

## PROJECT SCOPE

**Project Summary:** An IoT based Smart Agriculture System which can monitor the soil moisture and climatic conditions from any place and at any time. Based on these data, the motors around the soil can be controlled by the user.

**Project Requirements:** This project requires the creation of accounts in various sites as github, slack and ibm cloud. Then node red and Python IDE is installed. A device must be created in IBM Watson IoT platform and integrated to IoT simulator.

**Functional Requirements:** The project must be able to monitor the soil moisture and climatic condition as all times and provide the data to the users whenever required.

**Technical Requirements:** Cloud is required inorder to store the data. Open weather API is required to generate the data. An app should be created inorder to view the data generated by the system.

**Software Requirements:** NodeRed is used to collect the data generated by the IBM IoT platform and Open weather API. Python programming is used to subscribe to IBM IoT platform.

**Project Deliverables:** The app will provide the data which is produced by monitoring the soil and climatic conditions. This data can be viewed by the user using an mobile app.

**Project Team:** Mohamed Nazeem (Project manager)

**Project Schedule:** Day 1 : Project Planning

Day 2 : Setting up the environment

Day 3-6 : Explore IBM cloud platform

Day 7 : Integration of IBM IoT platform to IoT simulator

Day 8-9: Configuration of NodeRed

Day 10-11: Building Web App

Day 12-14: Configuration of Device