

# **PROJECT KICKOFF**

## **Project Summary:**

Creating an application for the convenience of farmers, to save their time to go and energy to check all the basic necessities like weather conditions, soil conditions, etc.

For the farmers we are creating a flexible application based on IOT.

Smart Agriculture System based on IoT can monitor soil moisture and climatic conditions to grow and yield a good crop.

Farmers will have a mobile application in which they can monitor temperature, humidity and soil moisture parameters along with weather forecasting.

## **Project Requirements:**

Here we are using the Online IoT simulator for getting the Temperature, Humidity and Soil Moisture values.

- Based on all the parameters the farmer can water his crop by controlling the motors using the mobile application.
- Even if the farmer is not present near his crop, he can water his crop by controlling the motors using the mobile application from anywhere.

## **Project Requirement:**

- IoT Application development
- IoT Cloud Platform

## **Functional Requirements:**

- Developing a Web Application
- Controlling the motor through web application

## **Software Requirements:**

- Node-red
- IBM Watson IoT Platform
- Python IDE
- Open Weather API

### Technical requirements:

- Collecting the weather data from Open Weather API
- Creating web app using Node red
- Controlling the motor using web application

### Deliverables:

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