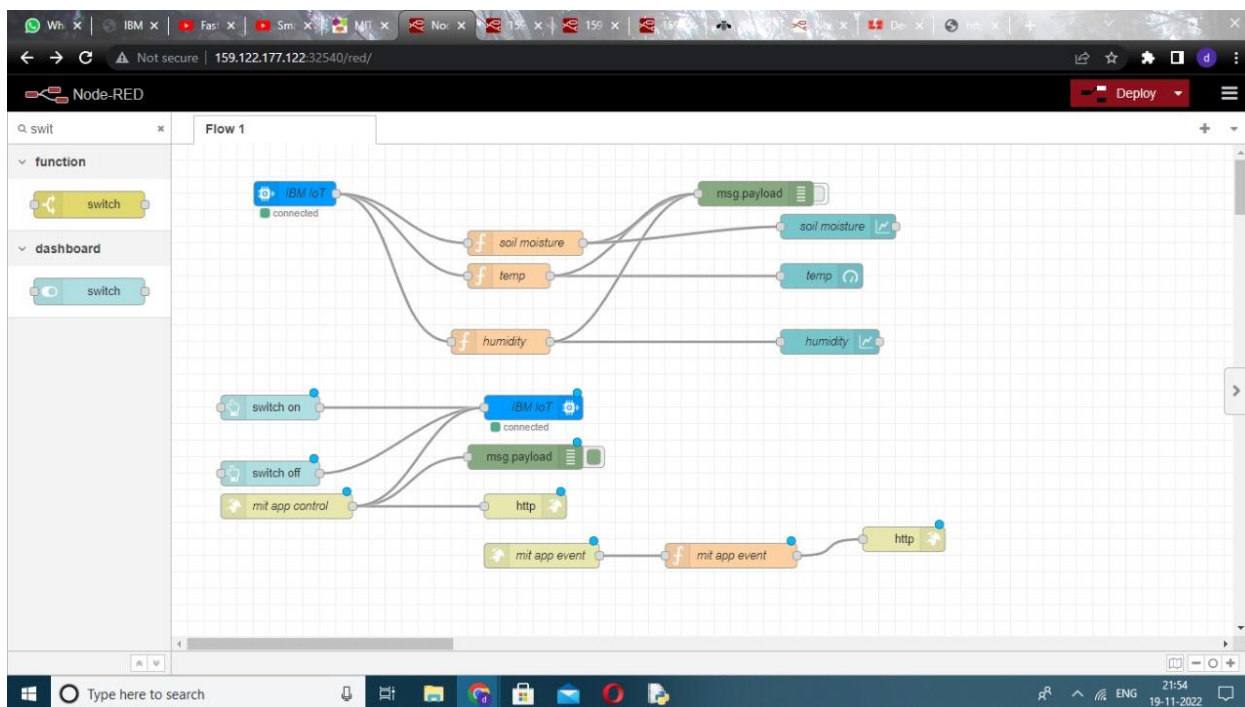# Smart farming

SPRINT-3

Team ID -- PNT2022TMID 29336

