Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	05 November 2022
Team ID	PNT2022TMID28957
Project Name	Iot based Smart crop protection system for agriculture
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Install the app. Signing up with Gmail or phone number Creating a profile. Understand the guidelines
FR-2	User Confirmation	Email or phone number verification required via OTP.
FR-3	Accessing datasets	Data's are obtained from iot device and send to cloud
FR-4	Mobile application	Farmer is provided a mobile app using which he can monitor the temperature, humidity and soil moisture parameters along with weather forecasting details.

Non-functional Requirements: Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	An intelligent crop protection system helps the farmers in protecting the crop from the animals and birds which destroy the crop.
NFR-2	**Security**	It was created to protect the crops from animals.
NFR-3	**Reliability**	Increase efficiency, improve quality, and lower costs. And farmers can protect their land.
NFR-4	**Performance**	When animals or birds enter the land the sensor detects and alert the farmer via message .
NFR-5	**Availability**	We can defend the crops against wild animals by creating and implementing resilient hardware and software.

NFR-6	**Scalability**	This system's integration of computer vision algorithms with IBM cloudant services makes it more efficient to retrieve photos at scale, enhancing scalability.