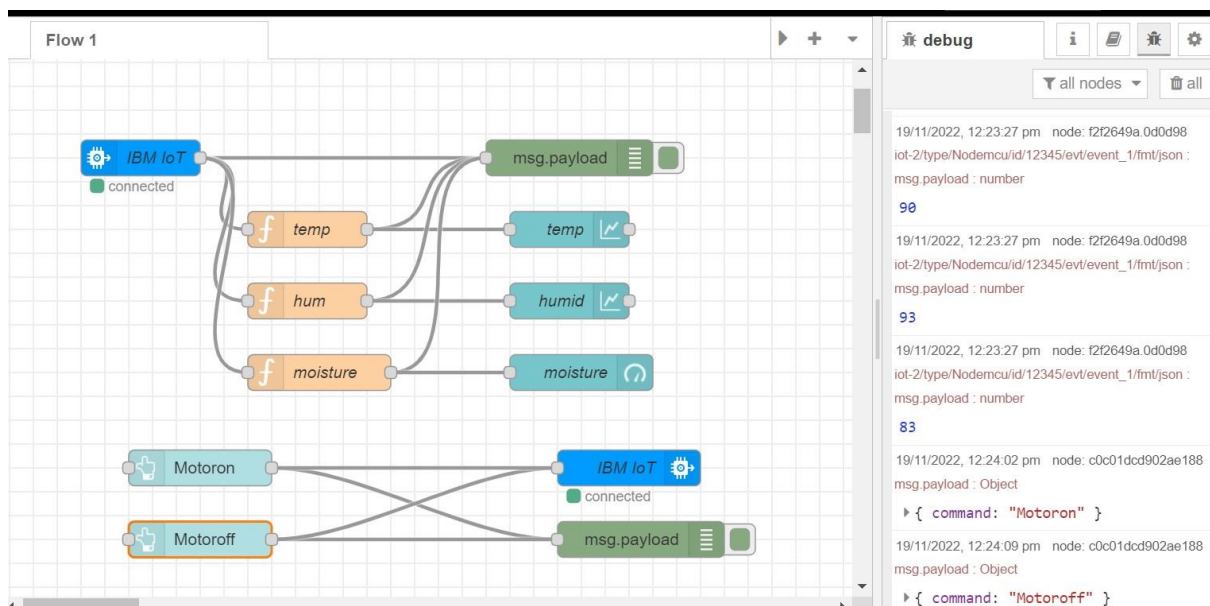


SPRINT – 3

SMART FARMER – IOT ENABLED SMART FARMING APPLICATION

Date	19 NOVEMBER 2022
Team ID	PNT2022TMID04701
Project Name	Smart Farmer-IoT Enabled smart Farming Application

CONFIGURATION OF NODE-RED TO SEND COMMANDS TO IBM:



1. Motor on and off the format is changed as JSON and command type=cmd

MOTORON:

The 'Edit button node' dialog box is shown with the following configuration:

- Delete** button
- Cancel** button
- Done** button
- Properties** tab is selected.
- Color**: optional text/icon color
- Background**: optional background color
- When clicked, send:** checkbox is checked.
- Payload**: `{"command":"Motoron"}`
- Topic**: `msg. topic`
- If msg arrives on input, emulate a button click:** checkbox is unchecked.
- Class**: Optional CSS class name(s) for widget

MOTOROFF:

The 'Edit button node' dialog box is shown with the following configuration:

- Delete** button
- Cancel** button
- Done** button
- Properties** tab is selected.
- Color**: optional text/icon color
- Background**: optional background color
- When clicked, send:** checkbox is checked.
- Payload**: `{"command":"Motoroff"}`
- Topic**: `msg. topic`
- If msg arrives on input, emulate a button click:** checkbox is unchecked.
- Class**: Optional CSS class name(s) for widget
- Name**: Name
- Enabled** checkbox is checked.

