

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

Date	23 October 2022
Team ID	PNT2022TMID34687
Project Name	SmartFarmer - 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 Form. Registration through Gmail. Registration through LinkedIn.
FR-2	User Confirmation	Confirmation via Email. Confirmation via OTP.
FR-3	Sensor Function for farming System	Measure the Temperature and Humidity Measure the Soil. Monitoring Check the crop diseases.
FR-4	Manage Modules	Manage Roles of User. Manage User permission.
FR-5	Check whether details	Temperature details. Humidity details.
FR-6	Data Management	Manage the data of weather conditions.. Manage the data of crop conditions. Manage the data of live stock conditions.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none"> ➤ Farmers are very conservative in their choice of technology so that they reduce risks and tend to choose traditional techniques. ➤ User friendly guidelines for users to avail the features. ➤ Most simplistic user interface for ease of use.
NFR-2	Security	<ul style="list-style-type: none"> ➤ The adoption of sensor based technologies and cloud supported smart applications in agriculture has unleashed opportunities for adversaries to orchestrate cyber attacks. ➤ All the details about the user are protected from unauthorized access. ➤ Detection and identification of any misfunctions of sensors.
NFR-3	Reliability	<ul style="list-style-type: none"> ➤ Implementing Mesh IoT Networks. ➤ Building a Multi-layered defence for IoT Networks.
NFR-4	Performance	The use of modern technology solutions helps to achieve the maximum performances thus resulting in better quality and quantity yields.
NFR-5	Availability	This app is available for all platforms.
NFR-6	Scalability	Scalability refers to the ability to increase available resources and system capability without the need to go through a major system redesign or implementation.