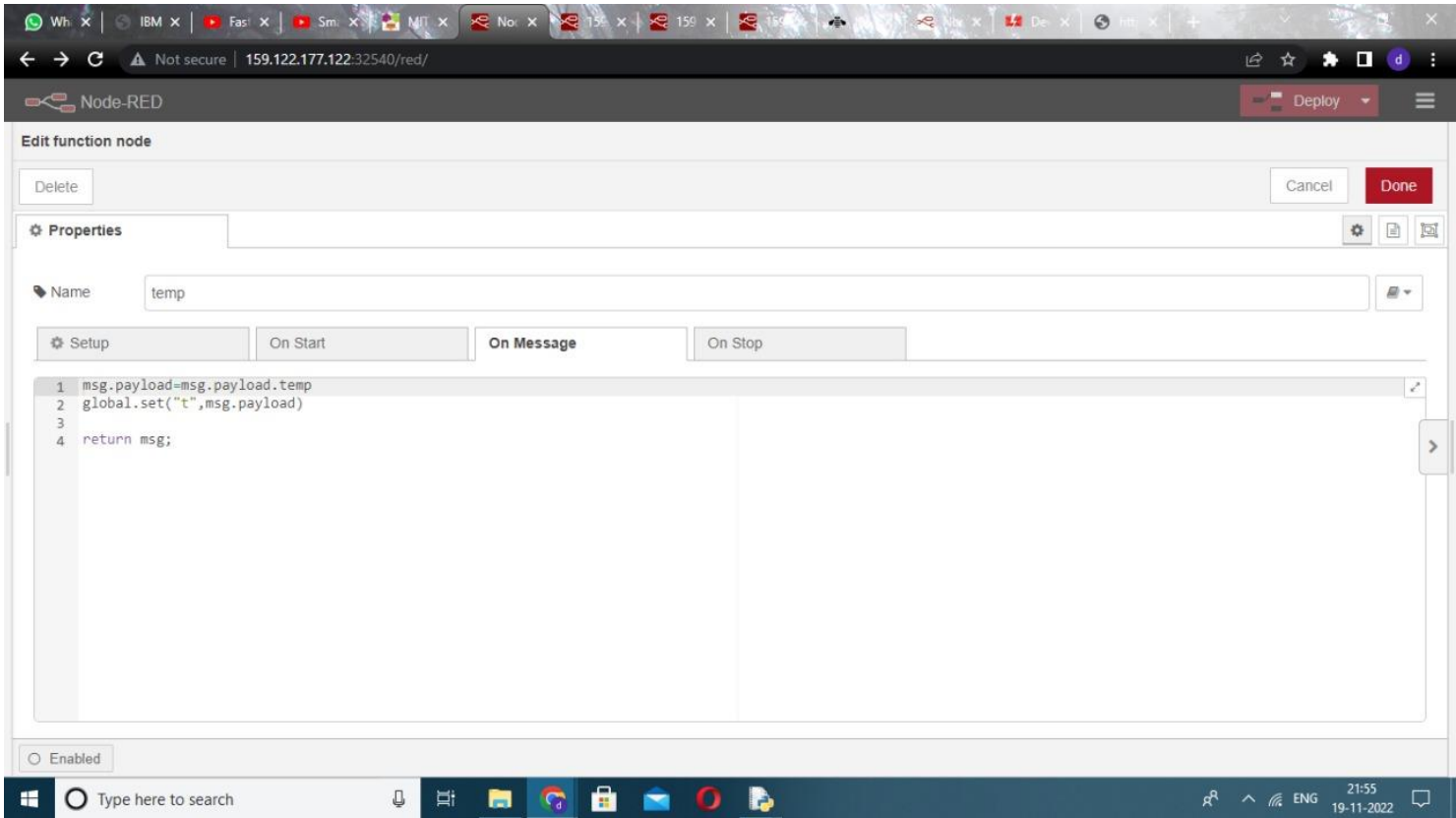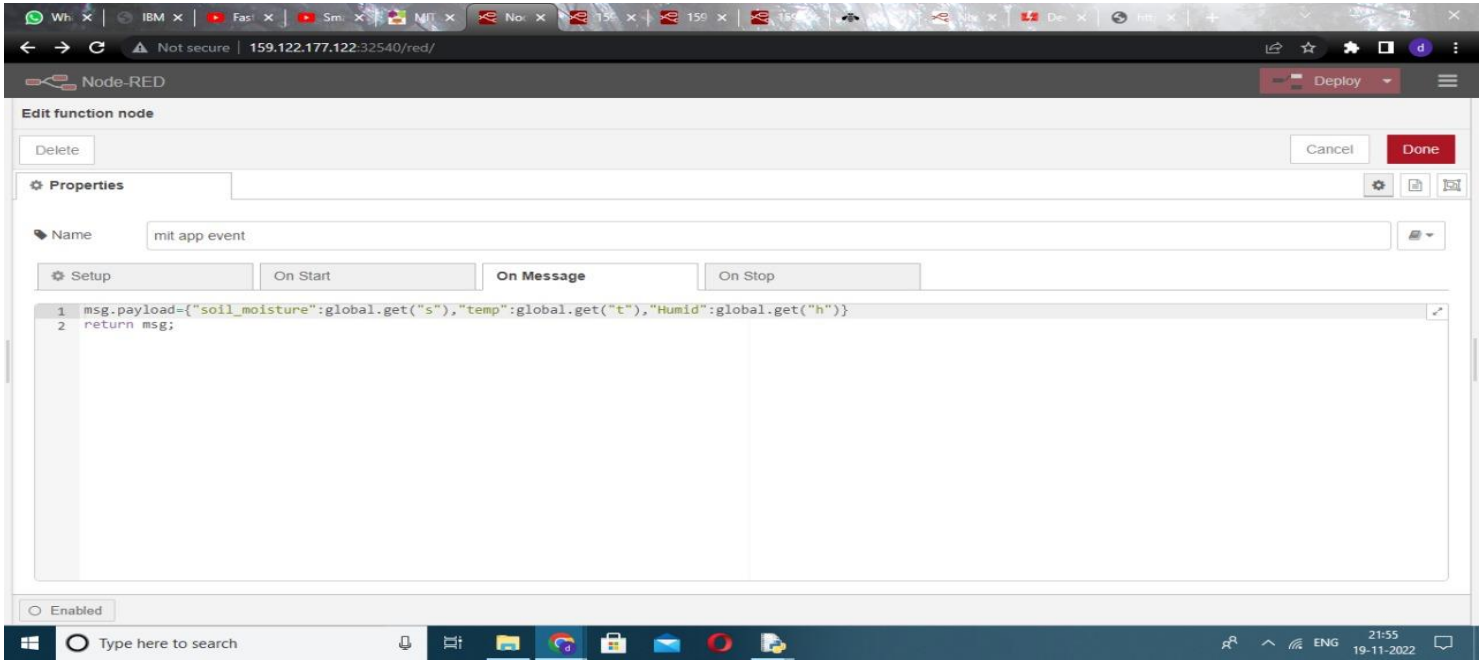## PROJECT NAME -- IOT ENABLED SMART