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

Date	14October 2022
Team ID	PNT2022TMID40529
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
FR-2	User Confirmation	• Confirmation via Email • Confirmation via OTP
FR-3	Authentication	• Policies that dictate how a user must authenticate before access is granted to a protected web application. • Authentication methods are ordered in a list by preference
FR-4	External Interfaces	• Screen layouts • Buttons • Functions on every screen
FR-5	Business rules	• Enterprise Architecture • Business Process Management • Decision Model Management
FR-6	Reporting	• Industry Standards • Unique Identifiers • User Expectations

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	• Used to provide additional nutrients to the plants ,they are added to improve the yield of the crops
NFR-2	**Security**	• An automated system is introduced to identify different diseases on plants by

		checking the symptoms shown on the leaves of the plant
NFR-3	**Reliability**	• Use the efficient deep learning model ,which achieves 99.8% validation accuracy on our choice of dataset for plant disease detection
NFR-4	**Performance**	• The proposed method uses SVM to classify tree leaves ,identify the disease and suggest the fertilizer
NFR-5	**Availability**	• Water -soluble fertilizers are often useful as a quick boost for vegetables,liquids mixed with water are applied as frequently as once a week
NFR-6	**Scalability**	• Support Vector Machine • Random Forest Algorithm