

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

Date	30 June 2025
Team ID	LTVIP2025TMID41159
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	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Image/Data Upload	- Upload image of infected poultry - Upload description of symptoms
FR-4	Disease Classification	- Classify disease using ML model - Display disease prediction and confidence score
FR-5	Recommendation System	- Provide treatment/prevention suggestions based on classification
FR-6	Report Generation	- Generate downloadable PDF report of diagnosis - Save to cloud or local device

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The application should have a user-friendly UI that is easy to navigate for farmers and veterinarians.
NFR-2	Security	SecurityUse HTTPS, secure authentication (e.g., OAuth 2.0), and encrypted storage for sensitive data.
NFR-3	Reliability	The system should provide consistent outputs and handle failures gracefully without data loss.
NFR-4	Performance	Application must respond within 3 seconds per request, with efficient model inference.
NFR-5	Availability	Availability 99.9% uptime expected using distributed hosting and auto-restart services.
NFR-6	Scalability	Scalability System should scale horizontally to accommodate more users and larger datasets over time.