

Project Design Phase-I

Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID04701
Project Name	Smart Farmer – IOT enabled Smart farming application
Maximum Marks	4 Marks

Solution Architecture:

Skillset:

1. Python
2. IBM Cloud
3. IBM IoT Platform
4. IBM Node-red
5. IBM Cloudant DB

- IOT based Smart agriculture system aims at providing best monitoring facilities for the farmers.
- Sensors like Soil moisture sensor, Temperature and humidity sensor that monitors the farmers field and provide data.
- These data are stored in the IOT cloud for the further process.
- Arduino UNO is used as a processing unit that process data obtained from sensors and weather API.
- Node-red is a programming tool to wire a hardware, software and APIs. MQTT Protocol is used for communication.
- The data processed by the Arduino can reach user with the help of the MIT app.
- Based on the data collected, user makes decision whether to water the plant or postpone it. By using this app they can also operate Motor pumps.

Solution Architecture Diagram:

