

Project Design Phase-II

Solution Requirements (Functional & Non-Functional)

Date	1-11-2025
Team ID	NM2025TMID06969
Project Name	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

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
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.