# Project Scope Document

- Project Summary:

  My project title is Smart Agriculture system based on IoT. In this project, I am collecting the temperature, humidity, soil moisture data from IBM Watson IOT sensor randomly. And also, I am collecting that data from open weather API in a particular region. That data also includes weather forecasts, temperature, sun rise, sun set, coord lon, lat and many more. And we are doing also motor on/off by using a button on interface which gives auto-control of pump. These types of things give us a lot to possible smart farming concept. Farmer can easily get these types of information just by pressing a single button.

- Project Requirements:

  1. IBM Cloud
  2. IBM Watson IOT Module
  3. IBM IOT Stimulator
  4. Node-Red
  5. Python IDLE
  6. Open Weather API
  7. GitHub
  8. ZOHO Writer

- Functional Requirements:

  1. Temperature
  2. Humidity
  3. Soil Moisture
  4. Coord
  5. Wind Speed
  6. Wind Angle
  7. Motor on/off
  8. Sun rise/set

- Technical Requirements:

  1. IBM Cloud
  2. IBM Watson IOT Module
  3. IBM IOT Stimulator
  4. Node-red
  5. Python Idle
  6. Open Weather API

- Software Requirements:

  1. Python Idle
  2. Node-Red

- Project Deliverables:
    1. Concept of Various Topics
    2. How to use Node-Red
    3. How to Make UI
    4. How to make an APP
    5. How to send motor on/off data manually

- Project Team:

    I am the only one person in my project team.

- Project Schedule:

    Mentioned duration is 16.2 days.