

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

Date	03 October 2022
Team ID	PNT2022TMID12522
Project Name	Project - Fertilizers Recommendation System for Disease Prediction
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	Image Upload	Get plant image from User
FR-4	Analyse Image	Perform analysis of given image
FR-5	View Disease	Display disease details observed in image Display 'No disease detected' if no disease observed in image
FR-6	Get Precautions	Display precautions for disease observed in image Display general precautions if no disease observed in image, along with 'No disease detected but general precautions are:'
FR-7	View Fertilizers	Display recommended fertilizers for detected disease Display general top fertilizers if no disease is detected
FR-8	View General Information	Show general information regarding plant diseases, fertilizers, precautions
FR-9	Feedback	Allow user to send feedback regarding the experience while operating the system.

### Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	One of the major factors influencing a project's success is the acceptance and pleasure of the end user. It is a good idea to consider the user experience needs from the beginning of a project. This will save time later when the project is released since less revisions or, worse still, misconceptions will be requested by the user.
NFR-2	<b>Security</b>	System access and session management are required. The information must be kept in a safe place and in a safe format. For the data, a secure communication connection is necessary.
NFR-3	<b>Reliability</b>	As simple as maintaining a system log would increase the time and effort required to complete it from the outset, it is essential to ensure and alert about system transactions and processing. Transferring data should be done securely and with reputable standards.
NFR-4	<b>Performance</b>	Performance is typically seen as an expectation of time. Particularly when the project is in the architecture phase, this is one of the most crucial factors to consider.
NFR-5	<b>Availability</b>	The system should be able to manage numerous calculations running concurrently and possibly interacting with the user. At any random instance of being called, it should return the user the appropriate result for said action.
NFR-6	<b>Scalability</b>	A well-designed system is intended to be operational for a long period. It will therefore frequently require preventative and remedial maintenance. Hence, the developed product should have the capacity to expand and enhance the features and operations of the system, i.e., demonstrate desired level of scalability.