

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

Date	03 October 2022
Team ID	PNT2022TMID27490
Project Name	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 Input	User needs to upload the image of a leaf of the infected plant.
FR-2	Feature Extraction	The required features to make the predictions are extracted from the uploaded image to yield the best result.
FR-3	Model Prediction	Pre-processed image is then fed into the pretrained model and disease is predicted by the model.
FR-4	Result Display	The disease identified by the model is then displayed to the user through the application's user interface.
FR-5	Recommendation	Fertilizers that could cure the identified disease is suggested to the user.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	An easy-to-use interface with guidelines for a smooth user experience.
NFR-2	Security	Providing secure service without any malicious attacks.
NFR-3	Reliability	The system provides accurate results and recommendations using the best ML model.
NFR-4	Performance	The application is capable of producing results within few seconds and it is highly responsive.
NFR-5	Availability	Users with good internet service can access the application from anywhere at any time.
NFR-6	Scalability	Application can handle a growing number of users and load, without compromising on performance and causing disruptions to user experience.