Project Design phase-II

Solution Requirements (Functional and Non functional)

Date	15 October 2022
Team ID	PNT2022TMID49700
Project Name	Project: Iot based smart crop protection system
Maximum Marks	4 marks

Functional Requirements:

Following are the functional requirements of the proposed solution

FR NO.	**Functional Requirement(Epic)**	**Sub Requirements(story/ sub-Task)**
FR-1	User Requirements	Control the animals and birds Monitoring soil moisture, temperature and humidity Automatic sprinkler irrigation system
FR-2	User Registration	Download the app Registration through Gmail Create an account Follow the instructions
FR-3	User Confirmation	Confirmation via Email Confirmation via OTP Confirmation via phone
FR-4	User Delivery	Product will be delivered to registered addresses

		▯ Free installation and 2 years warranty
FR-5	User Payments	▯ Pay via UPI/Net Banking ▯ Pay via Debit/ Credit/ ATM Card ▯ Pay via Cash on delivery
FR-6	Product feed back	▯ Through phone calls ▯ Through Google forms ▯ Through Email

Non- Functional Requirements:

Following are the non- Functional requirements of the proposed solution

NFR NO.	Non-Functional Requirement	Description
NFR-1	Usability	Have an easily to understand guidebook. simpler to use the product is easy to use even by farmers who are illiterate
NFR-2	Security	Applications security requires two-step authorization. Password and passkeys will be given out based on the needs of the users.
NFR-3	Reliability	This project will help farmers in protecting their fields and save them from significant financial losses. Hardware needs to be checked and maintained regularly.
NFR-4	Performance	IOT devices and sensors are used to indicate the farmer by a massage when animals try to

		enter into the field and also we use an SD card module that helps to store a specified sounds to scare the animals.
NFR-5	Availability	Are available soil moisture, temperature, humidity and irrigation value.
NFR-6	Scalability	Since this system uses computer vision techniques integrated with IBM cloudant services helps efficiently to retrieve images in large scale thus improving scalability.