PROJECT KICKOFF TEMPLATE

Project Name:Smart Agriculture based on IOT

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 Nodered 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 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

Project Team:

➤ Akshitha Eldandi