

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

Date	28 June 2025
Team ID	LTVIP2025TMID41715
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 Upload	Upload poultry images via camera or file Support multiple file formats (.jpg, .png) Preview uploaded image
FR-4	Disease Classification	Model processes image using transfer learning Display predicted disease name Show confidence level (%)
FR-5	Disease Information	Provide description and symptoms of predicted disease Suggest immediate actions and remedies
FR-6	Admin Portal	Manage disease database View logs of predictions Manage user access
FR-7	Feedback Collection	Allow users to provide feedback on prediction accuracy Rate user experience

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Intuitive UI for farmers and veterinarians, support for local languages
NFR-2	Security	End-to-end encryption of image and user data
NFR-3	Reliability	System must ensure 95% uptime and accurate predictions in 90%+ cases
NFR-4	Performance	Image classification response time < 5 seconds
NFR-5	Availability	Cloud-based access with mobile and web compatibility
NFR-6	Scalability	Scalable architecture to handle increasing number of users and image uploads