

Project Design

Phase-I Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID08508
Project Name	Smart Farmer-IoT Enabled Smart Farming Application
Maximum marks	4 Marks

Solution Architecture:

1. The different soil parameters (temperature, humidity, light intensity, pH level) are sensed using different sensors and the obtained value is stored in IBM cloud.
2. Arduino UNO is used as a processing unit which processes the data obtained from sensors and weather data from weather API.
3. Node red is used as a programming tool to wire the hardware, software and APIs. The MQTT protocol is followed for communication.
4. All the collected data are provided to the user through a mobile application which was developed using MIT app inventor. The user could make decision through an app, whether to water the crop or not depending upon the sensor values.

SolutionArchitectureDiagram:

