Project Design Phase – II

Solution requirements (functional and non-functional)

Date	10 October 2022
Team id	PNT2022TMID24340
Project name	Fertilizer recommendation system for disease prediction
Maximum marks	4 marks

Functional requirement :

Following are the functional requirements of the proposed solution .

Fr.no	Functional requirement	Sub requirement (story/subtask)
Fr-1	User registration	Registration through form or Registration through Gmail
Fr-2	User confirmation	Confirmation via OTP or Confirmation via Email
Fr-3	Log in to system	Check credentials Confirmation via otp
Fr-4	Manage Modules	Manage System Admins Manage Roles of user Manage User Permission
Fr-5	Capturing image	Capture the image of the leaf And check the parameter of the captured image .
Fr-6	Image processing	Upload the image for the prediction of the disease in the leaf.
Fr-7	Leaf identification	Identify the leaf and predict the disease in leaf.

Fr-8	Image description	Suggesting the best fertilizer for the disease .
Fr-9	Logout	Exit

Non-functional requirement:

Following are the non-functional requirement of the proposed solution

Nfr.no	Non-functional requirement	Description
Nfr-1	Usability	• Usability covers features including ease of learning effectiveness in usage, memory retention. • Datasets of all the leaf is used to detecting the disease that present in the leaf.
Nfr-2	Security	• Private and sensitive information must be kept secure all the times. • The information belongs to the user and leaf are secured highly.
Nfr-3	Reliability	• A superior cost of reliability trade off is achieved with shared protection. • The leaf quality is important for the predicting the disease in leaf.
Nfr-4	Performance	• It will be more effective to monitor farming operations overall if integrated sensors are used analyze leaf condition.

		• The performance is based on the quality of the leaf used for disease prediction .
Nfr-5	Availability	• Combining information about crops,weather and fertilizers allows for recommendation of the pesticide. • It is available for all user to predict the disease in the plant
Nfr-6	Scalability	• For ai platforms scalability is a big challenge.It has been demonstrated that different ai platform architectural decisions impact system scalability and that automatic real time decision making is possible in an environment with thousands of connected devices. • Increasing the prediction of the disease in the leaf .