SOLUTION REQUIREMENTS.

Project Name	IOT Based Smart Crop Protection System for	
	Agriculture.	
Team ID	PNT2022TMID16228	
Date	17 Oct 2022	

FUNCTIONAL REQUIREMENTS:

Following are the functional requirements of the proposed solution.

S.NO.	Functional Requirement.	Sub Requirement.
1.	User Visibility	Sense animals nearing
		the crop field & sounds
		alarm to woo them
		away as well as sends
		SMS to farmer using
		cloud service.
2.	User Reception	The Data like values of
		Temperature,
		Humidity, Soil
		moisture Sensors are
		received via SMS.
3.	User Understanding	Based on the sensor
		data value to get the
		information about the
		present of farming
		land.
4.	User Action	The User needs take
		action like destruction
		of crop residues, deep
		plowing, crop rotation,
		fertilizers, strip
		cropping, scheduled
		planting operations.

NON-FUNCTIONAL REQUIREMENTS:

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

S.NO.	Non-Functional Requirement.	Description.
1.	Usability	Mobile Support Users must be able to interact in the same roles & tasks on computers & mobile devices where practical, given mobile
2.	Security	capabilities. Data requires secure access to must register and communicate securely on devices and authorized users of the system who exchange information must be able to do.
3.	Reliability	It has a capacity to recognize the disturbance near the field and doesn't give a false caution signal.
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 productiondon't go down if the IOT solution is down.
6.	Scalability	System must handle expanding load & data retention needs that are based on the upscaling of the solution scope, such as extra manufacturing facilities and extra buildings.