SPRINT DELIVERY – III

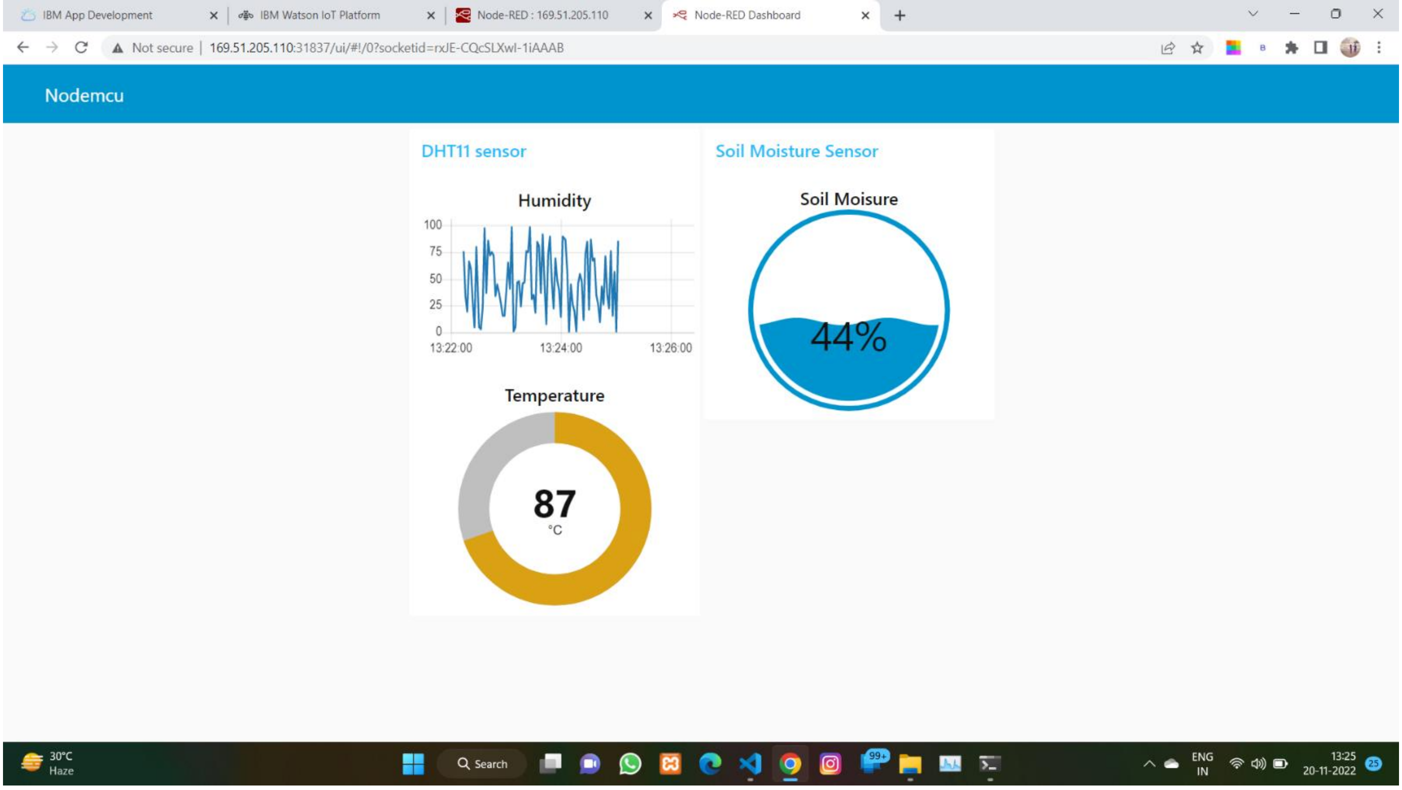
Project Name: SmartFarmer-Iot Enabled SmartFarming Application.

