Title: Smart Agriculture System
in
INTERNET OF THINGS

by
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#### **PROJECT SUMMARY:**

Farming in India is done using the mundane ways. The fact that most of our farmers lack proper knowledge makes it even more erratic. A large portion of farming and agricultural activities were failed in recent days. Farmers have to bear huge losses and they were mentally disturbed, their results leads to suicide. They were mostly affected in rainy days. But in the recent days, we were to be lock downed by a major pandemic one that is COVID19. But Farmers have to monitored their crops and supplying the sufficient water by staying in home is not possible.

For that only, I created this project SMART AGRICULTURE SYSTEM BASED ON IOT. The aim of this project is to introduce the latest technology into the agriculture business and better crop production. By collecting the status of crop and supplying the sufficient water by switching ON and OFF of the motor by creating a web app. By staying in home, this all should be performed.

#### PROJECT DESCRIPTION:

- Smart Agriculture System based on IoT can monitor soil moisture and climatic conditions to grow and yield a good crop.
- ➤ The farmer can also get the realtime weather forecasting data by using external platforms like Open Weather API.
- ➤ Farmer is provided a mobile app using which he can monitor the temperature, humidity and soil moisture parameters along with weather forecasting details.
- ➤ Based on all the parameters he can water his crop by controlling the motors using the mobile application.
- ➤ Even if the farmer is not present near his crop he can water his crop by controlling the motors using the mobile application from anywhere.
- ➤ Here we are using the Online IoT simulator for getting the Temperature, Humidity and Soil Moisture values.
- ➤ The farmer can monitored their crops by staying in home.By using open weather API he can supply sufficient water to the crops
- ➤ This should be helpful in rainy days. Smart agriculture improves crop productivity and addresses agriculture specific issues like food demand, land management.

# **Project requirements:**

- IBM cloud platform
- Open weather API
- Node-red
- IDLE python
- IBM watson IOT platform and IOT sensor simulator

### **Functional requirements:**

IBM cloud

### **Software requirements:**

Watson IOT platform, Node red, IDLE python

## **Project deliverables:**

Smart agriculture system based on IOT

## **Project Team:**

Varuna priya

Project duration: 30 days

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**THANK YOU**