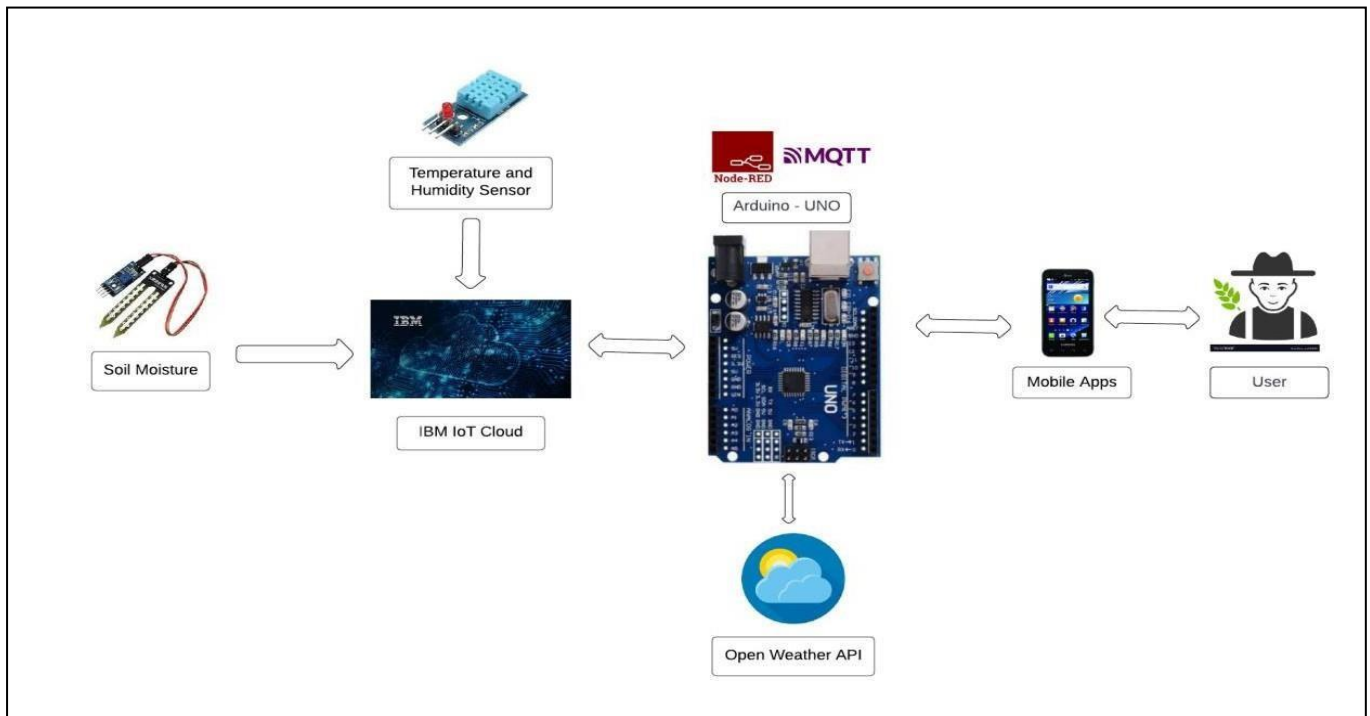


## Project Design Phase - I

### Solution Architecture

|               |  |
|---------------|--|
| Date          | 21 October 2022                                    |
| Team ID       | PNT2022TMID03604                                   |
| 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 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.