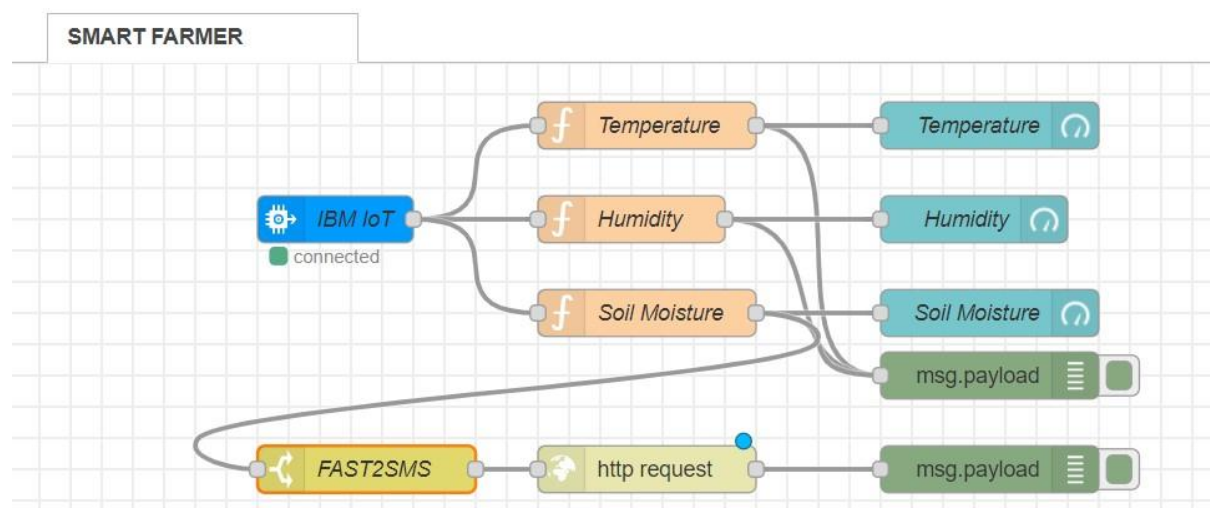
2. When “Motoron” from Node-red dashboard is touched it will show motor is on in the python code result.

```
Published Temperature = 91 C Humidity = 94 % Soil moisture = 16 % to IBM Watson
Published Temperature = 54 C Humidity = 4 % Soil moisture = 71 % to IBM Watson
Command received: Motoron
Motor is on
Published Temperature = 69 C Humidity = 73 % Soil moisture = 74 % to IBM Watson
Published Temperature = 98 C Humidity = 16 % Soil moisture = 52 % to IBM Watson
Published Temperature = 27 C Humidity = 16 % Soil moisture = 91 % to IBM Watson
Published Temperature = 20 C Humidity = 44 % Soil moisture = 54 % to IBM Watson
Published Temperature = 54 C Humidity = 85 % Soil moisture = 50 % to IBM Watson
```

3. When it is turned off it shows “Motor is off”.

```
Published Temperature = 52 C Humidity = 62 % Soil moisture = 21 % to IBM Watson
Command received: Motoroff
Motor is off
```

CONFIGURATION OF NODE-RED WITH FAST2SMS:



Edit the properties of FAST2SMS Switch node

If Soil Moisture is Less than 50, it will send the message to the particular number.

Edit switch node

Delete

Cancel

Done

⚙️ Properties

📁 Name

FAST2SMS

⋮ Property

msg. payload

☰

<=

▼

▼

%₉

50

→

1

✕

+ add

checking all rules

▼

☐ recreate message sequences

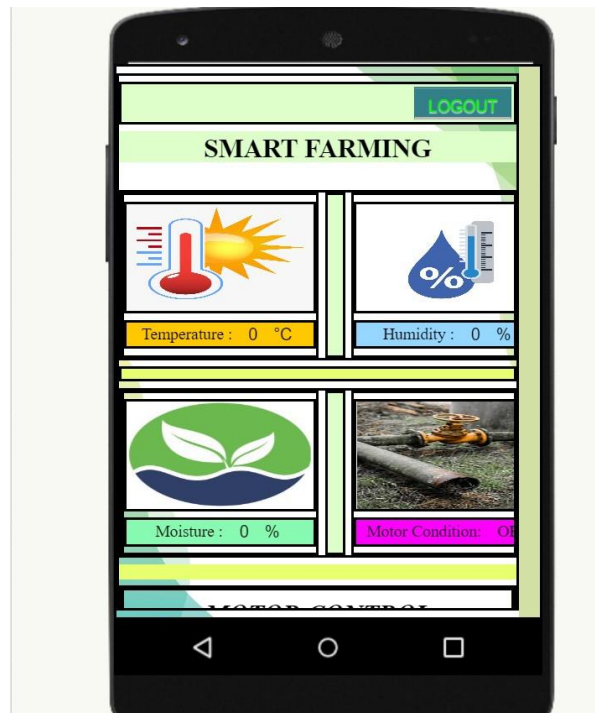
☐ Enabled

MIT APPLICATION:

DESIGNER (SCREEN 1):

