## Project Design Phase-II Solution Requirements (Functional & Non-functional)

| Date          | 30 June 2025                               |
|---------------|--|
| Team ID       | LTVIP2025TMID32889                         |
| 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.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task)   |
|--------|-------------------------------|--|
| FR-1   | User Registration             | Registration through Form<br>Registration through Gmail<br>Registration through LinkedIN |
| FR-2   | User Confirmation             | Confirmation via Email Confirmation via OTP  |
| FR-3   | User Login                    | Login via Email & password<br>Login via Gmail<br>Login via LinkedIn                      |
| FR-4   | Profile Management            | View profile Edit profile Upload profile picture Change password                         |
|        |                               |  |
|        |                               |  |

## **Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description  |
|--------|----------------------------|--|
| NFR-1  | Usability                  | The System Should provide a User -friendly interface that is intuitive responsive , and easy to navigate for all user type . |
| NFR-2  | Security                   | The System must ensure data protection thought encryption, secure authentication, and role based access controls.            |
| NFR-3  | Reliability                | The System Should function consistently under expected condition and handle failures gracefully without data loss.           |

| NFR-4 | Performance  | The System Should load all major functionalities (e.g, Registration login ) with in 2 seconds under normal load.    |
|-------|--------------|---|
| NFR-5 | Availability | The System Should maintain 99.9% uptime and be accessible 24/7 with minimal down time for maintenance.              |
| NFR-6 | Scalability  | The System Should be able to handle increasing number of users and transections without degradation in performance. |