V.S.B. ENGINEERING COLLEGE, KARUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINERRING

IBM NALAIYA THIRAN

PROJECT DESIGN PHASE-2

SOLUTION REQUIREMENTS (FUNCTIONAL & NON FUNCTIONAL)

Date	19September2022
TeamID	PNT2022TMID33383
ProjectName	Fertilizers Recommendation System for Disease Prediction
MaximumMarks	4Marks

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 Website
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP Confirmation via Message
FR-3	User Requirements	Get the requirements for the farmers' plants. Capture the image of the leaf And check the parameter of the captured image.
FR-4	User establishment	Establish the good recommendation of fertilizers using the requirements. Upload the image for the prediction and predict the disease in leaf.
FR 5	User review	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**	Predicting the fertilizers, Analyzing the disease in a tap makes the life of farmers easy with minimal subscriptions. It detects many diseases in crops and Recommends appropriate fertilizers to help them recover. It gives farmers vital information about farming techniques to assist them to enhance crop productivity. Datasets of all the leaf is used to detecting the disease that present in the leaf.
NFR-2	**Security**	Armed with sensors and other monitoring devices, the present farmers can oversee field conditions without going to the homestead. The information belongs to the user and leaves are secured highly.
NFR-3	**Reliability**	For constant admittance to in-handle information, network unwavering quality is critical. With regards to maintainable agribusiness, this nullifies the motivation behind accuracy brilliant cultivating, which depends on the most cutting-edge information and constant natural observing. The leaf quality is important for the predicting the disease in leaf.
NFR-4	**Performance**	The performance is based on the quality of the leaf used for disease prediction .It mainly provides better performance so it helps in high productivity and ensures the attack of disease.
NFR-5	**Availability**	It is available for all users to predict the disease in the plant. This assists ranchers with working on the nature of their items as well as the accessibility, bring down their expenses, and increment the client experience.
NFR-6	**Scalability**	Increasing the prediction of the disease in the leaf. The versatility of a framework to expand the limit, for instance.