

PNT2022TMID07016 – IDEA 3

SMART FARMER - IoT Enabled Smart Farming Application

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PROBLEM STATEMENT:

- IoT-based agriculture system helps 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:

1. The thermal camera can be placed in a drown.
2. By analysing and processing the thermal footage of the field, we can get the humidity level, temperature level., etc.
3. The data after processing the footage are updated to the cloud storage.
4. The readings are evaluated by the program with the minimum range and with the maximum range.
5. Based on the evaluation, Alert message can be thrown to the user when the sensor value reaches to the maximum range or it reaches down the minimum range.
6. When the user gets the alert message, he/she can verify and can make decision for the situation.