PROJECT SCOPE

SMART AGRICULTURE SYSTEM BASED ON IoT

Project Summary

In India, agriculture plays an important role for development in food production. In our country, agriculture depends on the monsoons which are not sufficient source of water. So irrigation is used in agriculture field. Internet of Things (IoT) is a milestone in the evolution of technology. IOT plays an important role in many fields, one of that is Agriculture by which it can feed billions of people on Earth in future.

The objective of this project is to overcome this challenge. The system can be operated from remote location through wireless transmission so there is no need to concern about irrigation timing as per crop or soil condition. Sensor is used to take sensor reading of soil like soil moisture, temperature, air moisture and decision making is controlled by user (farmer). The irrigation will be scheduled when the moisture and temperature of the field is reduced. The farmer is notified with the information regarding field condition through mobile periodically. This system will be more useful in areas where there is scarcity of water and will be worth efficient with satisfying its requirements.

Project Requirements

Smart Agriculture System based on IoT helps a farmer yeild a good crop. The farmer can watch his crops from anywhere using the mobile application. The app provides him details about soil mosture, climatic conditions, temperature, humidity and weather forecasting and other parameters with which the farmer can decide when and how much amount of water to be irrigated to his crops. He can irrigate the crops by controlling the motor using the application

Functional Requirements

To develop a mobile application, using concepts of IoT, that helps a farmer to:

monitor soil moisture and climatic conditions

provide realtime weather forecasting

water the crops by controlling motors

Software Requirements

Open Weather API

IBM Watson IoT Cloud

Online IoT simulator

Python IDE

Project Deliverables

A mobile application that can monitor soil moisture, temperature and other parameters and allows a farmer to water his crops by controlling the motors

Project Team

Joan Joshy

Project Schedule

To be completed within 30days (atmost 8hours spent a day)