

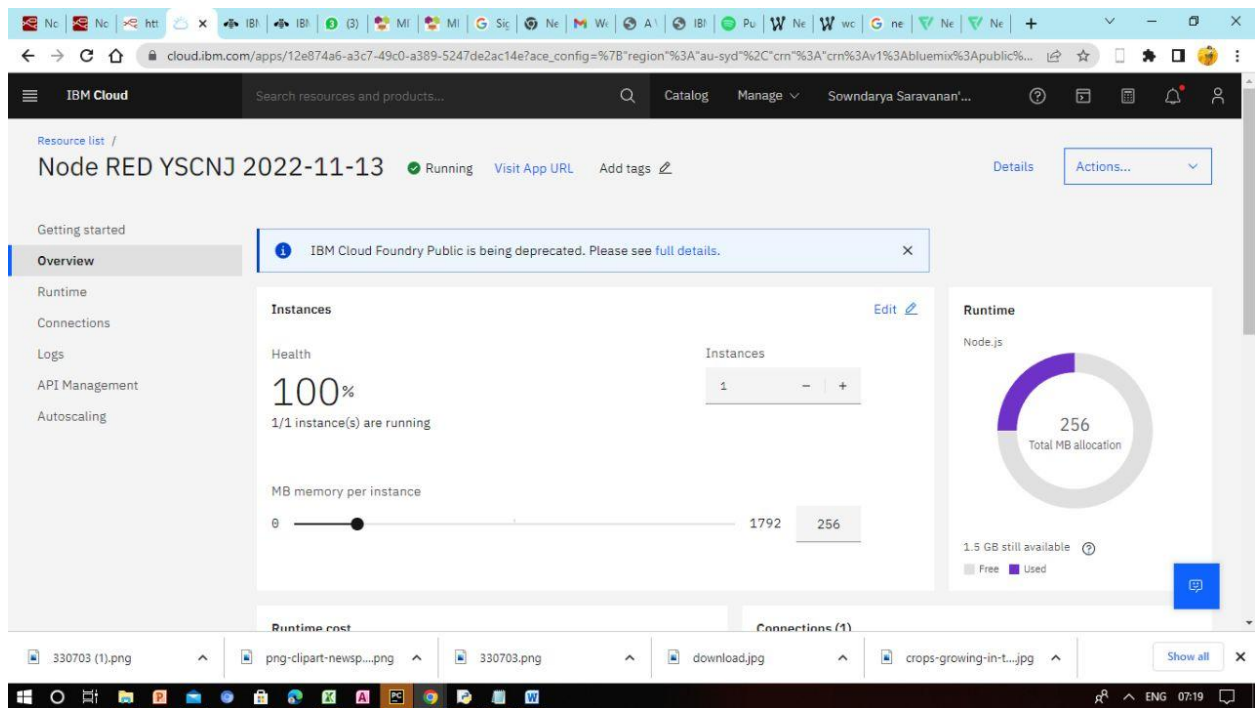
Project Development Phase

Sprint 4

Team ID	PNT2022TMID30928
Project Title	lot Based Smart Crop Protection System for Agriculture
Date	8 November 2022

In sprint 4, we linked the codes with the cloud and executed the code. As a result of this we got the output graphs and their values according to their reading.

Web UI:



Node-RED interface showing a flow for IoT data processing. The flow includes nodes for IBM IoT, msg payload, function, switch, Humidity, Temperature, Moisture status in soil, filter, http request, msg payload, Click on button to get image, http request, function, msg payload, http, msg payload, template, LIGHT ON, LIGHT OFF, MOTOR ON, MOTOR OFF, and IBM IoT. The debug console shows log messages with timestamps and data payloads.

```

11/17/2022, 10:55:18 AM node: 7e62ddccdf1a75
iot-2/type/ESP-Jid/ESP-1/ev/Event_1/fmt/json :
msg.payload: Object
{
  randomNumber: 35, temp: 101, hum: 61
}

11/17/2022, 10:55:18 AM node: 7e62ddccdf1a75
iot-2/type/ESP-Jid/ESP-1/ev/Event_1/fmt/json :
msg.payload: number
101

11/17/2022, 10:55:19 AM node: 7e62ddccdf1a75
iot-2/type/ESP-Jid/ESP-1/ev/Event_1/fmt/json :
msg.payload: number
61

11/17/2022, 10:55:20 AM node: 7e62ddccdf1a75
iot-2/type/ESP-Jid/ESP-1/ev/Event_1/fmt/json :
msg.payload: number
35

11/17/2022, 10:56:18 AM node: 7e62ddccdf1a75
iot-2/type/ESP-Jid/ESP-1/ev/Event_1/fmt/json :
msg.payload: Object
{
  randomNumber: 97, temp: 107, hum:
  
```

IBM Cloud console showing the deployment details for the resource 'node-red-ogoaf-2022--cloudant-1668166080007'. The details include CRN, Location, External endpoint, External endpoint (preferred), Authentication methods, and Activity Tracker event types.

Property	Value
CRN	crn:v1:bluemix:public:cloudantnosqldb:eu-gb:a/421c5b1ee841414ba6ff99bb717f2d98:23c1373c-3e17-465c-a6c4-22cf8440ff81::
Location	London
External endpoint	https://3a7e7b05-3c45-4d96-a75e-b456e05f3eb6-bluemix.cloudant.com
External endpoint (preferred)	https://3a7e7b05-3c45-4d96-a75e-b456e05f3eb6-bluemix.cloudantnosqldb.appdomain.cloud
Authentication methods	IBM Cloud IAM and Cloudant credentials Migrate to IAM Only
Activity Tracker event types	Management Save

IBM Watson IoT Platform

Device Type: ESP-

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.

```
0 {
1   "randomNumber": random(0, 100),
2   "temp": random(90, 110),
3   "hum": random(60, 100)
4 }
5
```

Upload a CSV file

Event	Value
event_1	{"randomNumber":52,"temp":93,"hum":66}
event_1	{"randomNumber":85,"temp":104,"hum":69}
event_1	{"randomNumber":58,"temp":101,"hum":87}
event_1	{"randomNumber":10,"temp":100,"hum":88}
event_1	{"randomNumber":93,"temp":93,"hum":63}

