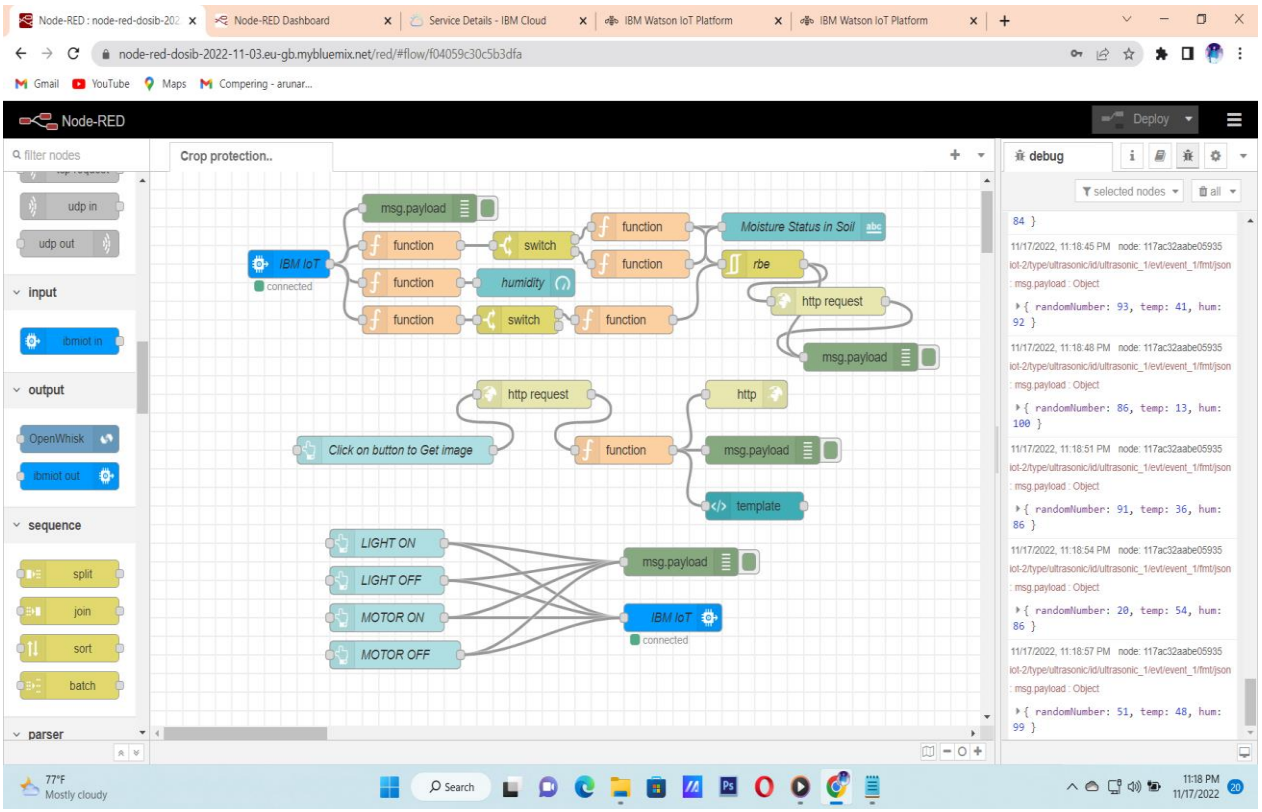
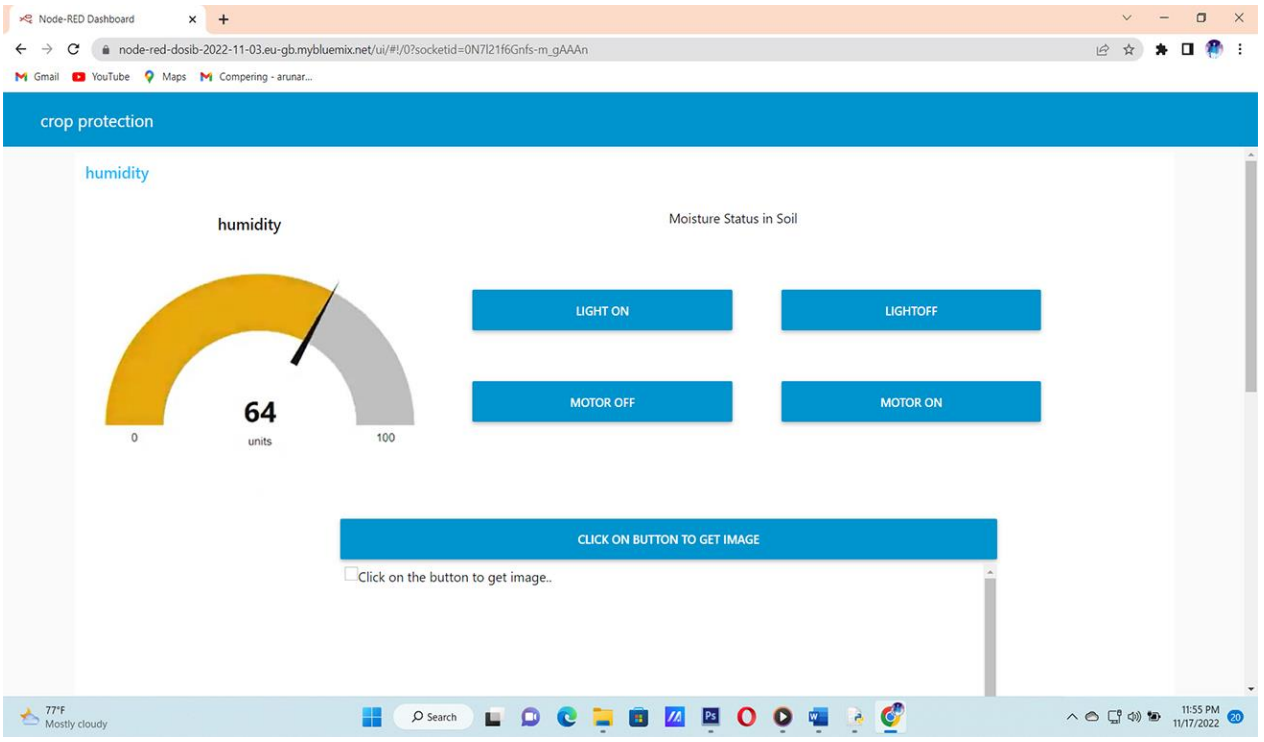
Develop A Web Application Using Node-RED Service

