**Project Design Phase-II**

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

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| Date | 31 January 2025 |
| Team ID | LTVIP2025TMID38735 |
| Project Name | Rice Type Detection System |
| 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 | User Login | Login via Email and Password  Login via Gmail  Login via LinkedIn |
| FR-4 | Dashbord | View Profile Summary  View Rice Type Prediction Results  Log Out Securely |

**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 application should have an intuitive and user-friendly interface for mobile and web users. |
| NFR-2 | **Security** | User data must be securely stored and transmitted using encryption (e.g., HTTPS, hashed passwords). |
| NFR-3 | **Reliability** | The system should function correctly under defined conditions and be fault-tolerant. |
| NFR-4 | **Performance** | The rice type detection model should return predictions within 3–5 seconds per image. |
| NFR-5 | **Availability** | The system should be available 99% of the time, with minimal downtime or maintenance. |
| NFR-6 | **Scalability** | The solution should support increasing user load and dataset volume without performance degradation. |