

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

Date	29 October 2022
Team ID	PNT2022TMID38131
Project Name	Project - SmartFarmer - IoT Enabled Smart Farming Application
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	<ul style="list-style-type: none">• Registration through Form• Registration through Gmail• Registration through LinkedIn
FR-2	User Confirmation	<ul style="list-style-type: none">• Confirmation via Email• Confirmation via OTP
FR-3	Sensor function for framing system	<ul style="list-style-type: none">• These equipment equipped with sensors that provide information about soil temperature, air temperature, rainfall, leaf wetness, chlorophyll, wind direction, solar radiation, relative humidity, atmospheric pressure etc.
FR-4	Check weather Details	<ul style="list-style-type: none">• Temperature Details• Humidity Details
FR-5	Manage Modules	<ul style="list-style-type: none">• To manage the permission access for the Users• Manage data of certain conditions• Manage the user roles.

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none">• This type of non functional requirement is concerned with characteristics such as aesthetics and consistency of the user interface.• It is important to describe the ease with which the solution can be learned and operated by the intended users.
NFR-2	Security	<ul style="list-style-type: none">• Security is a non-functional requirement assuring all data inside the system or its part will be protected against malware attacks or unauthorized access
NFR-3	Reliability	<ul style="list-style-type: none">• Reliability specifies how likely the system or its element would run without a failure for a given period of time under predefined conditions.
NFR-4	Performance	<ul style="list-style-type: none">• The areas of performance, availability, reliability, usability, flexibility, configurability, integration, maintainability, portability, and testability.• This category may also include implicit requirements for modification and upgrades, reusability, and interoperability
NFR-5	Availability	<ul style="list-style-type: none">• Availability describes how likely the system is accessible to a user at a given point in time.• While it can be expressed as an expected percentage of successful requests, you may also define it as a percentage of time the system is accessible for operation during some time period.
NFR-6	Scalability	<ul style="list-style-type: none">• Scalability is the ability of the application to handle an increase in workload without performance degradation, or its ability to quickly enlarge.• It is the ability to enlarge the architecture to accommodate more users, more process.