TEAM ID	**PNT2022TMID44579**
PROJECT NAME	**IOT Based Smart Crop Protection System For Agriculture**




Node-RED Dashboard
node-red-dosib-2022-11-03.eu-gb.mybluemix.net/ui/#!/0?socketid=0N7l21f6Gnfs-m_gAAAn
Gmail
YouTube
Maps
Compering - arunar...
crop protection
humidity
humidity
Moisture Status in Soil
64
units
0
100
LIGHT ON
LIGHTOFF
MOTOR OFF
MOTOR ON
CLICK ON BUTTON TO GET IMAGE
Click on the button to get image..
77°F
Mostly cloudy
Search
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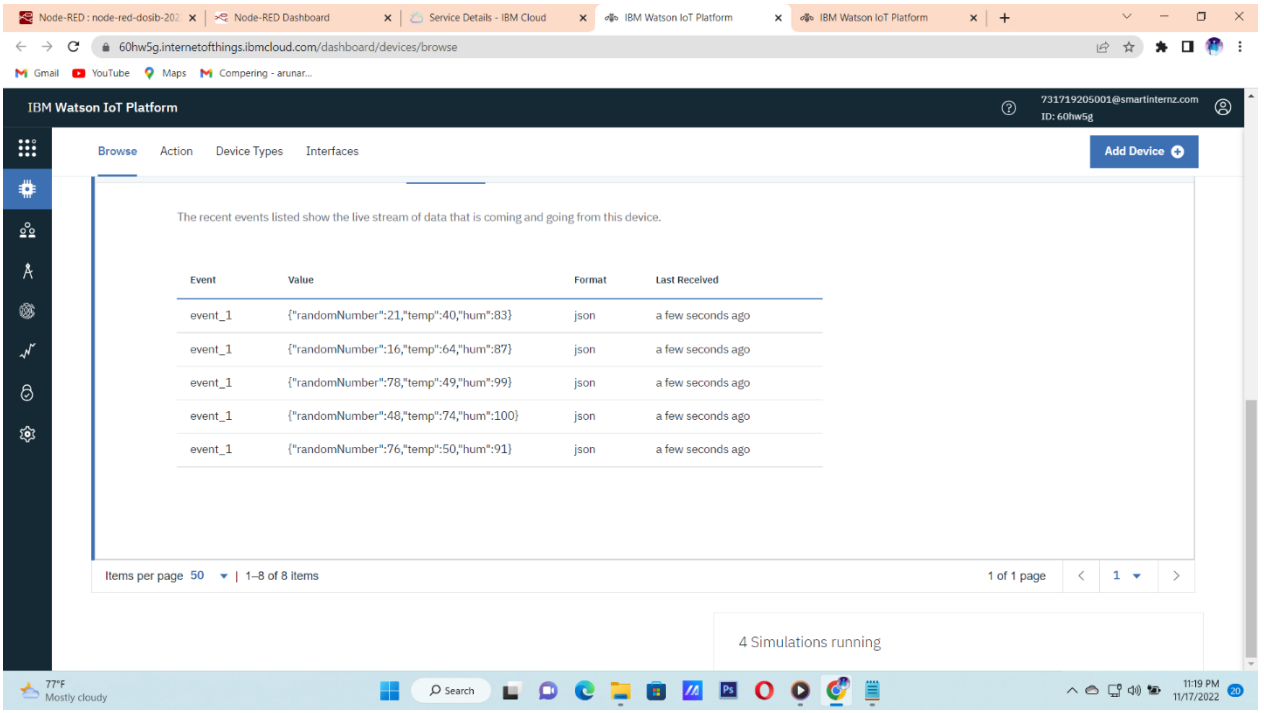
Node-RED Dashboard
Service Details - IBM Cloud
IBM Watson IoT Platform
60hw5g.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
731719205001@smartinternz.com
ID: 60hw5g
Browse
Action
Device Types
Interfaces
Add Device
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Last Received
event_1 {"randomNumber":21,"temp":40,"hum":83} json a few seconds ago
event_1 {"randomNumber":16,"temp":64,"hum":87} json a few seconds ago
event_1 {"randomNumber":78,"temp":49,"hum":99} json a few seconds ago
event_1 {"randomNumber":48,"temp":74,"hum":100} json a few seconds ago
event_1 {"randomNumber":76,"temp":50,"hum":91} json a few seconds ago
Items per page 50 | 1–8 of 8 items
1 of 1 page
1
4 Simulations running
77°F
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ibmiotpublishsubscribe.py - D:\crop\ibmiotpublishsubscribe.py (3.7.0)