FARMING APPLICATION.
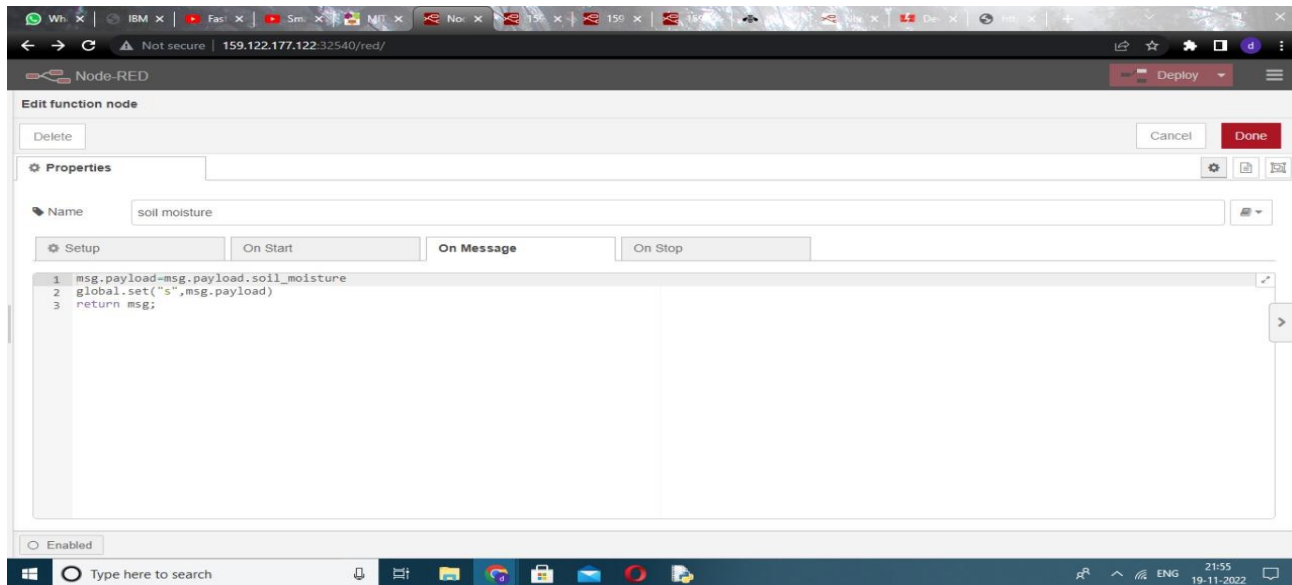
Node RED Flow between Watson IoT and MIT App:

