KICK-OFF MEETING REPORT

PROJECT

Project Title : Smart Agriculture system based on IoT
Project Manager: Miss. Vishakha Dakhane
Internship Mentor: Mr. Durga Prasad

Project Summary

Smart Agriculture System based on IoT is a project introduced by Smart Bridge which can monitor the essential situations required by plants to cultivate. The essential situations required by any plant are proper water level, sunlight, moisture etc. This project specially helps our farmers to get the real time weather forecasting data by using external platforms like Open Weather API. Through the mobile app, farmers can always keep an eye on moisture, temperature, humidity which helps to get good crops in less efforts. For getting the values of moisture, temperature, and humidity, we are using an Online IOT simulator. They can also water his crops by controlling the motors using this app from anywhere.

Project Requirements

In this project, we will be having sensors for temperature, humidity and soil moisture. Through these sensors, we will monitor the data about the situation of plants every moment. Here instead of sensors, we need Watson IoT sensor simulator to send data to the cloud. Then the data will be displayed on the IoT app created by us which will be of great use to check the conditions for farmers.

Technical Requirements

To develop this project that is for building the IOT app the developer should have the knowledge of IOT Application Development and the IOT Cloud Platform.

Software Requirements

We have to set up the development environment for developing the project like installation of Node-Red (For creating the user interface), Python IDE. We also have to create IBM cloud account and then create devices on IBM Watson IoT platform. The

credentials we get while creating the device can be used to get connected with Watson IoT sensor simulator.

Project Stakeholders

As the name of the project says, this project is specially designed to help farmers so that they can give us good crops using this technology in less effort.

Project Deliverables

The outcome of this project simply would be an App which can show the temperature, humidity and moisture of the soil. And also on the user interface there will be two buttons through which we can turn on/off the motor to water the plants.

Project Objectives

1) Connecting things (plants or crops) with internet to get the data at every moment.
2) Efficient utilization of data for weather forecasting.
3) Increased quality of crops which results in good production.
4) Less efforts in less time.