Team ID: PNT2022TMID32489

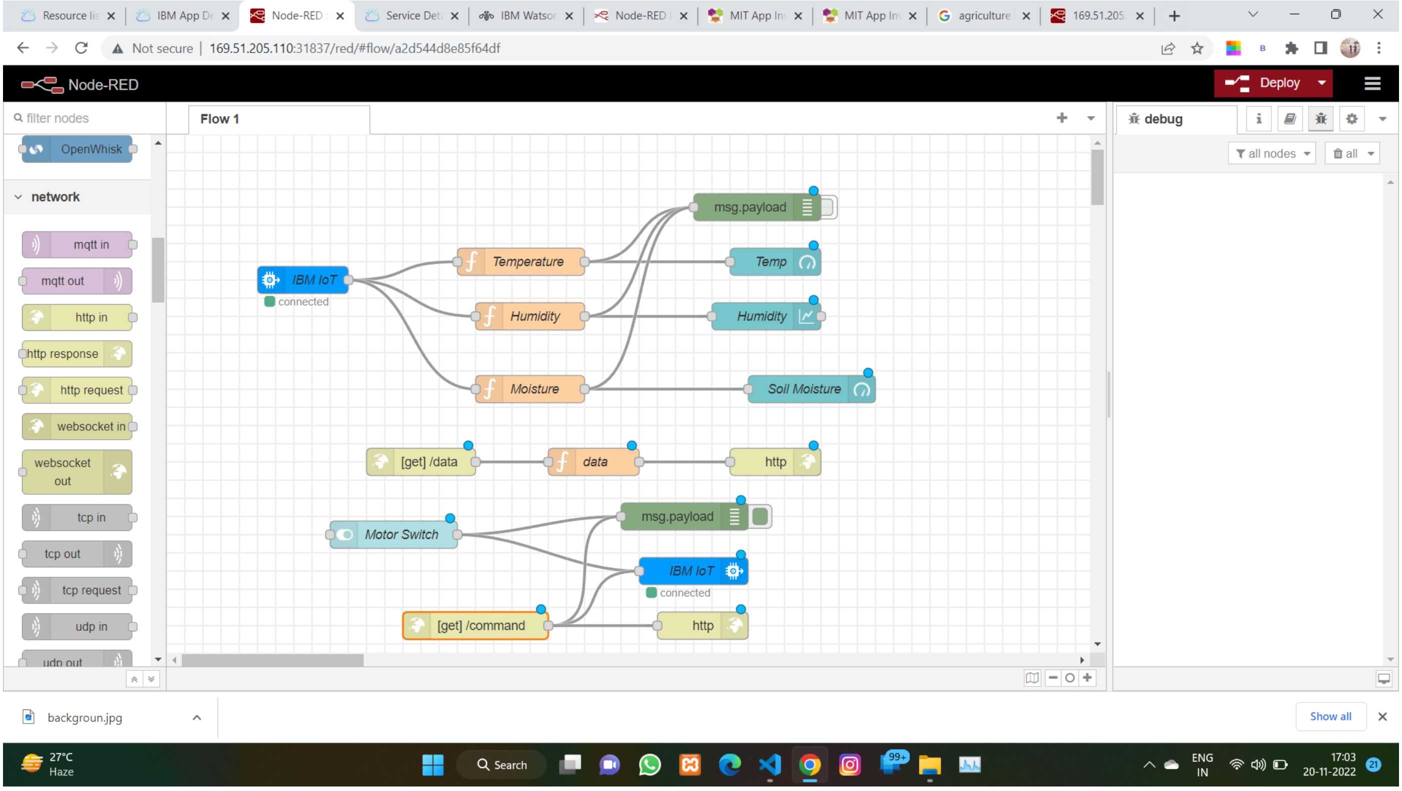
Build A Web Application Using Node-RED Service

- ✓ Node-Red Contains /Data and /Command Requests
- ✓ /Data command is used to access the MIT App Inventor
- ✓ /Command is used to send and receive the Motor Control response and request(on/off)
- ✓ Every one second the parameter is update
- ✓ App inventor contains blocks, with these help of these blocks we can build our application

