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

Date	03 October 2022
Team ID	PNT2022TMID29114
Project Name	Smart-Agricultural
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)
1	❖ ❖ *User Registration*	✓ ✓ *Registration through Gmail* ✓ ✓ *Registration through phone number*
2	❖ ❖ *User Confirmation*	✓ ✓ *Confirmation via Email* ✓ ✓ *Confirmation via OTP* ✓ ✓ *Confirmation via verification link sent to registered mail id*
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.)*
4	❖ ❖ *Terms and conditions*	✓ ✓ *Accepts the terms and condition for the chosen role and options*
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)*
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.

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