**PROJECT SCOPE DOCUMENT**

**PROJECT SUMMARY**

Agriculture is the root to country’s economic development. In recent times, huge scientific advancement has been implemented in various agricultural fields for the betterment of the future. Despite of various researches, proper assessment and productivity couldn’t be reached. We have tried to focus on different scientific applications which could be put together in agricultural field for better accuracy with better productivity using less man-power. Moreover we include a method for monitoring the agricultural fields from any remote location and assess the basic condition of the field.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.

**2.PROJECT REQUIREMENTS**

**2.1TECHNICAL REQUIREMENTS**

* IOT Cloud Platform
* IOT Application development

**2.2SOFTWARE REQUIREMENTS**

* Operating System:Windows XP or more
* Speed:2GHz or more
* Hard disk space:8GB or more
* Browser: Google Chrome

**3.PROJECT DELIVERABLES**

* Project Plan
* Developing a App based on plan

**4.PROJECT TEAM**

* **Individual Work:** S.Sahana

**5.PROJECT SCHEDULE**

|  |  |  |
| --- | --- | --- |
| **TASK** | **START DATE** | **END DATE** |
| Project Planning & Kickoff | 22.05.2020 | 25.05.2020 |
| Explore IBM Cloud Platform | 26.05.2020 | 28.05.2020 |
| Connect IOT Simulator to Watson IOt platform | 29.05.2020 | 1.06.2020 |
| Configure the NodeRed to get the data from IBM IOT Platform and Open Weather API | 2.06.2020 | 7.06.2020 |
| Building a WebApp | 8.06.2020 | 11.06.2020 |
| Configure a device to receive the data from the web application and control the Motor | 12.06.2020 | 17.06.2020 |