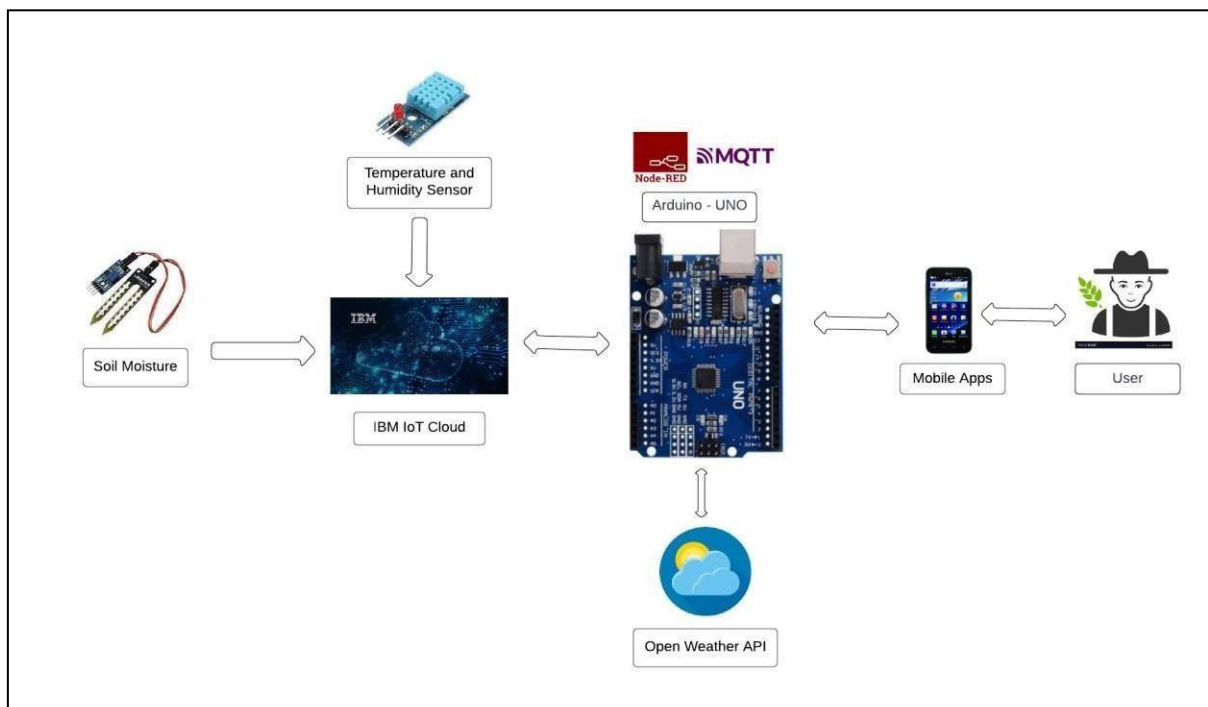


Project Design Phase-I Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID52019
Project Name	Smart Farmer-IoT Enabled Smart Farming Application.
Maximum Marks	4 Marks

Solution Architecture Diagram:



- The different soil parameters (temperature, humidity, Soil Moisture) are sensed using different sensors, and the obtained value is stored in the IBM cloud.
- 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.
- A mobile application that was created using the MIT app inventor gives the user access to all the collected data. Depending on the sensor results, the user might decide via an app whether to irrigate the crop or not. They are able to remotely control the motor switch through the app.