File Edit Format Run Options Window Help

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random


#Provide your IBM Watson Device Credentials
organization = "60hw5g"
deviceType = "ultrasonic"
deviceId = "ultrasonic_1"
authMethod = "token"
authToken = "731719205001"

# Initialize GPIO


def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("led is on")
    else :
        print ("led is off")

    #print(cmd)



try:
        deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod, "auth-token": authToken}
        deviceCli = ibmiotf.device.Client(deviceOptions)
        #.....................................

except Exception as e:
        print("Caught exception connecting device: %s" % str(e))
        sys.exit()

# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10 times
deviceCli.connect()

while True:
        #Get Sensor Data from DHT11

        temp=random.randint(0,100)
        Humid=random.randint(0,100)
```

Ln: 1 Col: 0

77°F Mostly cloudy

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Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\crop\ibmiotpublishsubscribe.py ==========
2022-11-17 23:41:48,125   ibmiotf.device.Client      INFO    Connected successfully: d:60hw5g:IOT:ultrasonic
Published Temperature = 70 C Humidity = 27 % to IBM Watson
Published Temperature = 92 C Humidity = 83 % to IBM Watson
Published Temperature = 70 C Humidity = 33 % to IBM Watson
Published Temperature = 17 C Humidity = 8 % to IBM Watson
Published Temperature = 27 C Humidity = 21 % to IBM Watson
Published Temperature = 65 C Humidity = 55 % to IBM Watson
Published Temperature = 25 C Humidity = 44 % to IBM Watson
Published Temperature = 88 C Humidity = 69 % to IBM Watson
Published Temperature = 84 C Humidity = 52 % to IBM Watson
Published Temperature = 81 C Humidity = 70 % to IBM Watson
Published Temperature = 0 C Humidity = 89 % to IBM Watson
Published Temperature = 44 C Humidity = 90 % to IBM Watson
Published Temperature = 74 C Humidity = 47 % to IBM Watson
Published Temperature = 81 C Humidity = 75 % to IBM Watson
Published Temperature = 61 C Humidity = 20 % to IBM Watson
Published Temperature = 90 C Humidity = 22 % to IBM Watson
Published Temperature = 80 C Humidity = 38 % to IBM Watson
Published Temperature = 10 C Humidity = 7 % to IBM Watson
Published Temperature = 30 C Humidity = 42 % to IBM Watson
Published Temperature = 34 C Humidity = 90 % to IBM Watson
Published Temperature = 64 C Humidity = 25 % to IBM Watson
Published Temperature = 54 C Humidity = 91 % to IBM Watson
Published Temperature = 68 C Humidity = 87 % to IBM Watson
```

Ln: 5 Col: 0

77°F Mostly cloudy

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