**Project Design Phase-II**

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

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| Date | 06 May 2023 |
| Team ID | NM2023TMID15467 |
| Project Name | Project - Traffic Intelligence: Advanced Traffic Volume Estimation with Machine Learning |

**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 | Web-User | Giving Input to predict the traffic volume to particular area at the particular time |
| FR-2 | User data base | Storing the User data and giving input for the particular time to give better analysis in future |

**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** | To maintain a consistent user experience, the project promotes usability. Users can quickly explore and use the system thanks to intuitive design and efficient operations, enhancing their productivity and happiness. |
| NFR-2 | **Security** | The project implements robust security measures, safeguarding user data and preventing unauthorized access. Encryption, authentication, and regular security audits ensure the protection of sensitive information and maintain user trust. |
| NFR-3 | **Reliability** | The project emphasizes reliability, delivering consistent and dependable performance. Through rigorous testing, monitoring, and error handling mechanisms, it minimizes downtime and ensures uninterrupted functionality, fostering user confidence and satisfaction |
| NFR-4 | **Performance** | The project is optimized for high performance, delivering fast response times and efficient resource utilization. Through scalability, caching, and performance tuning, it provides a smooth and responsive user experience, even under heavy loads or peak usage periods |
| NFR-5 | **Availability** | The project ensures high availability, minimizing system downtime and maximizing user access. It utilizes redundancy, fault tolerance, and robust infrastructure to maintain continuous operation and accessibility, meeting user needs at all times. |
| NFR-6 | **Scalability** | The project is designed for scalability, allowing for seamless expansion as user demand grows. It can efficiently handle increased workload and adapt to accommodate growing user base and data volume. |