Smart Agriculture System Based On IoT

Project Summary:

- Smart Agriculture System based on IoT can monitor soil moisture and climatic conditions to grow and yield a good crop.
- The farmer can also get the realtime weather forecasting data by using external platforms like Open Weather API.
- Farmer is provided a mobile app using which he can monitor the temperature,humidity and soil moisture parameters along with weather forecasting details.
- Based on all the parameters he 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.
- Here we are using the Online IoT simulator for getting the Temperature,Humidity and Soil Moisture values.

Project Requirements:

- Github account
- Slack channel
- Zoho writer.
- IBM cloud account.
- node red.
- Python IDE
- IOT simulator.

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.
- Based on all the parameters he 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.

Software requirements:

- IBM cloud account.
- node red.
- Python IDE

Project schedule:

- Project Scope, Schedule, Team & Deliverables-Duration: 1 Days
- Setup The Development Environment-Duration: 1 Days
- Explore IBM cloud platform-Duration 1 day
- connect the I0T Simulator to watson I0T platform-2 days
- Configure Nodered To Get The Data From IBM IOT Platform And Open Weather API-2 days
- Building a web app-1 day
- Configure Your Device To Receive The Data From The Web Application And Control Your Motors-2 days