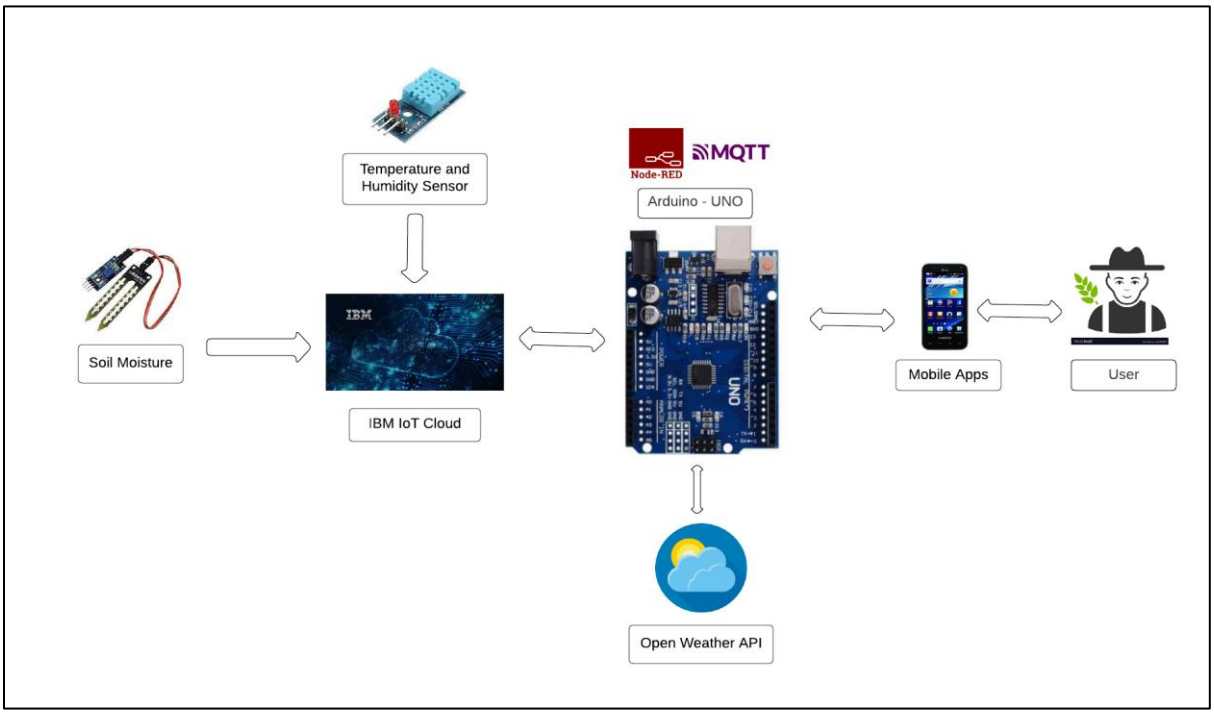
Project Design Phase - I

Solution Architecture

Date	26 October 2022
Team ID	PNT2022TMID40916
Project Name	Project–Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	4Marks



- The different soil parameters (temperature, humidity, Soil Moisture) are sensed using different sensors,and the obtained value is stored intheIBM cloud.
- ArduinoUNO is used as a processing unitthat 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 applicationthatwas developed usingtheMIT app inventor. The user could makea decision through an app, whether to water the crop or not depending upon the sensor values.By using theappthey can remotely operate the motor switch.