SMART AGRICULTURE

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- **Project Requirements:**
  - Knowledge about cloud platform especially IBM Cloud.
  - Knowledge about IBM Watson IOT Platform.
  - Current conditions in agriculture in order to optimize IOT solutions.
  - Knowing the requirements of the target audience and drafting feasible offerings.

- **Technical Requirements**
  - Access to IBM Cloud and IOT Platform.
  - Service in the IBM Platform and devices for use in the Watson Platform.
  - Node-Red to create flows and make http requests.

- **Software Requirements**
  - Python code to connect to the IBM Platform and send commands to the device created there.
  - OpenWeather api for weather information: both real-time and forecast of the next few hours.
  - Node Red to make requests to the api, receive data and send commands and data to the Watson device.
  - Node-Red UI
  - Git Hub to share and collaborate with SmartInternz.

- **Project Deliverables**
  - An IOT based Web App that shows relevant information related to a farm and provides certain controls like motor on/off.

- A Node-Red flow that allows making of a User Interface for the web app.
- Python code which connects to the IBM device.
- IBM device which receives data and commands from the node red flows and IOT Simulator.

- **Project Team**
  - Juhi Wani

- **Project Schedule**

Date	Work
15 May	Setting up Work environment
16 May	Create IBM Service and create device
17 May	Connect IBM Watson Device to IOT Simulator and receive and display data
22 May	Explore Node-red platform
23 May	Create a node to send IOT data to the device
24 May	Make http request to api to receive weather data
26 May	Make a dashboard and UI to display data
28 May	Make buttons for the motor control and configure them
1 June	Write Python code to connect to ibm iot device
5 June	Make required changes in code about display and requests, etc.
7 June	Configure the UI to make it readable and user friendly