

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

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| Date | 30 June 2025 |
| Team ID | LTVIP2025TMID37158 |
| 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 from local device Capture image using device camera |
| FR-4 | Disease Prediction | Process image using transfer learning Show predicted disease name Display accuracy/confidence level |
| FR-5 | Disease Information | Show symptoms of predicted disease Display treatment/prevention steps |
| FR-6 | History/Reports | Save user prediction history Export reports as PDF |
| FR-7 | Admin Panel | View and manage users Monitor model performance and logs |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| NFR-1 | Usability | Easy-to-use interface for farmers and general users |
| NFR-2 | Security | Secure login and data handling using encryption |
| NFR-3 | Reliability | The system should give consistent results for the same input |
| NFR-4 | Performance | Fast image processing and response time |
| NFR-5 | Availability | System should be available 24/7 with minimal downtime |
| NFR-6 | Scalability | Should handle increasing number of users and data without performance drop |