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

Date	09 November 2022
Team ID	PNT2022TMID00236
Project Name	Smart Farmer – IoT Enabled Smart Farming
	Application
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	Registration through Gmail
		Create a new username and password
FR-2	User Confirmation	Confirmation via Email
		Confirmation via OTP
FR-3	User login	Login using the credentials we have used during
		registration
FR-4	User permission	Get permission from user to access their location,
		camera, storage, wifi, audio and contacts.
FR-5	User Details	Get user details like name, mobile number, email, types of
		crops etc.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The application UI will be very simple and user friendly. The functions will be easily accessible. Even people with less smartphone knowledge will be able to understand.
NFR-2	Security	The smart farming application uses email or mobile number of the user for access. Correct password needs to entered to access the account. Therefore, intruders cannot access the application easily
NFR-3	Reliability	It has good consistency and Accuracy as it actively helps farmers to better understand the important factors such as water level, weather, humidity and soil moisture.
NFR-4	Performance	The performance of smart farming is high and it is very efficient as it is very easy to understand and has a high security and scalability.
NFR-5	Availability	This smart farming application is enabled at any system like laptop, mobile phone, desktop, tablets etc

NFR-6	Scalability	smart farming refers to the adaptability of a system to increase the capacity, the number of devices such as sensors and actuators, while enabling timely analysis.