**Project Design Phase-II**

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

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| Date | 27 JUNE 2025 |
| Team ID | LTVIP2025TMID40145 |
| 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.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | Image Upload | Upload poultry image via form (JPG,PNG) |
| FR-2 | Disease Prediction | Run ResNet50 model on uploaded image and return prediction |
| FR-3 | Display Result | Show predicted disease name |

**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 | **Usability** | Simple and intuitive UI for non-technical users (farmers) |
| NFR-2 | **Security** | Only verified images are accepted; prevent malicious file uploads |
| NFR-3 | **Reliability** | |  | | --- | |  |  |  | | --- | | Model consistently returns accurate predictions | |
| NFR-4 | **Performance** | Result should be shown within 3–5 seconds |
| NFR-5 | **Availability** | System should be available 24x7 with minimal downtime |
| NFR-6 | **Scalability** | Capable of scaling to handle more users and image uploads in the future |