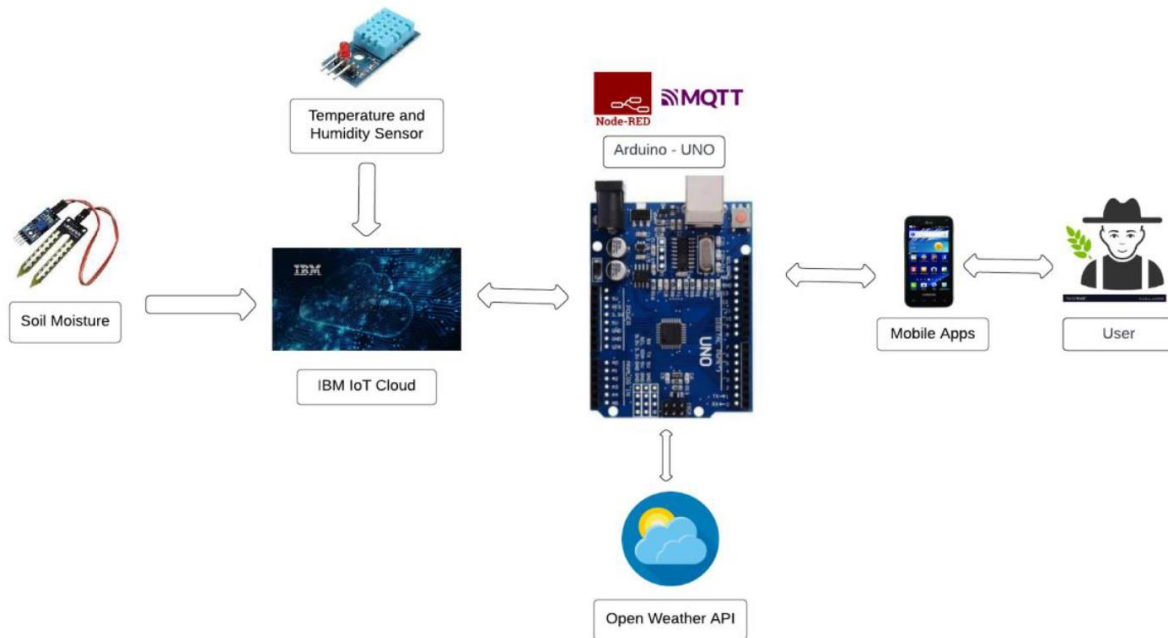


## Project Design Phase-I Solution Architecture

|               |  |
|---------------|--|
| Date          | 14 October 2022  |
| Team ID       | PNT2022TMID11377   |
| Project Name  | Project-Smart Farmer-IOT Enabled Smart Farming Application |
| Maximum Marks | 4 Marks  |



- The different soil parameters temperature, soil moistures and then humidity are sensed using different sensors and obtained value is stored in the ibm cloud.
- Arduino UNO is used as a processing Unit that process the data obtained from the sensors and whether data from the weather API.
- NODE-RED is used as a programming tool to write the hardware, software and APIs. The MQTT protocol is followed for the 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, weather to water the crop or not depending upon the sensor values. By using the app they can remotely operate to the motor switch.