SOIL PARAMETER MEASURMENT and SMART IRRIGATION SYSTEM:

Parameters like temperature, humidity and moisture is generated randomly in IBM Watson IoT Platform and send to the MIT App through Node Red.

Codes on the function nodes of NODE Red:


```
1  msg.payload={"soil_moisture":global.get("s"),"temp":global.get("t"),"Humid":global.get("h")}
2  return msg;
```



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

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

Enabled

OUTPUT

{"command":"motoron"}

Not secure | 159.122.177.122:32540/sensor

{"soil_moisture":19,"temp":19,"Humid":24}

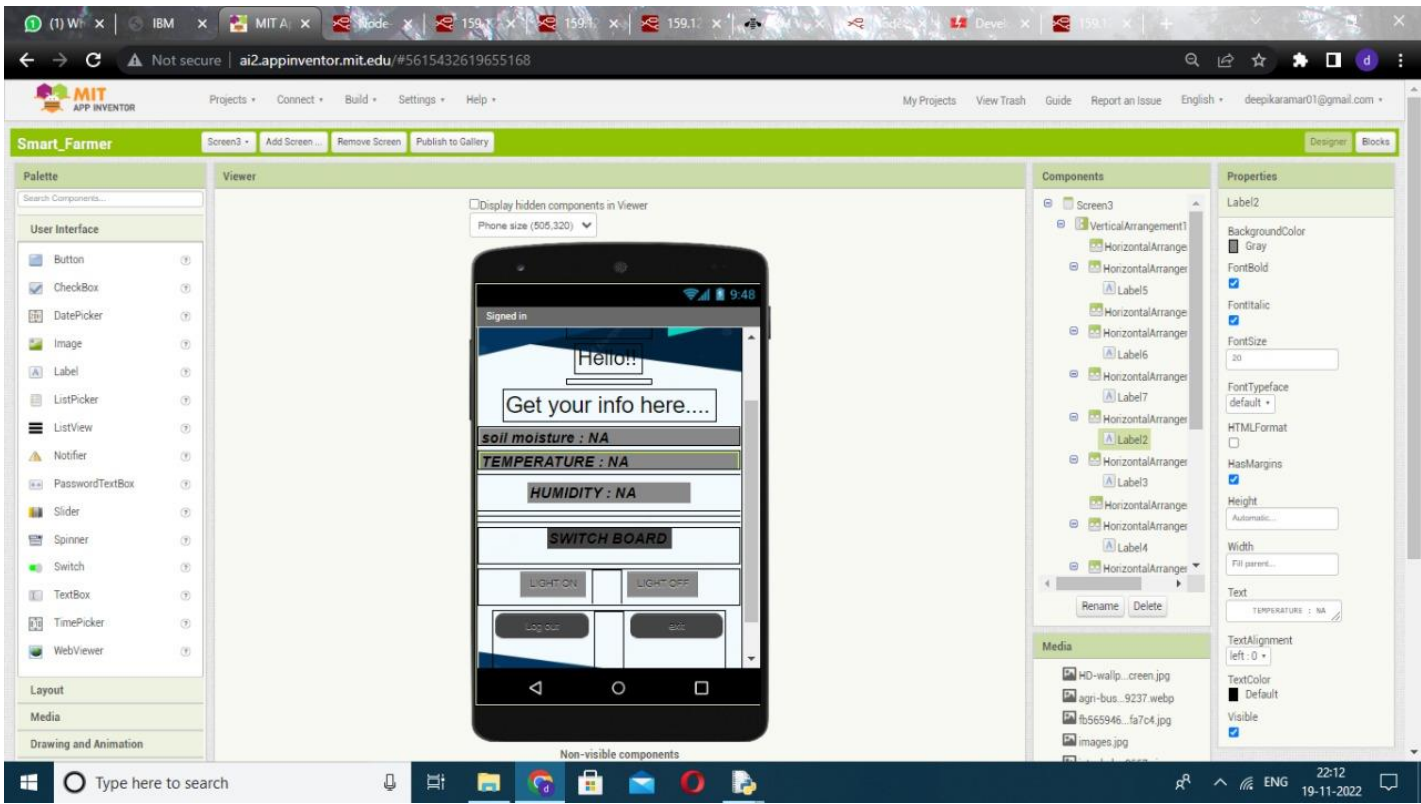Not secure | 159.122.177.122:32540/command?command=motoroff
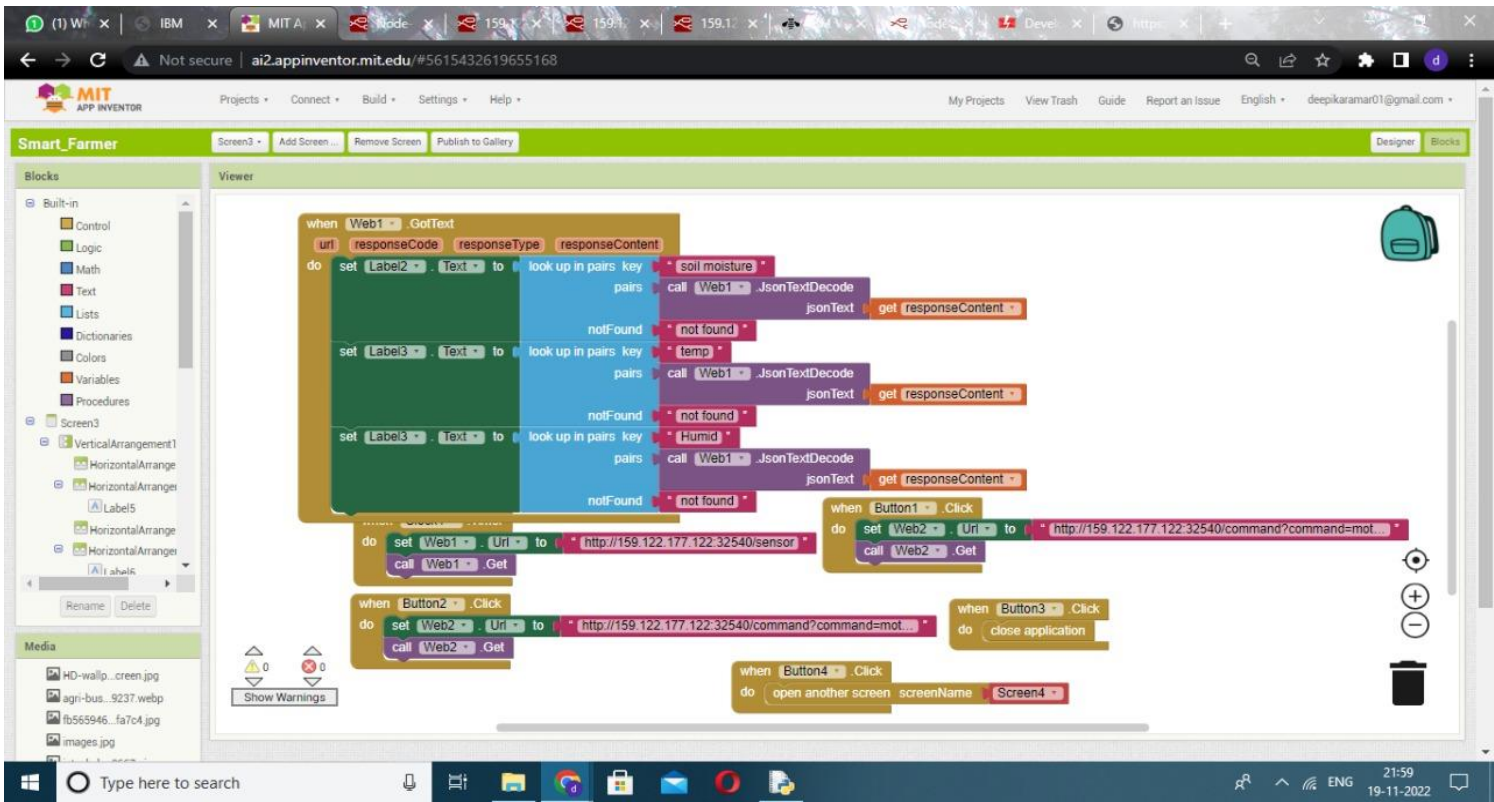
{"command":"motoroff"}

