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

| Date | 20 July 2025 |
|---------------|---|
| Team ID | LTVIP2025TMID41443 |
| 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 | Disease Detection | Upload poultry image for classification |
| | | Display predicted disease result |
| FR-4 | Treatment Suggestion | Provide care instructions based on disease result |
| | | Show local vet contact info (optional) |
| | | |
| | | |
| | | |

Non-functional Requirements:

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

| FR | Non-Functional | Description |
|------|----------------|--|
| No. | Requirement | |
| NFR- | Usability | The system provides a clean and responsive UI, allowing users to easily upload p |
| 1 | | |
| NFR- | Security | Images are securely handled using Flask. No user data or images are stored |
| 2 | | |
| NFR- | Reliability | The model provides consistently accurate predictions across various disease cat |
| 3 | - | |
| NFR- | Performance | Prediction and response time is under 2 seconds for standard image sizes. |
| 4 | | |
| | | |
| | | |
| NFR- | Availability | The system works 24/7 locally and can be deployed with minimal downtime on |
| 5 | | |
| NFR- | Scalability | Architecture can be easily extended to mobile apps, smart farming tools, or dep |
| 6 | _ | |