# <u>SPRINT 3 – Designing the modules and developing mobile application using MIT App inventor and connecting it with Node RED</u>

Date:	17 <sup>th</sup> November 2022
Team ID	PNT2022TMID27964
Project Name	Project – Smart Farmer- IoT
	basedSmartFarmingApplication

# AIM:

To create a mobile application and to link it with node RED using necessary modules and testing the working of the app.

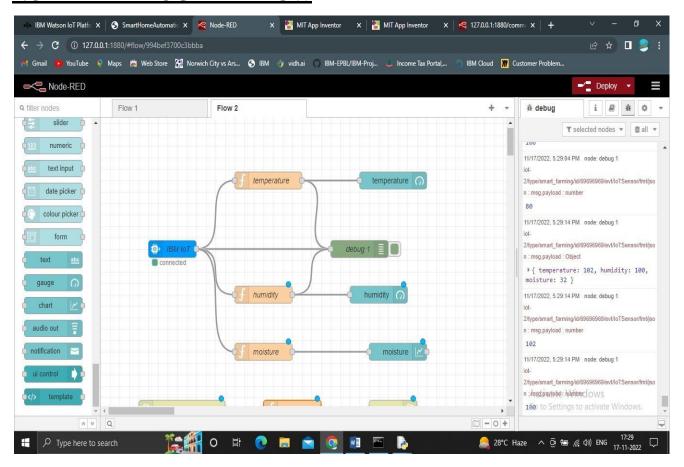
# **SOFTWARES USED:**

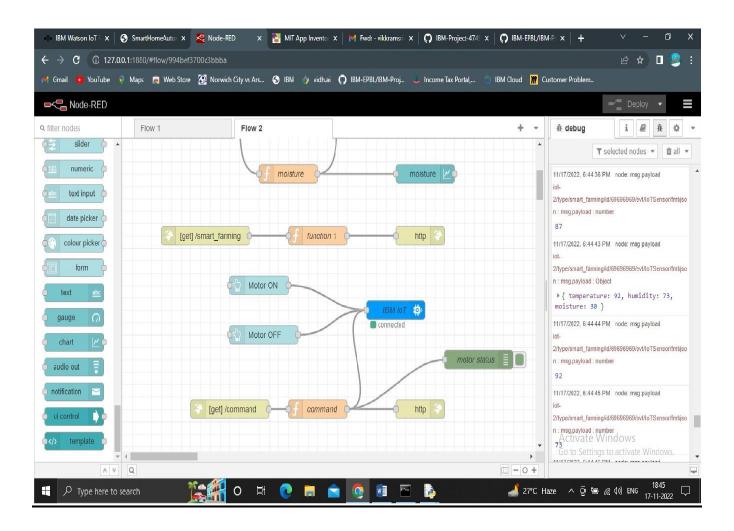
- IBM Cloud
- IBM Watson for IoT
- Node RED
- MIT App Inventor

# **PROCEDURE:**

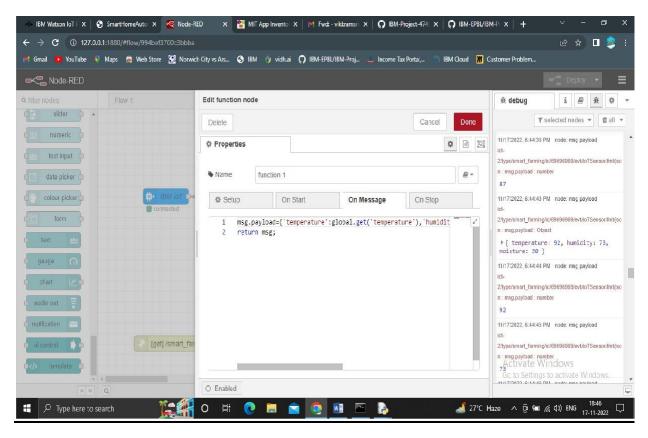
- The mobile application is created using MIT app inventor.
- The app is linked with Node RED using API key generated using IBM IoT Watson platform.
- Using node RED all necessary function nodes and component nodes are created and are programmed using java script functions.
- From here the data's are used to publish in the previously created the web application.
- The received data are graphically represented in Node RED dashboard.
- The data's are also sent to the mobile app which is linked to node RED using API key.
- The data can also be viewed through the app.

