

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

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 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	Usability	The application provides simple and clear functionality such as image capturing and earlier disease diagnosis besides alternative fertilizer suggestion
NFR-2	Security	To safeguard against threats including illegal access, the application is designed in such a way that it ensures the privacy of the user information gathered
NFR-3	Reliability	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	Performance	The user does not have to wait long for anything, from capturing and uploading till prediction and recommendations
NFR-5	Availability	The software can be utilized by anyone, regardless of customer location or other network capabilities.
NFR-6	Scalability	The system is designed in a way such that it can able to withstand huge number of users at any moment