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

Date	03 October 2022
Team ID	PNT2022TMID30750
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	• Registration through Form • Registration through Gmail • Registration through LinkedIN
FR-2	User Confirmation	• Confirmation via Email • Confirmation via OTP
FR-3	Sensor function for framing system	• 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	• Temperature Details • Humidity Details
FR-5	Manage Modules	• 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**	• 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**	• 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**	• 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**	• 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**	• 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**	• 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.