

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	16 October 2022
Team ID	PNT2022TMID33289
Project Name	Fertilizer Recommendation System for Plant 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	01. Registration through Form 02. Registration through Gmail 03. Registration through Mobile Number 04. Registration through Application
FR-2	User Confirmation	01. Confirmation via Email 02. Confirmation via OTP
FR-3	Image Capture	01. Take a picture of a leaf and verify that the leaf was captured using the specified criteria.

		02. Capture the image of the leaf and check the parameter of the captured image
FR-4	Image Processing	Upload the image for the prediction of the disease in the leaf
FR-5	Leaf Identification	Identify the leaf and predict the disease in leaf
FR-6	Image Description	Suggesting the best fertilizer for the disease.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	01. Datasets of all the leaf is used to detecting the disease that present in the leaf 02. Leaf datasets can be used for detection of all kind of leaf's Datasets can be reusable to detect diseases present in leaf.
NFR-2	Security	01. The information belongs to the user and leaf are secured highly. 02. The employed algorithms are more secure. 03. The fertilizer Details are saved in the specific ID of the user.
NFR-3	Reliability	01. The leaf quality is important for the predicting the disease in leaf.

		02. The datasets and image capture consistently performs well.
NFR-4	Performance	<p>01. The leaf problem is specified when the leaf is detected.</p> <p>02. Performs well according to the quality of the leaf and provides a specific cure to it by showing recommendation of fertilizer.</p> <p>03. The performance is based on the quality of the leaf used for disease prediction</p>
NFR-5	Availability	<p>01. It is available for all user to predict the disease in the plant</p> <p>02. The quality of the leaf will be used again for detection.</p> <p>03. Datasets will be made available and easily accessible.</p> <p>.04. It is available to all users to predict plant disease</p>
NFR-6	Scalability	<p>01. Increasing the accuracy of disease prediction in the leaf.</p> <p>02. Increasing the prediction of the disease in the leaf</p>