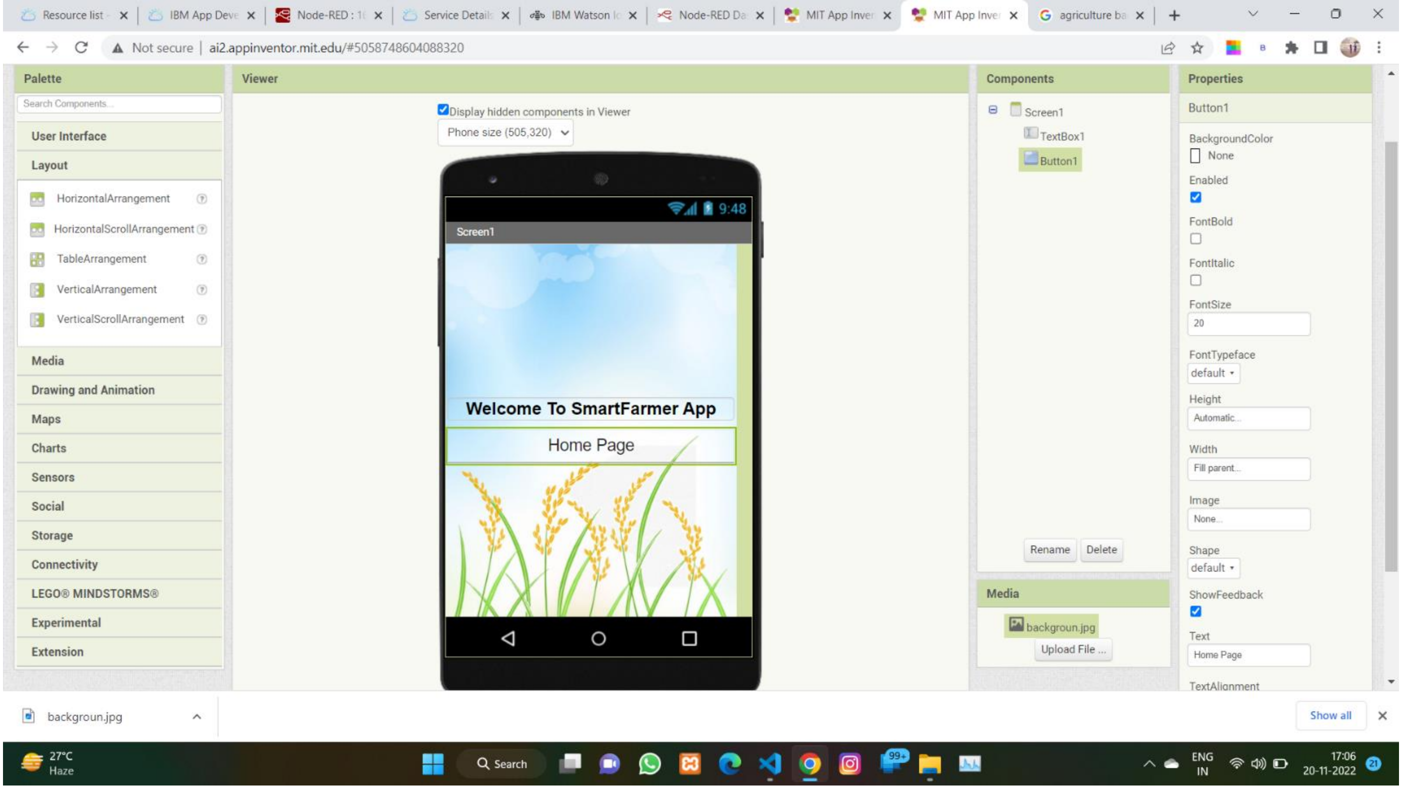
Node-Red UI



Configurations:



MIT App Inventor Home Page



Button1

BackgroundColor: □ None

Enabled: ☑

FontBold: □

FontItalic: □

FontSize: 20

FontTypeface: default

Height: Automatic...

Width: Fill parent...

Image: None...

