

Project Design Phase-I Solution Architecture

Date	17 October 2022
Team ID	PNT2022TMID04642
Project Name	Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	4 Marks

Solution Architecture:

The different soil parameters (temperature, humidity, Soil Moisture) are sensed using different sensors, and the obtained value is stored in the IBM cloud.

Arduino UNO is used as a processing unit that 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.

MIT app inventor can be used to develop an app and the integrate the services for the farmers to use. The user could make a decision through an app, whether to water the crop or not depending upon the sensor values. By using the app, they can remotely operate the motor switch.

