**Project Design Phase-II**

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

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID44432 |
| Project Name | Traffictelligence: Advanced traffic volume estimation with machine 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 | Image Upload & Analysis | Upload fabric image  Check file format(jpg.png)  Submit for fabric classification |
| FR-4 | Fabric Type Prediction | Process image through AI model  Displays fabric type  Show prediction confidence level |

**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 user-friendly UI for all the users. |
| NFR-2 | **Security** | Data encryption , secure login . |
| NFR-3 | **Reliability** | System uptime >99% |
| NFR-4 | **Performance** | Fast response time for predictions. |
| NFR-5 | **Scalability** | Able to handle multiple users and image uploads simultaneously. |