

SMARTINTERNZ

Project Name: Smart Agriculture system based on IoT

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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 needs 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
- Farmer 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 IDE
- IBM Iot Simulator

6. Project Deliverables

- The main aim is to successfully build an IOT model in agriculture which helps farmers to easily monitor 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 AMBATI VENKATA SAI NITHIN 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