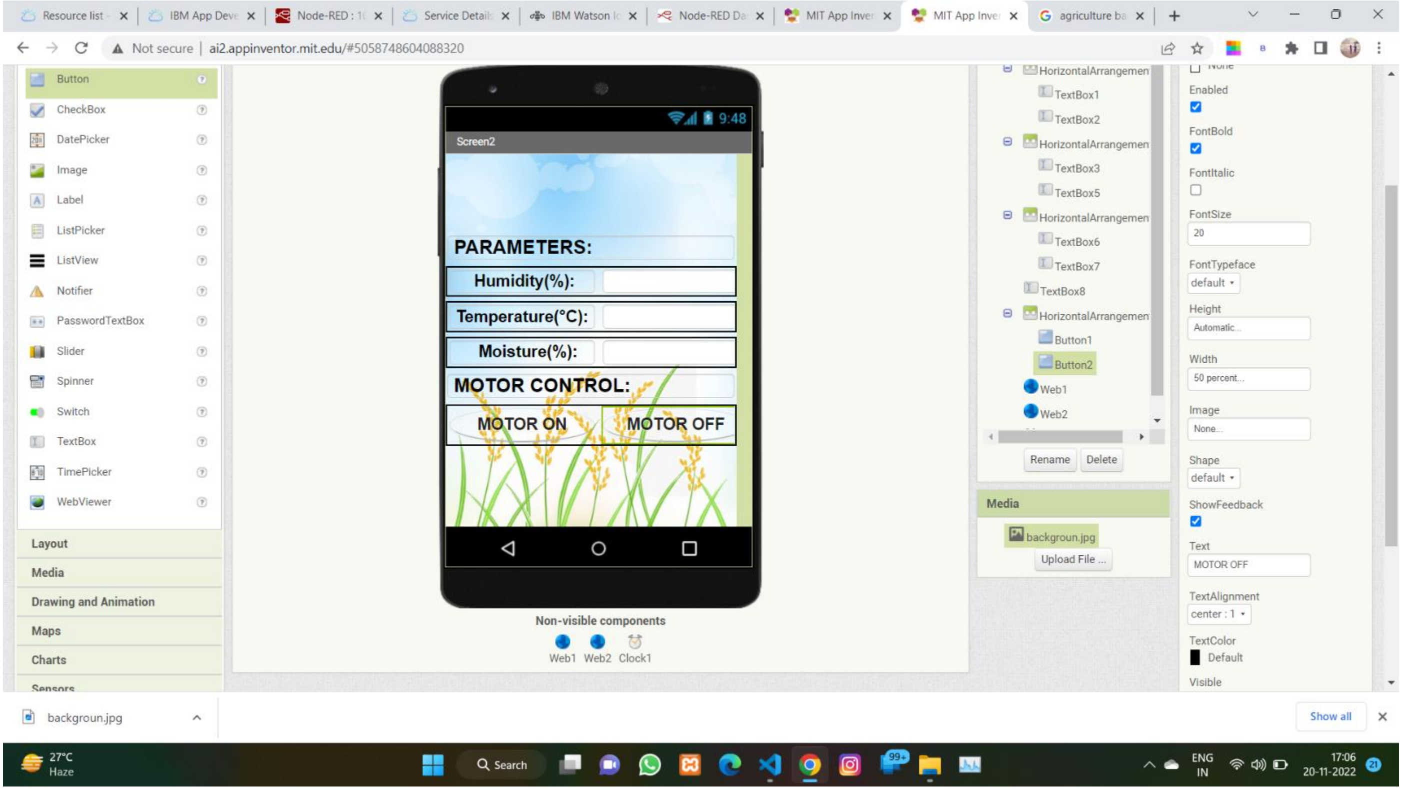
Shape: default

ShowFeedback: ☑

Text: Home Page

TextAlignment

MIT App Inventor Dashboard



Screen2

PARAMETERS:

Humidity(%):

Temperature(°C):

Moisture(%):

MOTOR CONTROL:

MOTOR ON MOTOR OFF

Non-visible components

Web1 Web2 Clock1

Enabled ☑

FontBold ☑

FontItalic □

FontSize 20

FontTypeface default

Height Automatic...

Width 50 percent...

Image None...

