**Project Design Phase-II**

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

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| Date | 26 june 2025 |
| Team ID | LTVIP2025TMID34904 |
| Project Name | Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables |
| 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 | Model Integration | - Load Machine Learning Model  - Classify Fruits and Vegetables  - Display Classification Result |
| FR-4 | Deployment | - Develop User Dashboard  - Flask Deployment  - HTML Integration |

**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** | |  | | --- | |  |  |  | | --- | | The system should have an intuitive and user-friendly interface for smooth navigation and ease of use. | |
| NFR-2 | **Security** | User data, including login credentials and classification results, should be securely stored and protected from unauthorized access. |
| NFR-3 | **Reliability** | The system should consistently perform correct classification and provide accurate results without failures. |
| NFR-4 | **Performance** | The system should process and classify images quickly to provide real-time or near real-time results. |
| NFR-5 | **Availability** | The system should be available for use at all times with minimal downtime, ensuring continuous access. |
| NFR-6 | **Scalability** | The system should support an increasing number of users and data volumes without degradation in performance. |