**Project Design Phase-II**

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

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| Date | 31 January 2025 |
| Team ID | LTVIP2025TMID36078 |
| Project Name | GrainPalette - A Deep Learning Odyssey In Rice Type Classification Through Transfer Learning |
| 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 Profile Management | Create/Edit Profile  Upload Profile Picture  Manage Privacy Settings |
| FR-4 | Content Sharing | Create New Posts  Share External Links  Upload Media Files |

**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 interface should be intuitive enough for 90% of users to complete registration without help |
| NFR-2 | **Security** | All user data must be encrypted both in transit and at rest |
| NFR-3 | **Reliability** | System should maintain 99.9% uptime during business hours |
| NFR-4 | **Performance** | Pages should load within 2 seconds for 95% of users |
| NFR-5 | **Availability** | System must be accessible 24/7 with maximum 1 hour downtime per month |
| NFR-6 | **Scalability** | Architecture should support 10x user growth without redesign |