Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	15 May 2023
Team ID	NM2023TMID22530
Project Name	Deep Learning Model for Detecting diseases in
	Tea Leaves

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Comfortable user interface	The tea tree leaf disease detection system should have
		an intuitive and user-friendly interface to enhance user
		experience and minimize errors.
FR-2	Accuracy in production	The system should provide highly accurate disease
		detection, minimizing false positives and false
		negatives, through advanced image processing and
		machine learning algorithms.
FR-3	User storage	The system should offer secure and private user storage
		for tea tree farmers to store and retrieve their leaf
		images and disease detection results.
FR-4	Efficiency in production	The system should exhibit efficient processing and
		response times, capable of handling large volumes of
		leaf images while optimizing resource utilization.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The tea tree leaf disease detection system should be
		user-friendly and require minimal training for tea
		tree farmers to use effectively.
NFR-2	Security	The system should ensure the confidentiality,
		integrity, and proper access control of user data.
NFR-3	Reliability	The system should be stable and minimize
		downtime or disruptions in disease detection
		services.
NFR-4	Performance	The system should deliver fast response times and
		efficient processing of leaf images, even under high
		user loads.
NFR-5	Availability	The system should be accessible and have minimal
		downtime, ensuring it is consistently available to
		users.

NFR-6	Scalability	The system should be capable of handling increased
		user loads and accommodate growing data volumes
		without compromising performance.