PROJECT DEVELOPMENT PHASE 2

SPRINT-2

Date	10 November2022
Team ID	PNT2022TMID35368
Project Name	Smart Farmer-IoT Enabled smart farming application
Maximum Marks	8 Marks

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Dashboard	USN-6	As a user, I can enter into dashboard and view the field and environment parameters	15	High	R Abhinav, Rahul Ebenezer, Yogeshwari
Sprint-2		USN-7	As a user, I can control motors from the dashboard	5	High	R Abhinav, Rahul Ebenezer, Yogeshwari

Introduction:-

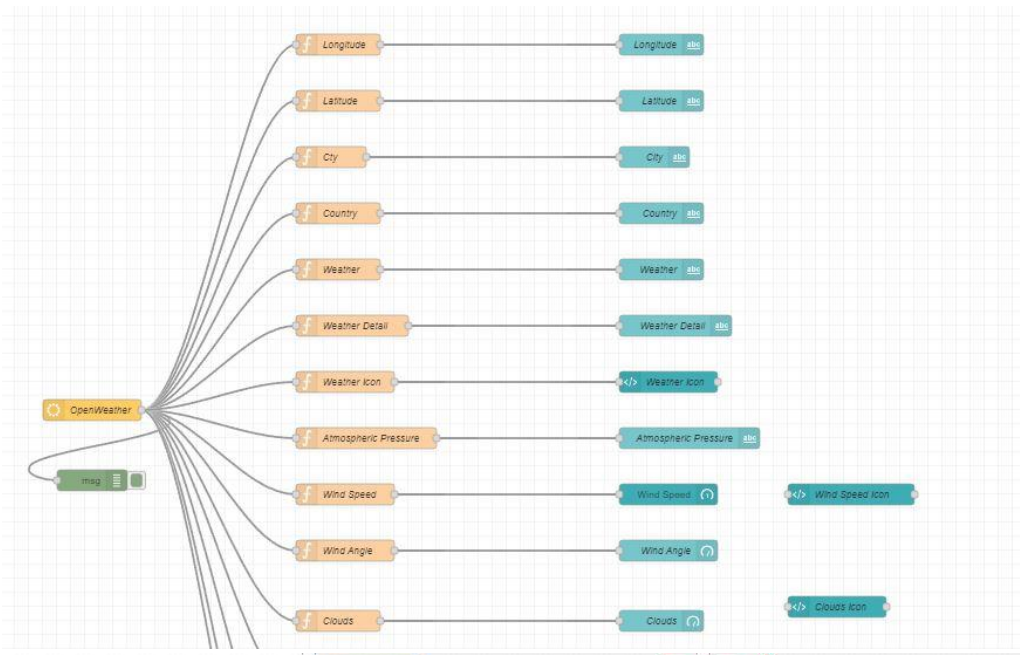
Node-RED Dashboard has been created with values obtained from sensors and OpenWeather API and motors can be controlled through the dashboard. Few minor modifications are also made in appearance and operationality of registration and login page.

