

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

|                     |                          |
|---------------------|--------------------------|
| <b>Date</b>         | 1-11-2025                |
| <b>Team ID</b>      | NM2025TMID06969          |
| <b>Project Name</b> | Garage Management System |

**Functional Requirements:**

Functional requirements describe what the system should do — the specific features and functions it must perform to meet user needs. Following are the functional requirements for our Proposed Solution

| <b>FR No.</b> | <b>Functional Requirement (Epic)</b> | <b>Sub Requirement (Story / Sub-Task)</b>        |
|---------------|--------------------------------------|--|
| FR-1          | User Registration                    | Registration through Form, Gmail, LinkedIn       |
| FR-2          | User Confirmation                    | Confirmation via Email, OTP                      |
| FR-3          | User Deletion                        | Admin can request to delete a user               |
| FR-4          | Assignment Check                     | System checks if user is assigned to an incident |
| FR-5          | Deletion Block                       | System blocks deletion if user is assigned       |
| FR-6          | Safe Deletion                        | Allows safe deletion if not assigned             |

**Non- Functional Requirements:**

Non-functional requirements define how the system performs its functions — focusing on quality, performance, and usability aspects. Following are the Non-Functional requirements for our Proposed Solution

| FR No. | Non-Functional Requirement | Description  |
|--------|----------------------------|--|
| NFR-1  | Performance                | The system should respond to user actions within 2–3 seconds under normal load.                                  |
| NFR-2  | Scalability                | The system must handle increasing numbers of customers, vehicles, and transactions as the garage grows.          |
| NFR-3  | Reliability                | The system should ensure continuous availability with minimal downtime.  |
| NFR-4  | Security                   | All sensitive data (user credentials, billing details) must be encrypted and protected from unauthorized access. |
| NFR-5  | Usability                  | The interface must be simple, intuitive, and easy for non-technical users to navigate.                           |
| NFR-6  | Maintainability            | The system code should be modular and easy to update or fix without affecting other modules.                     |
| NFR-7  | Portability                | The system should be deployable on different operating systems (Windows, Linux) or hosted on cloud platforms     |

## Conclusion:

The Functional and Non-Functional Requirements phase of the Garage Management System (GMS) plays a crucial role in defining the system's overall capabilities and quality expectations. The functional requirements clearly specify what the system should accomplish — such as managing customers, vehicles, services, billing, and inventory — ensuring that all operational needs of a modern garage are met efficiently.