Project Design Phase - I

Solution Architecture

Name	K. Kamalambika
Team ID	PNT2022TMID17466
Project Name	Smart Farmer-IoT Enabled Smart Farming Application
College Name	Sethu Institute Of Technology
Temperatu Humidity S IEM Soil Moisture	Arduino - UNO Mobile Apps User

The different soil parameters (temperature, humidity, Soil Moisture) are sensed using different sensors, and the obtained value is stored in the IBM cloud.

Open Weather API

- ♣ Arduino UNO is used as a processing unit that processes the data obtained from sensors and weather data from weather API.
- Node-red is used as a programming tool to wire the hardware, software, and APIs. The MQTT protocol is followed for communication.
- All the collected data are provided to the user through a mobile application that was developed using the MIT app inventor. The user could make a decision through an app, whether to water the crop or not depending upon the sensor values. By using the app they can remotely operate the motor switch.