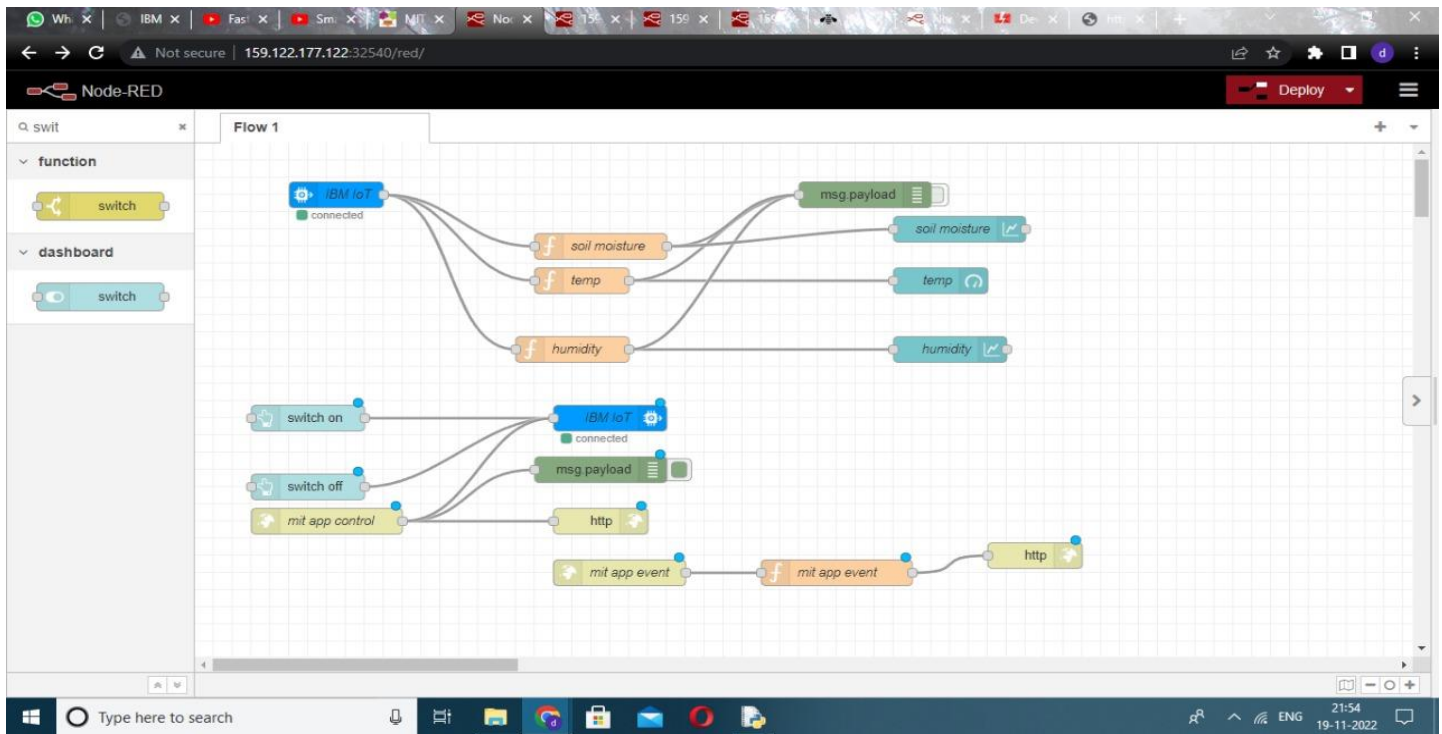# SHOW THE TEMPERATURE, HUMIDITY, SOIL MOISTURE RANGE
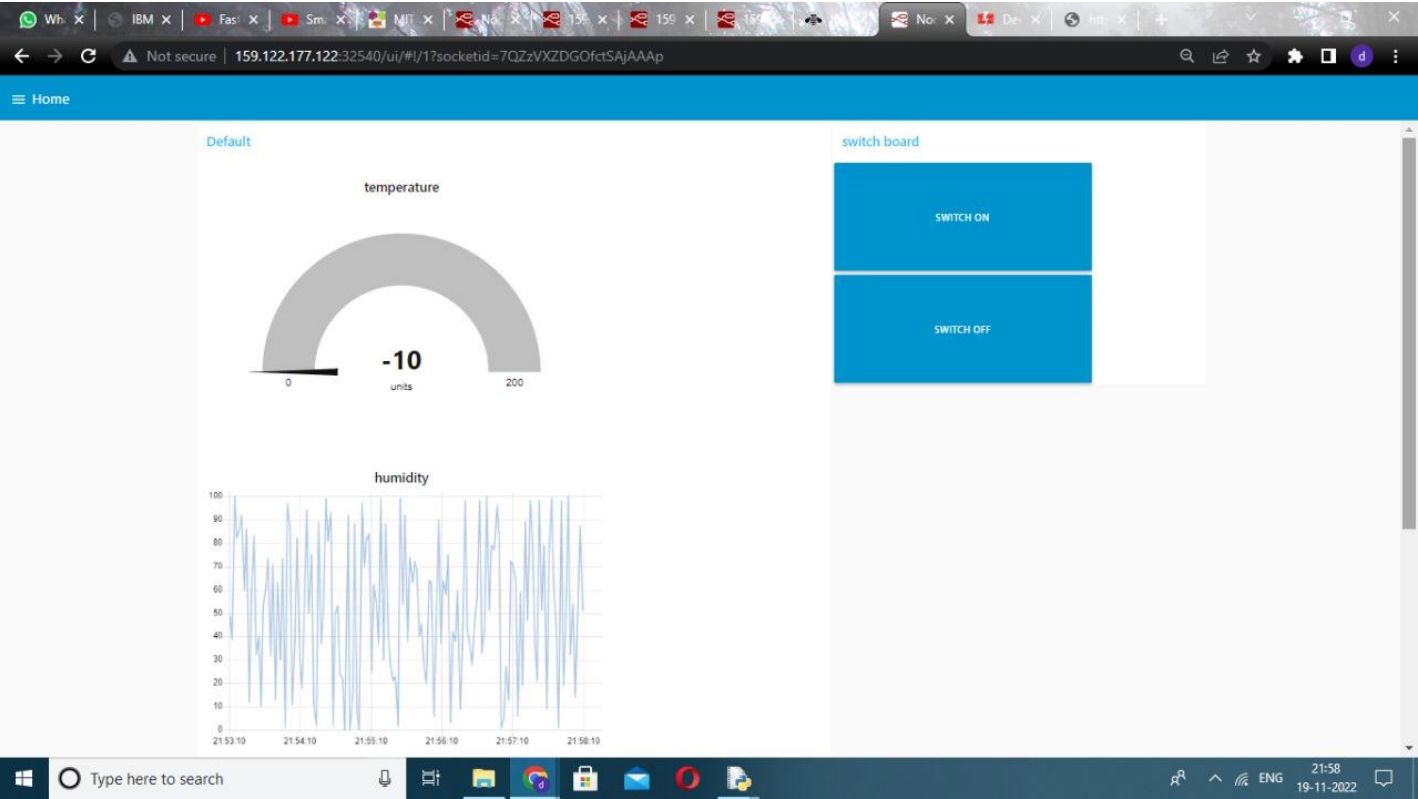
SCREEN VISIBLE ON LAPTOP

BLOCK FOR THIS SCREEN

From this screenshots, the generated parameters are sent to NODE Red and viewed by user in User Interface. After the farmer saw the parameters, if they want to irrigate their farm, they only have to Turn ON and OFF the irrigation system through the MIT App.

The soil parameters values are displayed on APP generated from the IBM Watson IoT Platform. The command of Turning ON and OFF the motor is given by the farmers from the app and also send to the IoT platform.