#### NODE RED PROGRAM FLOW

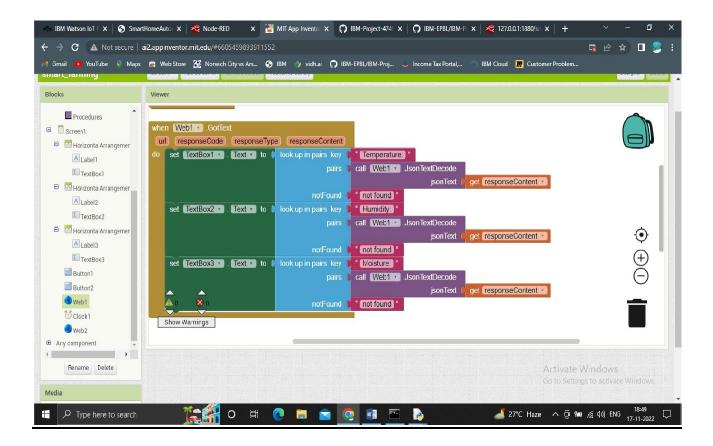




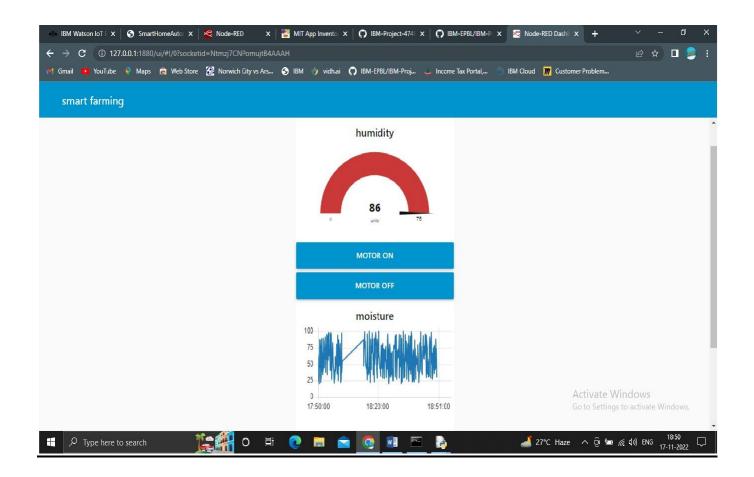
# <u>DEVELOPED WEB APPLICATION AFTER CONNECTING API AND</u> EDITING NODES:

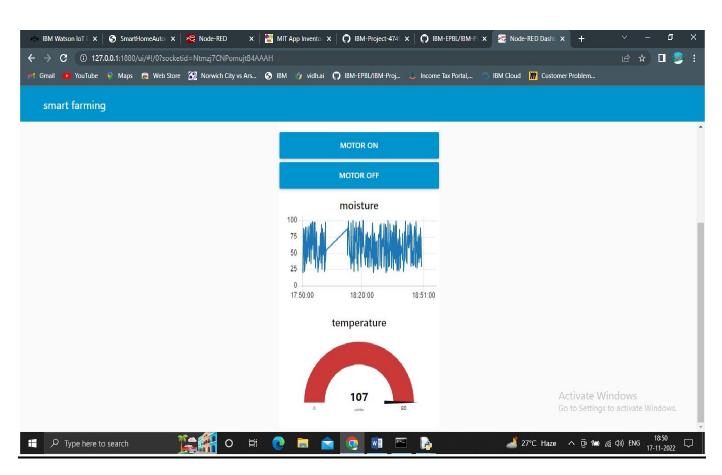


# **DEVELOPED MOBILE APPLICATION:**



### **OUTPUT AT WEB APP UI**





# **MOBILE APPLICATION OUTPUT**

Screen1	
Temperature:	104
Humidity:	91
Moisture:	77
MOTOR ON	
MOTOR OFF	The second second