

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

Date	19 september 2022
Team ID	PNT2022TMID46542
Project Name	Fertilizers Recommendation system for Disease Prediction
Maximum Marks	4 Marks

**Functional Requirements:(Fertilizers Recommendation System For Disease Prediction)**

The proposed method **uses SVM to classify tree leaves, identify the disease and suggest the fertilizer**. The proposed method is compared with the existing CNN

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through mail Registration through google Registration through linked in
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Detail	Register Name
FR-4	User Device	Request for camera access Request for gallery access

**Non-functional Requirements:(Fertilizers Recommendation System For Disease Prediction)**

**Nonfunctional Requirements (NFRs) define system attributes such as security, reliability, performance, maintainability, scalability, and usability. They serve as constraints or restrictions on the design of the system across the different backlogs.**

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	A recommender system is a <b>system that recommends apparently useful information or suggests strategies users might apply to achieve their apparent goals.</b>
NFR-2	<b>Security</b>	To predict the suitable nutrients for different crops and provide nutrients <b>recommendations</b> by analyzing the crop fertility and yield production
NFR-3	<b>Reliability</b>	Even though farmers <b>use</b> excessive amounts of <b>fertilizer</b> , which eventually destroys the climate, some soils simply cannot support high yields.

NFR-4	<b>Performance</b>	Improving the <b>performance</b> of sigmoid kernels in multiclass SVM using optimization techniques for agricultural <b>fertilizer recommendation system</b>
NFR-5	<b>Availability</b>	The <b>application</b> provides <b>recommendations</b> to farmers for identification of appropriate <b>fertilizer</b> and crop. This <b>system</b> can be <b>used</b> by farmers android based
NFR-6	<b>Scalability</b>	Scalability is <b>the measure of a system's ability to increase or decrease in performance and cost in response to changes in application and system processing</b>