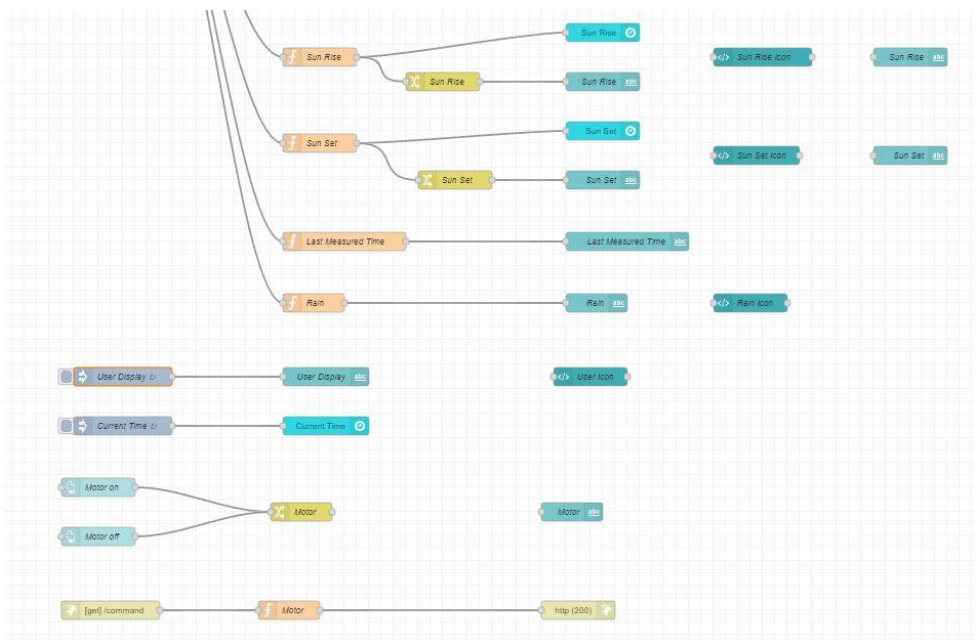
Dashboard:-

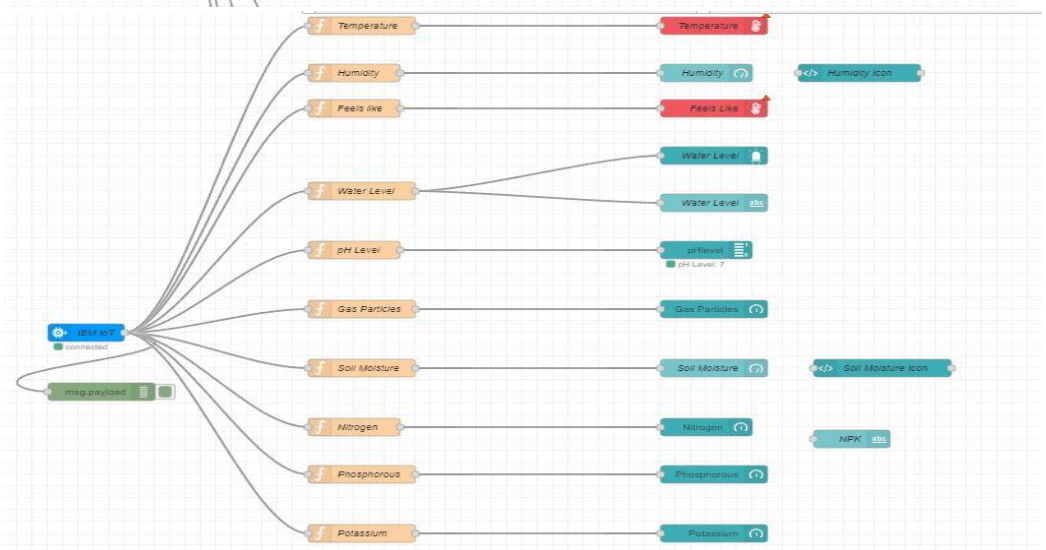
In Wokwi online Simulator, sensor values like humidity, temperature, soil moisture etc are simulated and connected with ESP32 and uploaded to IBM Watson IoT Platform.

Node-RED Dashboard is then created with the values obtained from IoT Platform and additional weather values obtained using Open Weather API. Buttons are also created in the dashboard through motors can be controlled whose results are seen in Wokwi Online Simulator.

