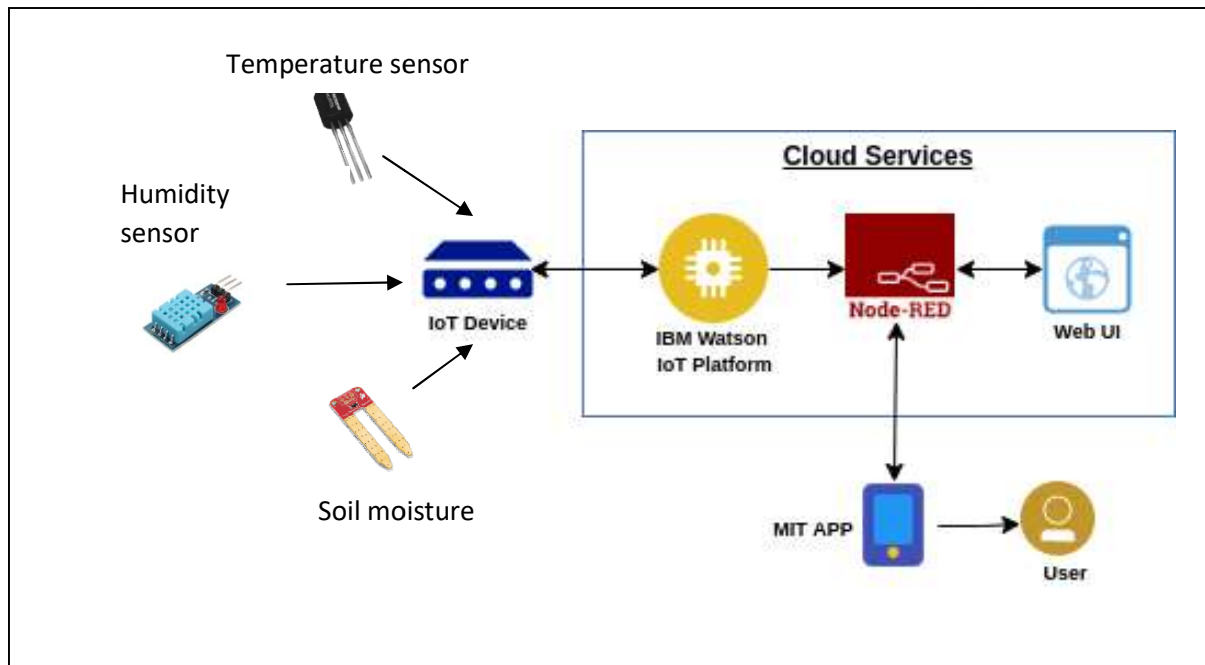


## Project Design Phase-I Solution Architecture

Date	29 October 2022
Team ID	PNT2022TMID22393
Project Name	Smart Farmer -IOT Enabled Smart Farming Application
Maximum Marks	4 Marks



- ✓ The various soil parameters such as temperature, humidity, soil moisture are sensed using various sensors and the values obtained are stored in the IBM cloud.
- ✓ Arduino UNO is used as a processing unit that process the data obtained from sensors and weather data from weather API.
- ✓ Node Red is used as a programming tool to write the hardware, software, and APIs. The MQTT protocol is followed for communication.
- ✓ MIT app inventor is used to develop app and the data collected from the sensors are transmitted to the cloud which is seen in the mobile application.
- ✓ The user can make a decision through the app, whether to water the crop or not depending upon the sensor measurements.
- ✓ With the help of app developed by the MIT app inventor, the users can access the motor switch remotely.