SOLUTION REQUIREMENTS.

Project Name	IOT Based Smart Crop Protection System for Agriculture.
Team ID	PNT2022TMID44156
Date	18 Oct 2022

FUNCTIONAL REQUIREMENTS :

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

S.NO.	Functional Requirement.	Sub Requirement.
1.	User Visibility	Sense animals approaching the crop field &it will sounds alarm to chase them away as well as sends SMS to harvester using cloud service.
2.	User Reception	The Data similar to values ofTemperature, Humidity, Soil moisture Sensors are received via SMS.
3.	User Understanding	Based on the sensor data value to obtain the information regarding the present of agricultural land.
4.	User Action	The User needs to take action similar to devastation of yield 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 should be able to interact in the same roles & interact on computers & mobile devices where realistic, given mobile capabilities.
2.	Security	Data requires safe access and have to register and communicate securely on devices and official usersof the system who exchange information must be able to do.
3.	Reliability	It has a ability to identify the trouble near the field and doesn't give a fake caution signal.
4.	Performance	Must offer satisfactory reply to users despite 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 associated to the requirement to support industrial and device protocols at the edge.
5.	Availability	IOT Solutions and domains demand extremely accessible systems for 24 x 7 operations. Isn't a serious production application, which means that operations or production don't go down if the IOT solution is down.
6.	Scalability	System must handle increasing load & data retention needs that are based on the up scaling of the resolution scope, such as added manufacturing facilities and extra buildings.