PNT2022TMID07016 – IDEA 2

SMART FARMER - IoT Enabled Smart Farming Application

TEAM LEAD: VISHNUKUMAR D

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 sensors to sense the soil moisture, humidity and temperature should be placed in the field.
2. The readings from the sensors are updated to the cloud storage.
3. The readings are evaluated by the program with the minimum value and with the maximum value.
4. 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.
5. When the user gets the alert message, he/she can verify and can make decision for the situation.
6. In addition, the level of water in the well can be monitored and also updated to the cloud.
7. Now the user can also get the idea about the water level in the field.
8. Automation can be done for,
9. When the water level reaches the minimum level or the field reaches the maximum moisture level, the motor can be turned off automatically.
10. When the soil moisture reaches to minimum level and the water level is needed enough , the motor can be automatically turned on.