

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

Date	03 October 2022
Team ID	PNT2022TMID08602
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	Form-based registration Profile build Rudimentary details Plant/crop information Soil and Environment data
FR-2	User Confirmation	Affirmation by text message
FR-3	User engagement	Picture capture and upload Image quality Evaluation Provoking visuals for precision
FR-4	Disease prediction	Digital Image processing Proper Disease prediction
FR-5	Recommendation	Suggesting the right fertilizer for the anticipated disease Advising the alternative fertilizers for ease

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The application provides simple and clear functionality such as image capturing and earlier disease diagnosis besides alternative fertilizer suggestion
NFR-2	<b>Security</b>	To safeguard against threats including illegal access, the application is designed in such a way that it ensures the privacy of the gathered user information
NFR-3	<b>Reliability</b>	The model is trained with different visuals for a certain ailment, which leads to more accurate assessment of a disease, thereby making the system more reliable

NFR-4	<b>Performance</b>	The user does not have to wait long for anything, from capturing and uploading till prediction and recommendations
NFR-5	<b>Availability</b>	The software can be utilized by anyone, regardless of customer location or other network capabilities
NFR-6	<b>Scalability</b>	The system is designed in such a way, that it can withstand huge number of users at any moment