Functional and Non-Functional Requirements

The Functional Requirements of the Garage Management Project define the system's core operations and outline what the solution must achieve to meet user and business objectives. These functionalities enable the automation of everyday garage tasks such as managing customers, handling vehicle records, booking services, tracking progress, generating invoices, and collecting feedback. Together, they ensure that the entire process runs efficiently, accurately, and in real time within the Salesforce environment.

The system must provide full control over Customer Management, allowing the creation, modification, and deletion of customer records as needed. Each customer record forms the central reference point for related operations such as vehicle registration and service tracking.

The Vehicle Management function should maintain detailed information for each vehicle, including model, registration number, and service history. Each vehicle must be properly linked to its respective owner, ensuring accurate traceability and preventing data duplication.

The Service Booking functionality allows customers or managers to create, modify, and manage service appointments. These appointments automatically connect to the relevant customer and vehicle records, allowing seamless scheduling and monitoring of garage activities.

For Service Tracking, the system must enable platform users, such as mechanics or technicians, to update job status dynamically. The job progress should be recorded as "Pending," "In Progress," or "Completed," ensuring that managers and customers can monitor updates in real time.

The Billing Management feature must generate automated invoices upon service completion. These invoices should include all relevant charges, parts used, taxes, and labor costs, ensuring financial accuracy and transparency. By automating this process, the system eliminates human errors and speeds up payment workflows.

A Feedback Collection function should be included to allow customers to provide service-related feedback after each transaction. This ensures continuous quality improvement and helps managers assess service performance over time.

Finally, the Reporting and Analytics functionality should provide managers with access to dashboards and reports summarizing key business metrics such as service performance, revenue trends, and customer satisfaction levels. These insights will help in making informed decisions and improving operational efficiency.

Collectively, these functional requirements ensure that the system delivers a complete end-to-end solution for managing garage operations, while maintaining accuracy, automation, and transparency across all modules.

The Non-Functional Requirements of the project define how the system should perform and behave under various conditions. These requirements ensure the Garage Management System remains reliable, secure, and scalable, providing an optimal user experience across all usage scenarios.

In terms of Performance, the system should efficiently handle multiple concurrent users without any noticeable degradation. Whether managing customer data, processing service requests, or generating reports, the application should remain responsive and stable under heavy workloads.

Usability is a crucial consideration. The interface must be intuitive, user-friendly, and easily accessible, even for non-technical users such as mechanics and service staff. Simple navigation, clear labeling, and minimal manual data entry will enhance user adoption and reduce training time.

Reliability ensures that the system maintains accurate data and continuous availability. The project aims to achieve an uptime of at least 99%, guaranteeing that users can access critical information at all times without interruption.

Security plays a central role in protecting sensitive customer and billing data. Salesforce’s Role-Based Access Control (RBAC) and data encryption mechanisms must be implemented to ensure that only authorized personnel can access or modify specific information. Confidential data such as payment details, customer contact

information, and business analytics must remain protected against unauthorized access.

Scalability ensures that the system can easily adapt to future growth. As the garage expands to serve more customers, vehicles, and services, the system should support additional records and users without compromising performance. This flexibility makes the solution suitable for small, medium, and large garage networks.

Maintainability focuses on ensuring that administrators can easily update configurations, add new features, or modify automation processes within Salesforce. The low-code nature of Salesforce facilitates quick enhancements without requiring extensive redevelopment.

Data Integrity guarantees that information remains consistent and accurate across all modules. Automated validation rules and workflows must ensure that data entered in one module is reflected correctly in all related records. This consistency prevents duplication, maintains accuracy, and supports reliable decision-making.

Together, these non-functional requirements create a stable and secure foundation for system operation. They ensure that the Garage Management Project runs smoothly, adapts to future needs, and consistently provides high-quality performance for users and customers alike.

Conclusion

The Functional and Non-Functional Requirements together form the core foundation of the Garage Management Project. While the functional requirements define what the system must do—such as managing customers, vehicles, services, billing, and reporting—the non-functional requirements define how the system should operate, focusing on reliability, scalability, security, and usability.

This combination ensures that the Salesforce-based Garage Management System is not only powerful in terms of features but also efficient, dependable, and future-ready. By adhering to these requirements, the project delivers a robust, user-friendly, and scalable digital solution that transforms traditional garage operations into an automated, data-driven workflow optimized for long-term success.