PNT2022TMID07016 – IDEA 3

SMART FARMER - IoT Enabled Smart Farming Application

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PROBLEM STATEMENT:

- IoT-based agriculture systems help the farmer in monitoring different parameters of his field like soil moisture, temperature, and humidity using some sensors.
- Farmers can monitor all the sensor parameters by using a web or mobile application even if the farmer is not near his field. Watering the crop is one of the important tasks for the farmers.
- They can make the decision whether to water the crop or postpone it by monitoring the sensor parameters and controlling the motor pumps from the mobile application itself.

SOLUTION:

- **Temperature and Humidity Sensor** : DHT11 sensor is used to measure Temperature and humidity both.A humidity sensor (or hygrometer) senses, measures and reports both moisture and air temperature. The ratio of moisture in the air to the highest amount of moisture at a particular air temperature.

- **soil moisture sensor** : Soil Moisture sensor measures the water content in soil using capacitance. It influences will act as a open circuit, hence the output is maximum. The Soil Moisture sensor is platinum coated for high efficiency, it is anti-rust, and the sensor has a long life.

- Based on the evaluation, an Alert message can be thrown to the user when the sensor value reaches the maximum range or it reaches down the minimum range.