Project Design Phase-II

Solution Requirements (Functional & Non-functional)

IoT Based Smart Crop Protection System For Agriculture

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	Confirmation via Email Confirmation via phone number verification required via OTP.
FR-3	Accessing datasets	Data's are obtained by cloudant DB.
FR-4	Interface sensor	Connect the sensor and the application When animals enter the field , the alert is generated.
FR-5	Mobile application	It is used to predict the temperature,humidity which makes the crop yield better.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	This project's contributes the farm protection through the smart protection system.
NFR-2	**Security**	It was created to protect the crops from animals,climate change.
NFR-3	**Reliability**	Farmers are able to safeguard their lands with the help of this technology. They will also benefits from higher crop yields, which will improve our economic situation.
NFR-4	**Performance**	When animals attempt to enter the field, IOT devices and sensors alert the farmer also when the climatic condition changes this also gives an

		alert by the indication of message.
NFR-5	**Availability**	We can defend the crops against wild animals by devloping and deploying resilient hardware and software.
NFR-6	**Scalability**	The ibm cloud service is involved which uses computer vision techniques integrated at cloudant service. It helps efficiently to retrieve images in large scale.