PROJECT KICK OFF

- Project Summary :

  Smart Agriculture System is a commercially scalable model which is being built to reduce the efforts of Farmers. It intends to take care of one of the most important part of farming which is watering the crops. It needs to be done at the right time, in right amount and right conditions.

  There are many things to take care of, while considering the watering of crops. If the water is too much, the crops can get damaged by water logging. If we water on a rainy day, the extra rain water may tamper with the growth of crop. If the farmer forgets to turn on the pump for a day or two due to any reason, it can again make the soil too dry for the plants to get their daily nutrition level. Considering many facts, this project is chiefly focused on automating the process of water pump and providing the farmers with an application where they can see the status of pump, moisture of the soil, humidity, temperature as well ass weather forecasting.

  The ultimate goal of this project is to increase the quality of yield by taking care of irrigation process and start the revolutionary era of Farmers by bringing technology in this domain.

- Project Requirements

  - ➤ Farming land is the primary requirement
  - ➤ IoT devices and sensors for collecting the on field data and process the data to make decisions.
  - ➤ Water pump at the field for irrigation.

- Technical Requirements

  - ➤ Hardware at the field
  - ➤ IoT devices - To collect data, and To complete the action decided to be taken after the data processing.

- ➤ Internet conection for the hardware device at the field and monitoring station.

- Software Requirements
  - ➤ Node-Red for the UI designing of web-app.
  - ➤ IBM Watson for data collection, storage and processing.
  - ➤ IoT devices to take action on the processed data.
  - ➤ Open weather map API keys and knowledge of http requests.

- Project Team
  - ⭐ Mentor support from THE SMART BRIDGE team.
  - ⭐ Colleagues

- Project Schedule

  To complete this project we are given approximately four weeks of time.
  My aim is to complete the tasks in:

  1. Project planning and kick off; explore the IBM cloud platform; connect the IOT simulator to Watson IOT platform in 1st week.
  2. Configure the node red to get the data from IBM IOT platform and open weather API in 2nd week.
  3. Building a web app in 3rd week.1
  4. Configure your device to receive the data from web application and control your motors and also complete final report in 4th week.