Project Design Phase-II Solution Requirements (Functional & Non-functional)

Date	31 May 2025
Team ID	LTVIP2025TMID43861
Project Name	Transfer Learning-Based Classification of Poultry
	Diseases for Enhanced Health Management
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	Image Upload	Upload poultry image from mobile/web Validate
		image format & size
FR-2	Disease Classification	Run image through AI model Return prediction
		label & confidence score
FR-3	Notification & Alert System	Send disease alert via email/SMS > Trigger critical
		alerts for dangerous disease
FR-4	Admin Dashboard & History	View disease history per user > Filter by disease,
		location, and date

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The application must be user-friendly, especially for
		farmers with minimal technical knowledge.
NFR-2	Security	All user data and images must be securely
		transmitted and stored using HTTPS and encryption.
NFR-3	Reliability	The system should provide accurate predictions
		consistently, even under high load.
NFR-4	Performance	The system should classify diseases and display
		results within 5 seconds of image submission.
NFR-5	Availability	The application should be available 24/7 with
		minimal downtime for updates or maintenance.
NFR-6	Scalability	The system should be able to handle increasing
		numbers of users and images without performance
		loss.