Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	08 October 2022
Team ID	PNT2022TMID21664
Project Name	Fertilizers Recommendation System for Disease Prediction

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement	Sub Requirement
FR-1	User Registration	Registration through form Registration through Gmail Registration through LinkedIn
FR-2	Image Capture	Take image of a leaf Check the leaf is captured under given parameters
FR-3	Image Processing	Upload the leaf image Click the predict button
FR-4	Updated Native Language	Languages can be changed according to the user, which he is more understandable with. (Ex: English, Hindi, Tamil)
FR-5	Leaf Prediction	Add the pesticides and fertilizers to be used for an unhealthy leaf
FR-6	Image Description	Show the prescribed fertilizer and description of the disease for curing a unhealthy leaf
FR-7	Providing Datasets	Training datasets Testing datasets
FR-8	Adding Datasets	Fruit datasets for fruits Vegetable datasets for vegetables
FR-9	E-mail Notification	Farmers will be received a Email notification about the leaf and its history

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Leaf datasets can be used for detection of all kind of leafs Datasets can be reusable Data sets can be prepared according to the leaf
NFR-2	Security	User information and leaf data are secured The algorithms used are more secure
NFR-3	Reliability	The leaf quality is more The datasets and image capturing performs consistently well
NFR-4	Performance	Leaf problem defines once the leaf is detected Performs well according to the quality of leaf provides certain cure to it.
NFR-5	Availability	Quality of leaf will be used again for detection Available and easy access of datasets provided
NFR-6	Scalability	Increase in growth of predicting the results and defining a leaf