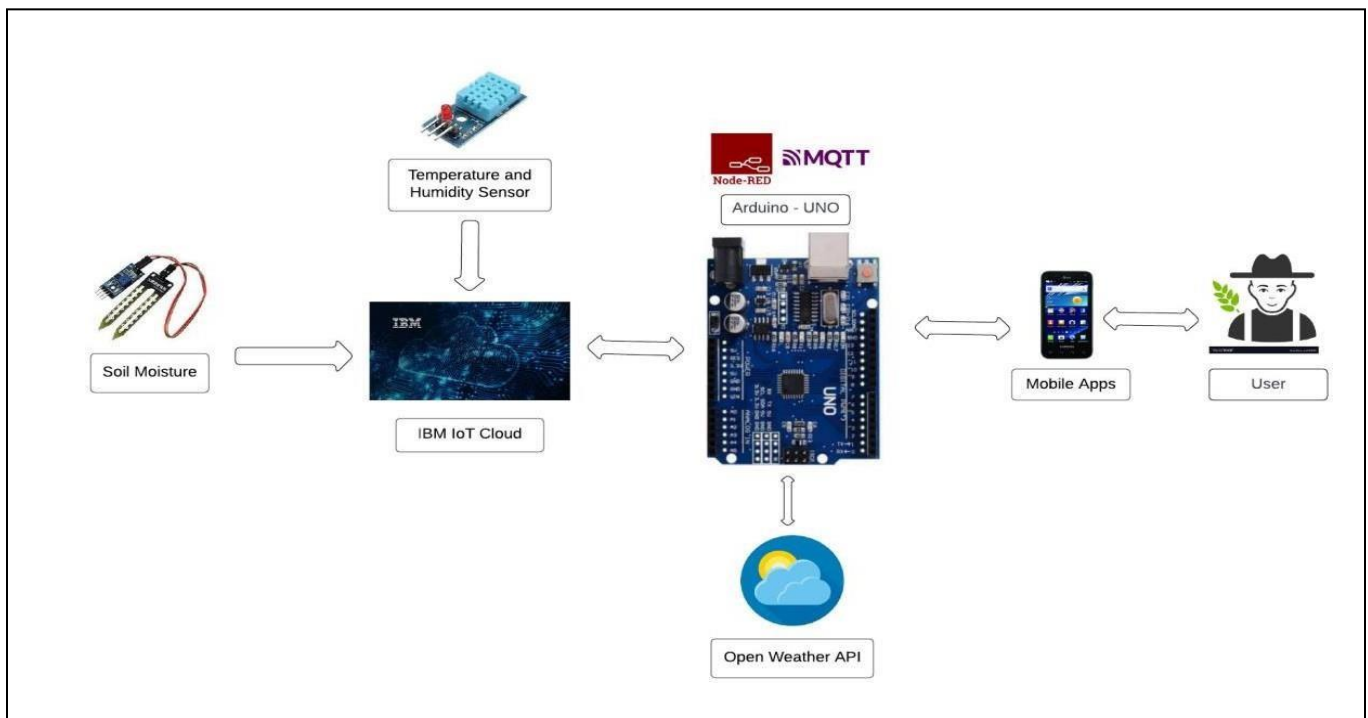


## Project Design Phase - I

### Solution Architecture

Date	21 October 2022
Team ID	PNT2022TMID54280
Project Name	Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	4 Marks



- ❖ 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.
- ❖ All the collected data are provided to the user through a mobile application that was developed using the MIT app inventor. The user could decide 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.