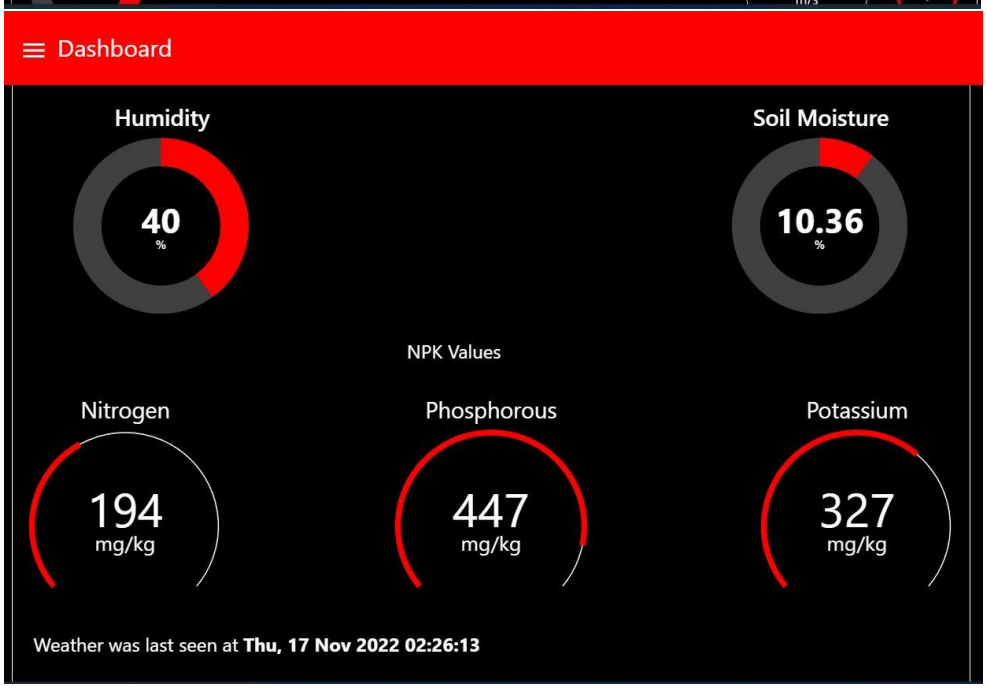
Flows:-



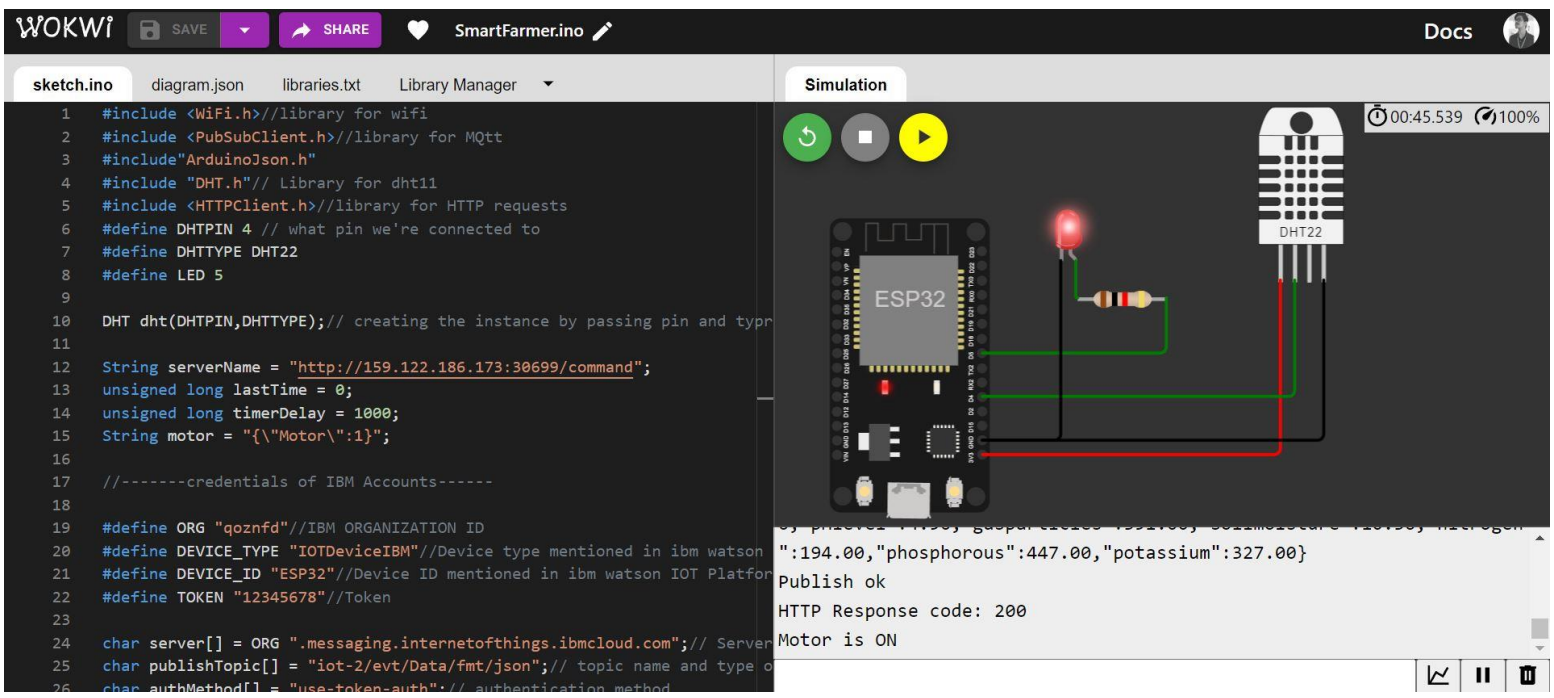




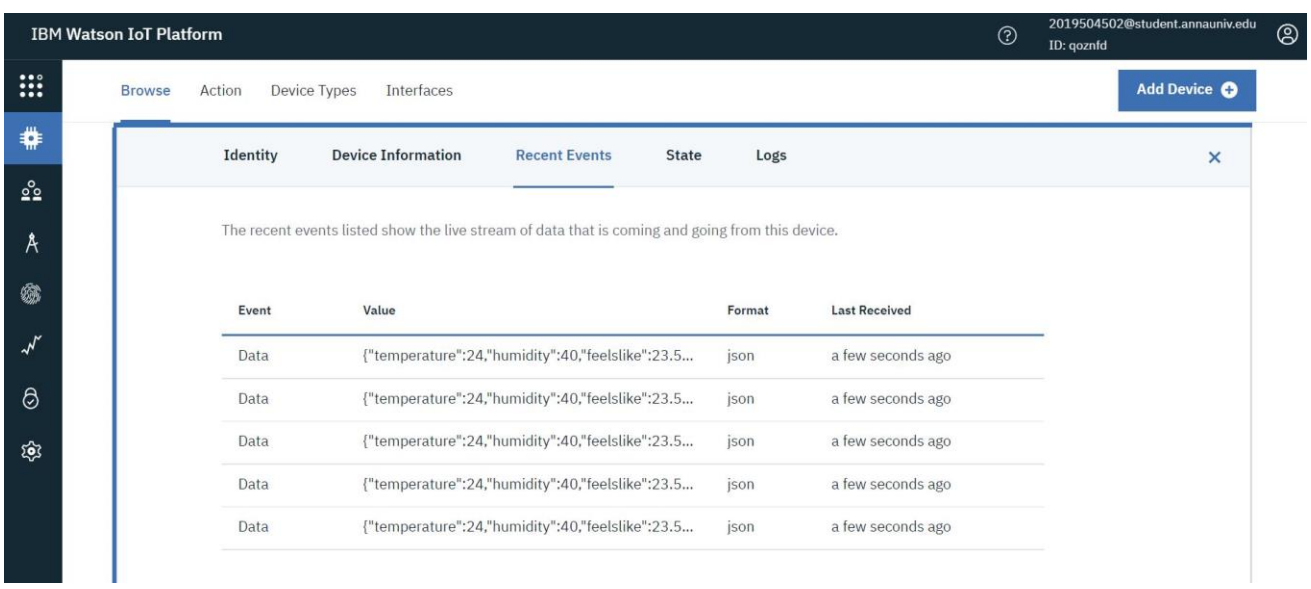
Dashboards:-



Arduino Code:-



IBM Watson IoT Platform:-



Further Works:-

Mobile App is to be created to display sensor values and control motor and finally alert messages are sent and sensor values are stored in a database.