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

Date	31-10-2022
Team ID	PNT2022TMID43896
Project Name	Smart Farmer-IOT Enabled Smart Farming Application

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***	✓ ***Registration through Gmail*** ✓ ***Registration through phone number***
FR-2	❖ ***User Confirmation***	✓ ***Confirmation via Email*** ✓ ***Confirmation via OTP*** ✓ ***Confirmation via verification link sent to registered mail id***
FR-3	❖ ***Roles and service***	✓ ***Choose roles (ex: farmer, student etc.)*** ✓ ***Enter the personal details.*** ✓ ***Choose the type of service or options (ex: irrigation, pest management, crop management etc.)***
FR-4	❖ ***Terms and conditions***	✓ ***Accepts the terms and condition for the chosen role and options***
FR-5	❖ ***Details of farm and plans***	✓ ***Enter the details of farming land and vegetation.*** ✓ ***Choose the crop you want to plant*** ✓ ***Choose the types of plans (ex: regular and premium)***
FR-6	❖ ***Details according to farm information***	✓ ***Check the weather information*** ✓ ***Enter the soil nutrient and pH value*** ✓ ***click SAVE*** ✓ ***Soon the details will share to registered mail*** ✓ ***EXIT***

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	❖ ***Usability***	✓ ***A system is built for monitoring the crop field with the help of sensors and automating the irrigation system and helps the farmer to understand the important aspects.***
NFR-2	❖ ***Security***	✓ ***Applications must be designed with the security of their use in mind. This includes personal data and their user's well-being.***
NFR-3	❖ ***Reliability***	✓ ***It allows farmers to maximize yields using minimum resources such as water, fertilizers, seeds etc.***
NFR-4	❖ ***Performance***	✓ ***It increases efficiency and reduce the environmental impacts and to implement technology properly to minimize cost.***
NFR-5	❖ ***Availability***	✓ ***This concept focused on providing the agricultural industry with the infrastructure to leverage advanced technology.***
NFR-6	❖ ***Scalability***	✓ ***It provides the recognition of each object that makes up a solution and ensure communication. The system must remain operational regardless.***