

## **Project Scope Document**

Project Name	Smart Agriculture System Based On IoT
Project ID	SPS_Pro_101
Project Manager	Mr. Dnyanesh Kolhe
Project Mentor	Mr. Durga Prasad
Project Sponsor	Smartbridge
Project Duration	4 Weeks
Kickoff Date	10 <sup>th</sup> June 2020

### **Project Summary**

Smart agriculture system based on IoT is introduced by Smartbridge. Agriculture sector is very much required for a life. Agriculture is the backbone of our country. It is present in the country thousands of years. Over years it has developed and used technologies and equipment has led immense growth and better yield in agriculture.

In this growing technology the aim of Smart Agriculture system based on IoT project to provide mobile application to decrease efforts and save time of farmer. Using this application they can monitor crop condition parameter such as soil moisture, humidity and temperature. On this information they can operate the motor and irrigation system timely provides appropriate water to the crop from anywhere. They can also check current weather information based on that they can cultivate the crop timely.

### **Project Requirement**

- IoT application development.
- IoT cloud platform.
- Sensors for temperature, humidity, soil moisture instead of this used Watson IoT sensor.

### **Technical Requirement**

- IoT Cloud Platform for retrieving data from sensor.
- Open Weather API
- Node Red to develop app

### **Software Required**

- IBM Cloud Platform
- Node-Red
- Open Weather API
- IBM Watson IoT Sensor
- Python IDE

### **Stakeholders:**

This app is specifically developed for farmer. Some efforts of farmer can be decreased while farming.

### **Project Deliverables**

Farmer is provided a mobile app using which he can monitor the temperature, humidity and soil moisture parameters along with weather forecasting details.

### **Future Scope**

The model can be further automated like based on the data received the motor will be turned on or off automatically. The mineral content of the soil can be tested and accordingly crops can be cultivated.