**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID32415 |
| Project Name | Poultry Disease Classification for Health Management |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **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 & Analysis | Upload poultry image  Check file format (jpg, png)  Submit for disease detection |
| FR-4 | Disease Pridection | Process image through AI model  Display disease name or "Healthy" status  Show prediction confidence level |
| FR-5 | Suggest Remedies | Show preventive measures  Show treatment suggestions based on disease |
| FR-6 | History&Reports | View previous predictions  Download reports in PDF/CSV |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Performance** | Fast response time for predictions (< 5 seconds) |
| NFR-2 | **Reliability** | System uptime > 99% |
| NFR-3 | **Security** | Data encryption, secure login, OTP/email verification |
| NFR-4 | **Scalability** | Able to handle multiple users and image uploads simultaneously |
| NFR-5 | **Usability** | Simple and user-friendly UI for farmers and non-technical users |
| NFR-6 | **Maintainability** | Easy to update ML models and remedy information |