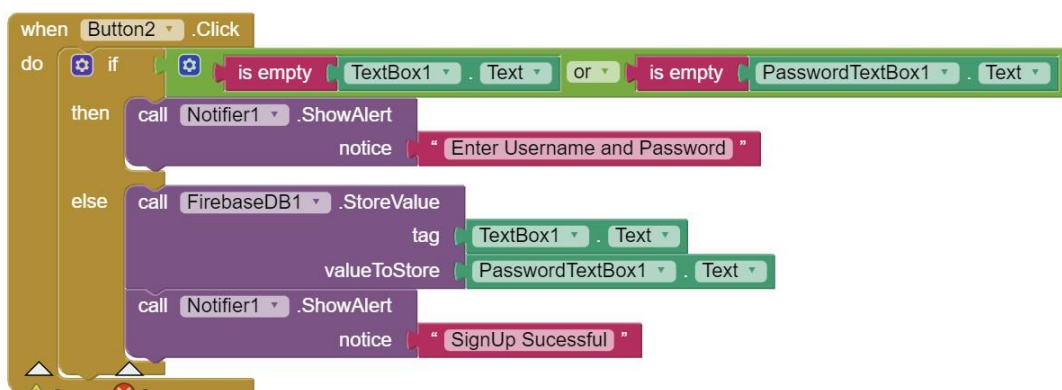
A screenshot of a mobile application interface titled "SMART FARMING". The screen features a central image of a farm landscape with various agricultural icons overlaid, including a sun, a leaf, a water drop, a tractor, a Wi-Fi symbol, a drone, a microscope, and a person. Below the image are two input fields: "USERNAME :" and "PASSWORD :". The password field is masked with dots. At the bottom, there are two buttons: a purple "LOGIN" button and a grey "SIGN UP" button. The entire interface is framed by a decorative green leaf border. The phone's navigation bar is visible at the bottom.

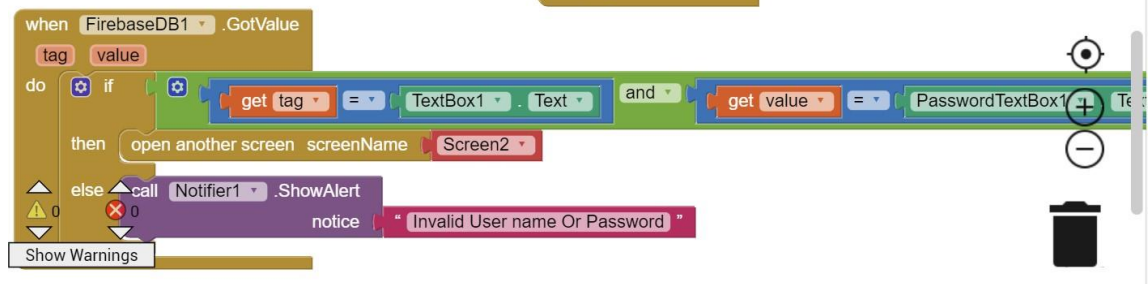
SCREEN 2:



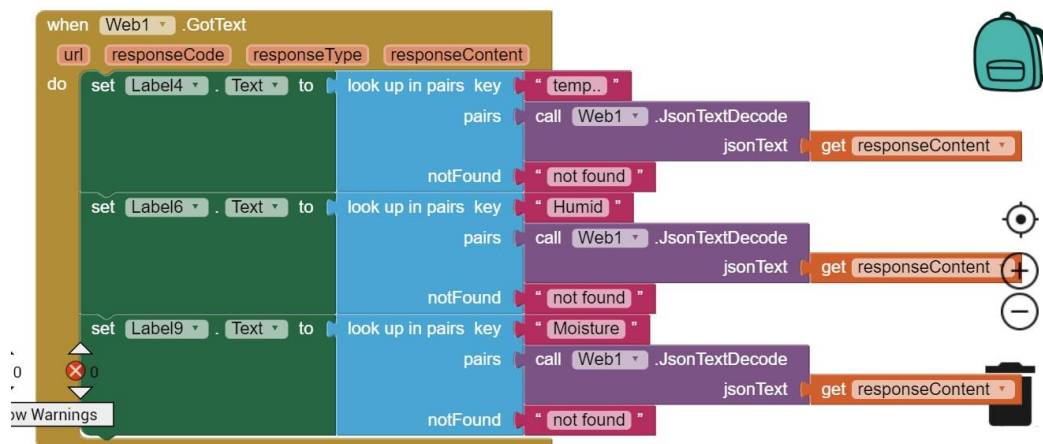
BLOCKS:

SCREEN 1:





SCREEN 2:



```

when Button1 .Click
do
  set Web2 . Url to " https://node-red-mhovh-2022-11-18.eu-gb.mybluemi... "
  call Web2 .Get
  call Notifier1 .ShowAlert
  notice " Motor ON successful "
  set HorizontalArrangement12 . Image to on.jpg
  set Label12 . Text to " ON "

```

```

when Button2 .Click
do
  set Web2 . Url to " https://node-red-mhovh-2022-11-18.eu-gb.mybluemi... "
  call Web2 .Get
  call Notifier1 .ShowAlert
  notice " Motor OFF successful "
  set HorizontalArrangement12 . Image to off.png
  set Label12 . Text to " OFF "

```

```

when Button3 .Click
do
  open another screen screenName Screen1

```



API:

IN MOBILE PHONE:

