SMARTINTERNZ

Project Name: Smart Agriculture system based on IoT

Project Handled by : Nakka Abhishek

Project Scope Document

1. Project Summary
    - This project is to help farmers to maintain the growth of their plants and maintain various parameters effecting the crops and to have a record and them and to control the motors from anywhere in the world with a simple application .

2. Project Requirements
    - IBM Cloud
    - IBM watson Simulator
    - Nodered
    - IBM Iot Platform
    - Python IDE
    - Open Weather Map Account

3. Functional Requirements
    - The farmer neeeds to plant sensors across his field and power them
    - The sensors collects the data and notify the farmer
    - Whenever the threshold levels are crossed it should notify the farmer
    - Farrmer will be able to control the motors and supply water to fields from anywhere in the world with a simple application.

4. Technical Requirements
    - Sensors, IBM Cloud, Nodered, OpenWeatherMap api, Python,IBM Iot Simulator
    - Hands on Experience on IBM cloud

5. Software Requirements
    - IBM Cloud, Nodered, OpenWeatherMap api, Python,IBM Iot Simulator,
6. Project Deliverables
    - The main aim is to succesfully build an IOT model in agriculture which helps farmers to easily montor their crops and produce a better yield
    - Should successfully retrieve the temperature and humidity values from the sensor and show them to farmer using an app , So that based on all the parameters , he can water the crops by controlling the motors which were built to control by him from anywhere with a proper internet connection
    - We are using Online IOT simulator to bring down the sensor values and show them on the app
    - To show the various parameters of crop on the mobile application to farmer which can control from anywhere

7. Project Team
    - This project is delivered by Nakka Abhishek under the guidance of SmartInternz team
    - The duration of project completion is 1 month

8. Project Schedule

Start and End dates	Activity
Wednesday, May 20	Project Idea and plan
Tuesday , May 26	Explore IBM cloud, Nodered, IBM IOT waton
Thursday, May 28	Connect IOT simulator to Watson IOT Platform
Thursday, June 4	Configure NODERED to get data from IBM IOT Platform and open WeatherMap
Friday, June 5	Build a Web Page
Sunday, June 14	Configure your device to recieve data from web application and control your motors