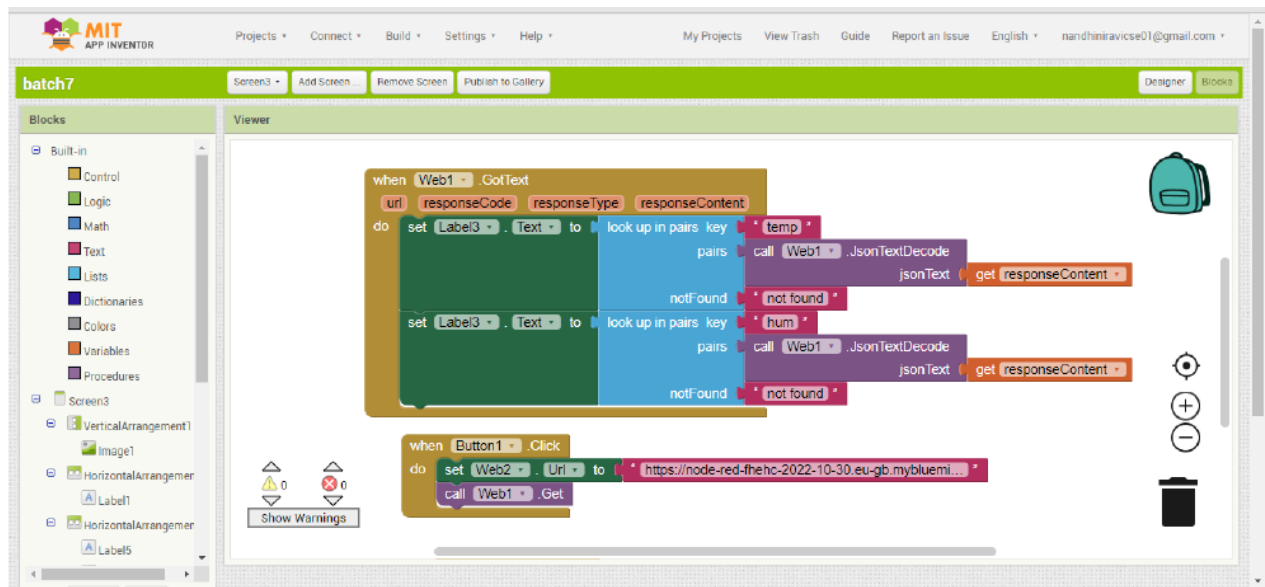
The screenshot displays the Node-RED web interface in a browser. The main workspace shows a flow with several nodes: an inject node, a function node, a msg.payload node, and a http node. The function node is configured with the following JavaScript code:

```
1 msg.payload = msg.payload.temp;
2 global.set("t1",msg.payload);
3 return msg;
```

The right sidebar shows the 'Edit function node' panel with the 'On Message' tab selected. The 'Name' field is set to 'Temp'. The 'Properties' section shows the 'On Message' tab selected. The 'Layout' section shows a 'Smart Home' category with 'HALLAC' and 'Garden' sub-items. The bottom status bar indicates the system is 'Enabled' and the time is 2:21 PM.



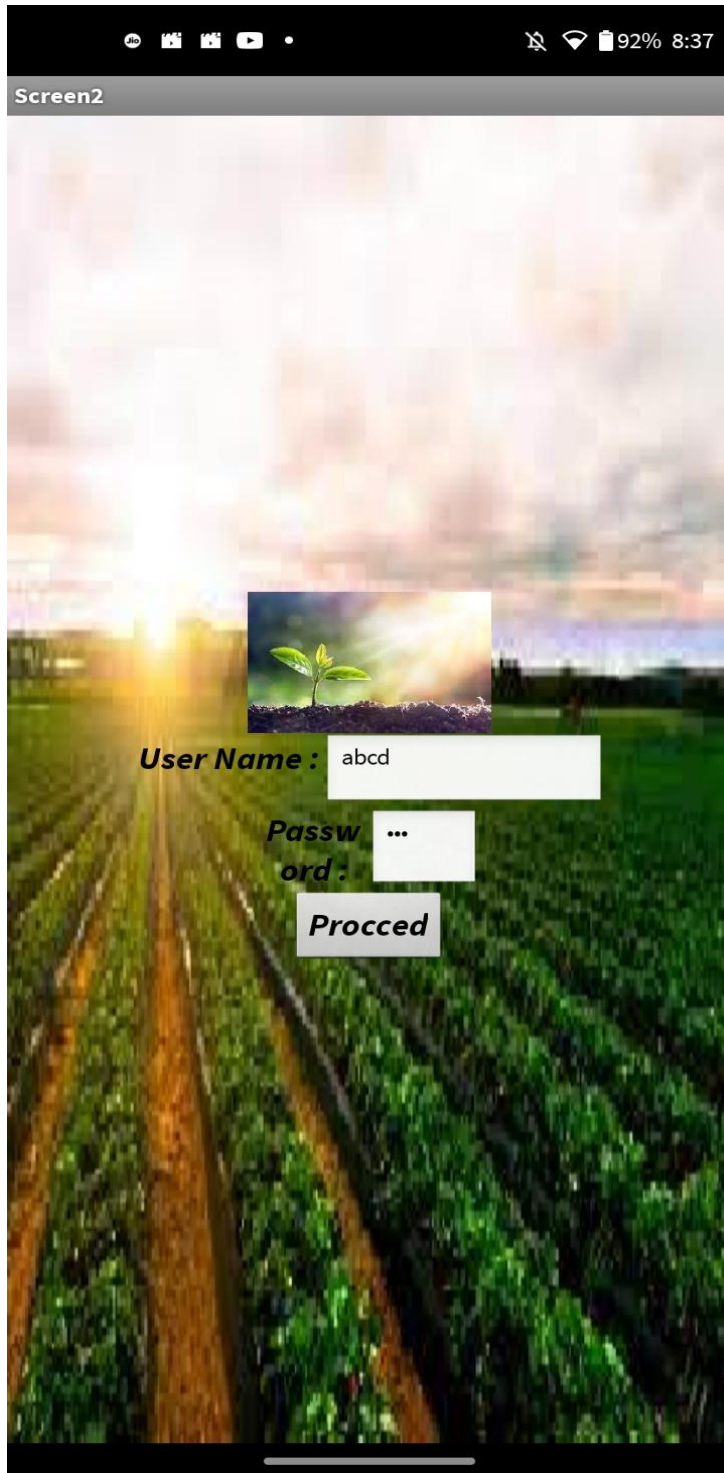
BLOCK DIAGRAM



SCREEN 1



SCREEN 2



SCREEN 3



OUTPUT

