

# SOLUTION ARCHITECTURE

Date	23 October 2025
Team ID	NM2025TMID07843
Project Name	Garage Management System
Maximum Marks	4 Marks

## **Solution Architecture:**

### **Goals of the Architecture:**

The architecture aims to provide an integrated, scalable, and automated platform for managing garage operations. It ensures efficient handling of customer data, service workflows, and billing while maintaining data consistency, security, and accessibility. The design promotes modularity, enabling easy customization and future expansion within the Salesforce environment.

### **Key Components :**

The solution architecture comprises key Salesforce components such as custom objects for Customers, Vehicles, Services, and Billing, supported by Flows, Validation Rules, and Process Builder for automation. Dashboards and Reports provide analytical insights, while Role-Based Access Control ensures data security and proper authorization across various garage staff levels.

### **Development Phases :**

Development followed structured phases: requirement analysis, data modeling, and Salesforce environment setup. Custom objects and relationships were created, followed by automation using Flows and Process Builder. Testing ensured data integrity and functionality. Finally, dashboards, reports, and user profiles were configured to deliver a complete and efficient Garage Management solution.

### **Solution Architecture Description :**

The Garage Management Project architecture is built entirely on the Salesforce platform, integrating data, automation, and analytics to streamline garage operations. It uses a relational data model connecting Customers, Vehicles, Services, and Billing through custom objects. Automation is achieved via Salesforce Flows and Process Builder for service tracking, invoice generation, and notifications. Validation Rules maintain data accuracy, while dashboards provide real-time insights into service performance. The architecture follows a modular approach to allow easy scaling and future enhancements. By leveraging Salesforce's security and cloud infrastructure, the system ensures reliable, accessible, and high-performing management of all garage-related processes.

## Solution Architecture Diagram :

