SOLUTION

REQUIREMENTS.

Project Name	**IOT Based Smart Crop Protection System forAgriculture.**
Team ID	PNT2022TMID35045

FUNCTIONAL REQUIREMENTS :

- **Following are the functional requirements of the proposed solution.**

S.NO.	Functional Requirement.	Sub Requirement.
1.	User Visibility	It sense near by animals in the farming field and send and SMS to the farmer.
2.	User Reception	It gives the data values of weather condition,temperature,humitidy are received in the message formet to the farmer.
3.	User Understanding	Based on the sensor data values to get the information about the farming land.
4.	User Action	Crop idendification distribution and area statistics to help make better decisions. Natural disaster monitoring and disease warning to reduce planting risk.

NON-FUNCTIONAL REQUIREMENTS :

- **Following are the non-functional requirements of the proposed solution.**

S.NO.	Non-Functional Requirement.	Description.
1.	Usability	IoT in agriculture uses robots,drones,remote sensors,and computer imaging combined with contiuously progressing machine learning and analytical tools for monitoring crops , surveying , and mapping the fields.
2.	Security	Exchanging data should be end to end encrypted form.
3.	Reliability	It has a capacity to recognize the disturbance near the field and doesn't give a false to the farmer.
4.	Performance	Must provide acceptable response times to users regardless of the volume of data that is stored and the analytics that occurs in background. Bidirectional, near real-time communications must be supported. This requirement is related to the requirement to support industrial and device protocols at the edge.
5.	Availability	IOT Solutions and domains demand highly available systems for 24 x 7 operations. Isn't a critical production application, which means that operations or production don't go down if the IOT solution is down.