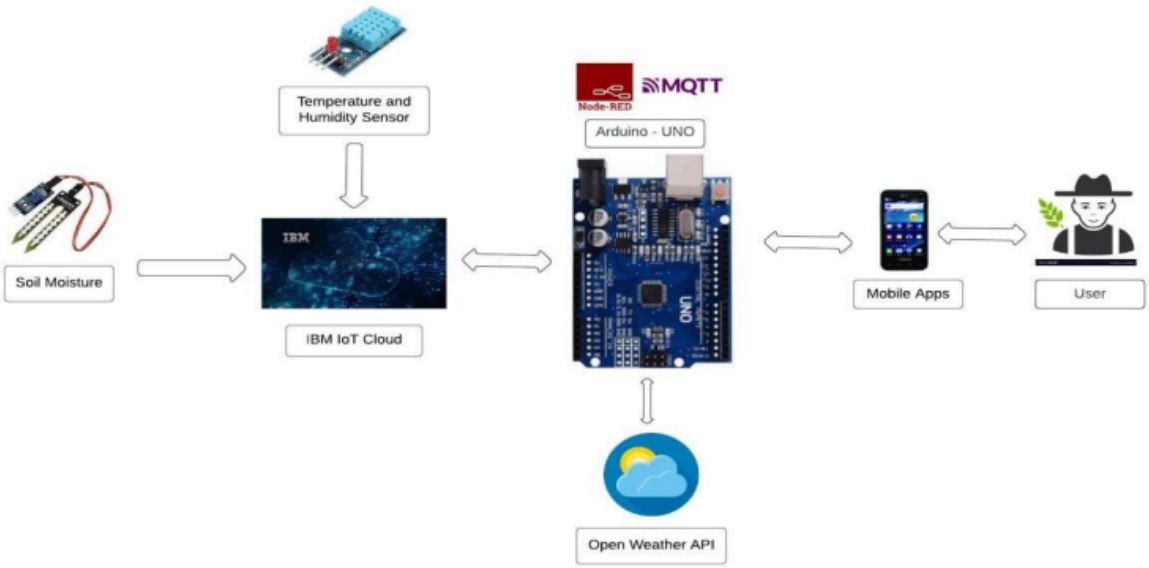
PROJECT DESIGN PHASE - I
SOLUTION ARCHITECTURE

Date	11 October 2022
Team ID	PNT2022TMID15443
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.