Project Design Phase-II
Solution Requirements

Project Name	IOT Based Smart Crop Protection System for Agriculture
Team ID	PNT2022TMID03994
Marks	4 Marks
Date	3 November 2022

FUNCTIONALITY REQUIREMENTS:

S.No.	Functional Requirement	Description
1.	User Visibility	Cloud services are used to send SMS to farmers and sound an alert when it detects animals approaching the field to entice them away.
2.	User Reception	Data such as sensor readings for soil moisture, humidity, and temperature are obtained by SMS.
3.	User Understanding	Using sensor data values, information on the current state of farming land is obtained.
4.	User Action	The user must take action by destroying crop residues, deep ploughing, rotating crops, applying fertilizers, and planting crops on a set schedule.

NON-FUNCTIONALITY REQUIREMENTS:

S.NO.	Non-Functional Requirement	Description
1.	Usability	Users should experience the same interaction in mobile support as that of being experienced via computer devices
2.	Security	Implementation of secure access of data for the authorized users to communicate and exchange data.
3.	Reliability	It has the ability to detect the disturbance with accuracy.

4.	Performance	Responses in considerable amount of time irrespective of the quantitative data that need to be processed in backend.Acting as a bidirectional and real time communication.
5.	Availability	Provides 24/7 functioning as IOT solutions and domains are widely used and production does not get delayed even if the IOT solution is down.
6.	Scalability	System handles the upcoming extra load depending on the needs of upscaling of the solution scope for instance, adding extra features.