Project Scope Document

- ## Project Summary

Smart Agriculture System based on IoT can monitor soil moisture and climatic conditions to grow and yield a good crop. 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 these factors, the farmer can choose when to irrigate his crops, thus increasing his yield, and being sure not to over or under water his crops. This can also be extended to various other processes both in and out of the agriculture sector.The purpose of this project is to develop a mobile application which serves as an all-inclusive platform wherein the farmer can monitor the current weather details using sensors placed in his field, can forecast future weather conditions, and can also control the system of irrigation, being able to turn the pump ON or OFF based on his crops and the weather details.

- ## Project Requirements

The Requirements of this project are as follows:

a) Access to a stable internet connection.
b) The use of IBM IOT Cloud Platform.
c) The access to a functioning work system

- ## Functional Requirements

a) To understand the flow of information.
b) To be able to build a comprehensive web app.

- ## Technical Requirements

a) The ability to write basic code in Python.
b) The basic knowledge of IOT and its implementation.
c) Very basic logical reasoning.

- ## Software Requirements

a) Python IDE
b) NodeRed
c) The ability to use Git.

- ## Project Deliverables

The result is a mobile appication that is accessible via a stable internet connection, that gives the farmer access to a myriad of data concerning his livelihood, and can save farmers an immense amount of time, resources and money.

- ## Project Schedule

The total time devoted to this project is the duration of 1 month, with the milestones split up across the month.