

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

Date	13October 2022
Team ID	PNT2022TMID36157
Project Name	Fertilizer recommendation on 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	Specific characteristics	It identifies the diseases especially rice bran diseases
FR-4	Functions	The proposed methods uses the SVM to classify tree leaves, identify the diseases and suggest the fertilizer.
FR-5	Fault tolerance	This study enables a possible prediction of crop yield from the historic data collected and offers a suggestion to farmers.
FR-6	Analyze	It helps us to classify the data based on the diseases, and data extracted from the classifier is used to predict soil and crop.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Crop and fertilizer recommendation system help the farmer to identify the diseases.
NFR-2	<b>Security</b>	The proposed method combines two major aspects in farming , pest identification and insecticide recommendation.
NFR-3	<b>Reliability</b>	It is easy use so that health issues can be avoided.
NFR-4	<b>Performance</b>	Precision fertilizer and precision crops is mostly used. They used to predict the crop in artificial intelligence.
NFR-5	<b>Availability</b>	reduces the losses as ammonia , nitrate leaching, apply the right rate, apply accurately.
NFR-6	<b>Scalability</b>	If the soil is not replenished with nutrients through fertilizing ,crop yields will deteriorate over time.