

# SOLUTION ARCHITECTURE

Date	23 October 2025
Team ID	NM2025TMID01244
Project Name	Garage Management System
Maximum Mark	2 Marks

## Solution Architecture

The architecture of the Garage Management System is designed to be modular, scalable, and responsive. The frontend utilizes Salesforce Lightning Experience to deliver a modern, user-friendly interface that works seamlessly across desktop and mobile devices. The logic layer, implemented using Apex Classes and Salesforce Flows, handles the business workflows, data validation, and automated notifications, ensuring that processes run smoothly without manual intervention. The database layer, built on Salesforce Custom Objects, securely stores all customer, vehicle, service, and invoice information, providing a centralized repository for all operational data.

In terms of data relationships, the system follows a structured Entity-Relationship (ER) model. A single customer can own multiple vehicles, each of which can have several services recorded over time. Each service entry generates a corresponding invoice, creating a clear and organized relationship between customers, vehicles, services, and billing records. This structured data model ensures consistency, facilitates reporting, and allows administrators to efficiently manage garage operations.

## Solution Architecture Diagram:

# SALESFORCE SOLUTION ARCHITECTURE

