Project Scope

☆We need to Follow these steps to Complete our Project:

- Project Planning and Kickoff
- Explore IBM Cloud Platform
- Connect the IOT Simulator To Watson IOT Platform
- Configure the Node red to Get the Data From IBM IOT Platform And Open Weather API
- Building A Web App
- Configure Your Device to Receive The Data From The Web Application And Control Your Motors
- ☆Our Project main aim is to help farmers to control his motor from home. He/ She can On and Off his motor by using his mobile phone.

☆By using Weather API he can know the weather conditions like temperature, humidity and soil moisture.

Project Background:

- This Project mainly aims to help the farmers to ease their work.
- Smart Agriculture System based on IoT can monitor soil moisture and climatic conditions to grow and yield a good crop.
- Farmer can get the realtime weather conditions by using smart agriculture.
- Instead of physical devices we create devices in the IBM IOT platform and use them in our project.

- We connect our device to the IBM node in the Node-Red framework.
- We need to create Weather API account to configure weather API Platform.
- We then Configure our Nodered to get the weather forecasting data using http requests.
- We Build Web application to create buttons for front end and connect them to backend(IOT paltform).

-

-

-

-

-

Project Schedule:

- Project Planning and Kickoff(15th-16th may)
- Explore IBM Cloud Platform(17th may)
- Connect The IOT Simulator To Watson IOT Platform(17th may)
- Configure The Nodered To Get The Data From IBM IOT Platform And Open Weather API(18th may-30th may)
- Building A Web App(30th may-2nd june)

- Configure Your Device To Receive The Data From The Web Application And Control Your Motors(2nd-6th june)

Project Requirements:

➤IBM Cloud Account and IBM Watson IOT Platform to create device and sensor

➤Python IDE

➤Node-Red

➤Open weather API Platform

-

-

-

Functional Requirements:

➤Measure Temperature.

➤Gauge Temperature.

➤Gauge Humidity.

➤Gauge Pressure.

➤Weather API.

➤Display the sensor readings using Watson IOT sensor.

➤Respond to sensor readings and send alerts to the user.

Technical Requirements:

➤IOT Simulator

Software Requirements:

➤Python

➤Node Red

➤IBM Watson IOT Platform

➤Open Weather API

-

-

-

Project Deliverables:

➤A web App for farmers where he can:

- Monitor temperature,humidity,Soil moisture along with weather forecasting details.
- Control motor for watering the crop through the web app from where he was

Project Team:

➤Harshitha Digajari.