**Project Design Phase-II**

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

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID40771 |
| Project Name | Traffictelligence |
| 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 Access | Access application without registration |
| FR-2 | Traffic Volume Prediction | Input weather, time, and holiday data Display predicted traffic volume |
| FR-3 | Error Handling | Show error messages for invalid inputs |
| FR-4 | Navigation | Return to input page from result/error pages |

**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** | Intuitive interface with clear input fields and readable output |
| NFR-2 | **Security** | Protect model and data inputs; no user authentication required |
| NFR-3 | **Reliability** | Accurate predictions with pre-trained model (e.g.,  85% R2 score) |
| NFR-4 | **Performance** | Process predictions within 2 seconds |
| NFR-5 | **Availability** | Accessible 24/7 via web browser |
| NFR-6 | **Scalability** | Support up to 1000 users simultaneously with future enhancements |