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

Date	31 October 2022
Team ID	PNT2022TMID50334
Project Name	Project – 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 Creating a profile. Understand the instructions.
FR-2	User Confirmation	Email verification required via OTP or gmail.
FR-3	Accessing datasets	Data's are obtained by cloud.
FR-4	Interface sensor	Connect the sensor ,controller connected with server and the application. When animals enter the field , the alarm is generated.
FR-5	Mobile application	It is used to monitor the crops from insects ,animals, bird and field sprinklers.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	By using smart protection systems the crops are protected from animals and birds.
NFR-2	**Security**	It was constructed for protecting the crops.
NFR-3	**Reliability**	It help farmers grow more food on less land by protecting crops from pests, diseases and weeds as well as raising productivity per hectare.
NFR-4	**Performance**	The iot devices, sensors which are connected as the systems will monitor the crops and the data will send via messages to farmers when the animals are entered in the field .
NFR-5	**Availability**	We can defend the crops against wild animals by creating and implementing hardware and software.
NFR-6	**Scalability**	This systems is more scalable which has an efficient way to retrieve the data from ibm cloud services.