Shape default

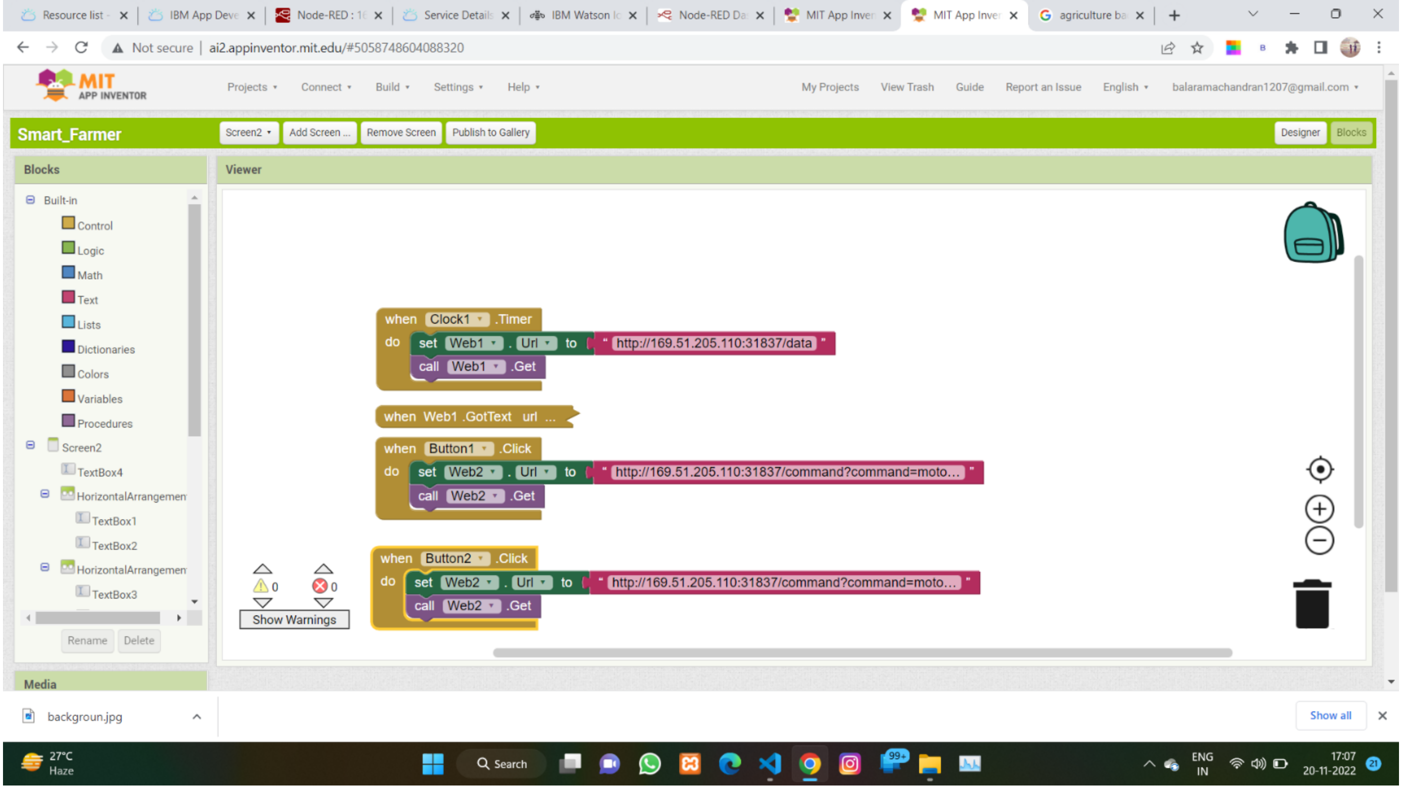
ShowFeedback ☑

Text MOTOR OFF

TextAlignment center : 1

TextColor Default

App Configuration



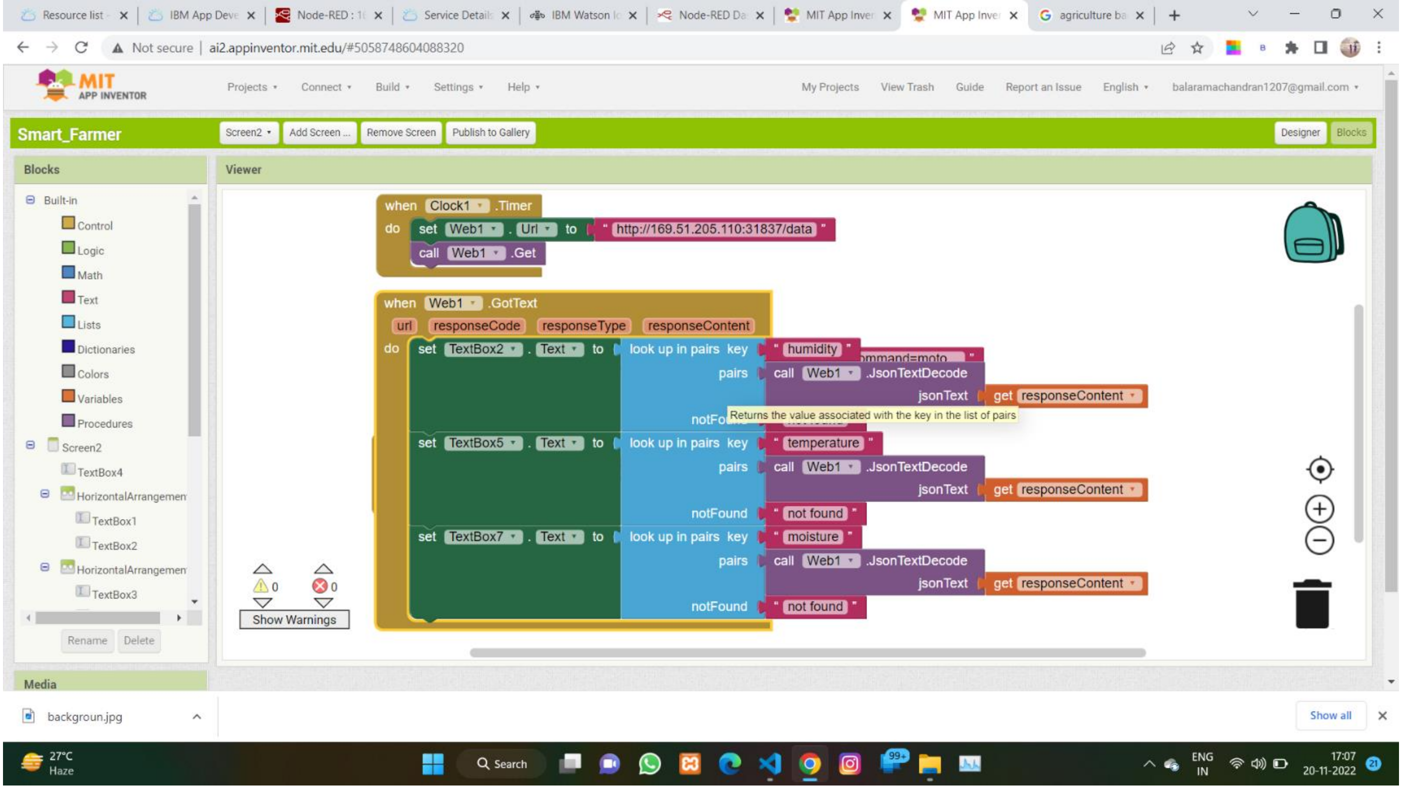
Smart_Farmer

```
when Clock1 .Timer
do  set Web1 . Url to " http://169.51.205.110:31837/data "
    call Web1 .Get

when Web1 .GotText url ...

when Button1 .Click
do  set Web2 . Url to " http://169.51.205.110:31837/command?command=moto... "
    call Web2 .Get

when Button2 .Click
do  set Web2 . Url to " http://169.51.205.110:31837/command?command=moto... "
    call Web2 .Get
```



```
when Clock1 .Timer
do  set Web1 . Url to "http://169.51.205.110:31837/data"
    call Web1 .Get

when Web1 .GotText
 url  responseCode  responseType  responseContent
do  set TextBox2 . Text to  look up in pairs  key "humidity"
                                              pairs  call Web1 .JsonTextDecode
                                                                    jsonText  get responseContent
                                              notFound
    set TextBox5 . Text to  look up in pairs  key "temperature"
                                              pairs  call Web1 .JsonTextDecode
                                                                    jsonText  get responseContent
                                              notFound "not found"
    set TextBox7 . Text to  look up in pairs  key "moisture"
                                              pairs  call Web1 .JsonTextDecode
                                                                    jsonText  get responseContent
                                              notFound "not found"
```

Returns the value associated with the key in the list of pairs