

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

Date	16 October 2022
Team ID	PNT2022TMID00072
Project Name	Project - 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	User Login	Login with Email Id and password Check Credentials.
FR-4	Sensor Data	To display all the data from different sensors like temperature sensor, humidity sensor etc.
FR-5	Weather Info	To show the climatic weather conditions of the location in real-time and other data using a weather API.
FR-6	Calendar and Notes	Add information about the plants and add remainder in the calendar.
FR-7	Alerts and Notification	Checks for any abnormalities and alerts the user.
FR-8	Logout	After checking all the details, user can exit.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Easy and effective to use Easy to learn and clean UI
NFR-2	Security	All the details are protected from unauthorized access. Detection and identification of any malfunction of sensors.
NFR-3	Reliability	It gives the accurate results.
NFR-4	Performance	It requires low power consumption and low data transmission rates.
NFR-5	Availability	With minimum internet connectivity it is accessible all time and all the data are synced to the cloud.
NFR-6	Scalability	It supports third party sensors and can be easily scalable for large scale farming.