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

Date	18 October 2022
Team ID	PNT2022TMID01248
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 Uploading	Upload from local storage
FR-4	Image Pre-processing	Evaluating using DL Algorithm
FR-5	Displaying result	Display results got from the model
FR-6	Feedback	Give feedback through forms

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	We propose a user-friendly web application system based on machine learning. So, the user can provide the input using forms on our user interface and quickly get their results. The proposed method is also found to perform better and produce a higher number of yields.
NFR-2	**Reliability**	More farmers get benefited from this system as they simply have to upload an image to get the fertilizer recommendation. Using the proposed model, crop yield production increased and gave the super ability to decide the right combination of different types of available resources. This will help farmers and agriculture experts to adopt the method for other crops.
NFR-3	**Performance**	Deep learning techniques are used to identify the diseases and suggest the precautions that can be

		taken for those diseases. So, it provides better performance and recommends fertilizers in a quick manner.
NFR-4	**Scalability**	More farmers get benefited from this system as they simply have to upload an image to get the fertilizer recommendation. The proposed system is also beneficial to the government in analyzing the soil condition of any region and the requirements of the farmer to maximize soil production. The fertilizer companies can use the dataset produced in the process to create customizable fertilizer depending on the need of each region