Project Design Phase - I

Solution Architecture

Date	18 October 2022
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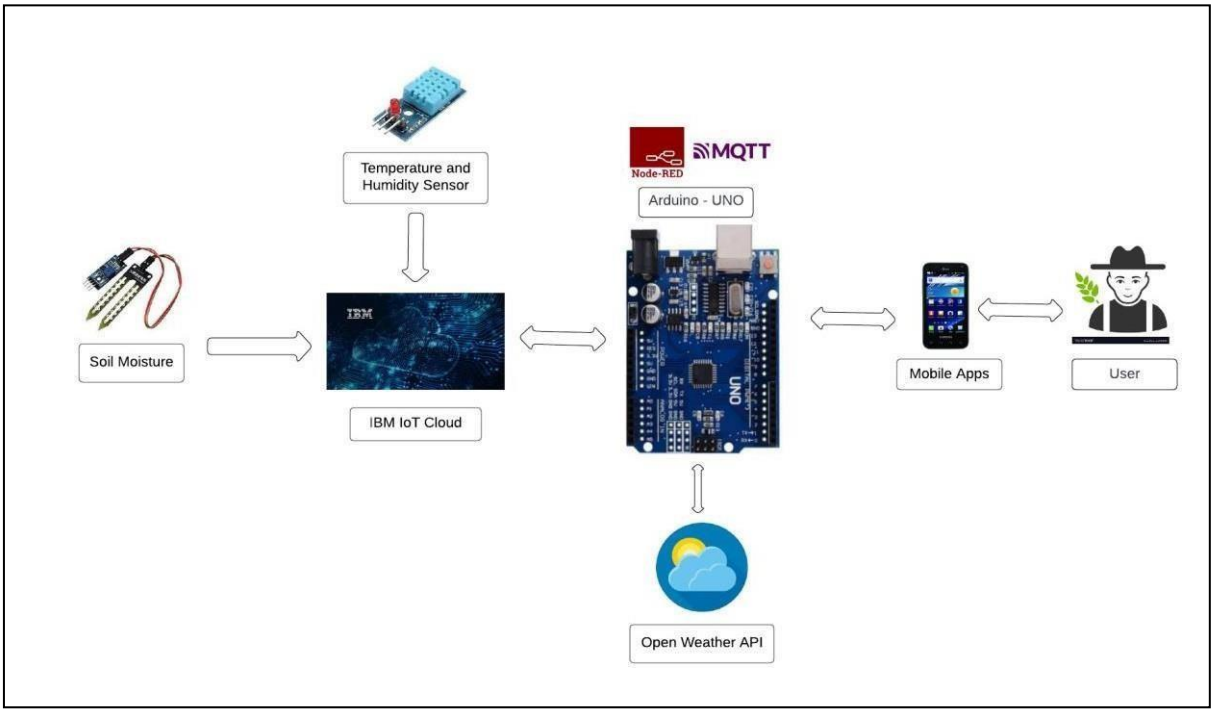
Team ID:	PNT2022TMID04737
Project Name	Project – Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	4 Marks



- Different sensors are used to measure the various soil characteristics (temperature, humidity, and soil moisture), and the results are saved in the IBM cloud.
- The data from sensors and weather data from weather API are processed using an Arduino UNO as a processing unit.
- Node-red is employed as a programming tool to connect the APIs, hardware, and software. It uses the MQTT protocol for communication.
- A mobile application that was created utilising 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 by utilising the app.