

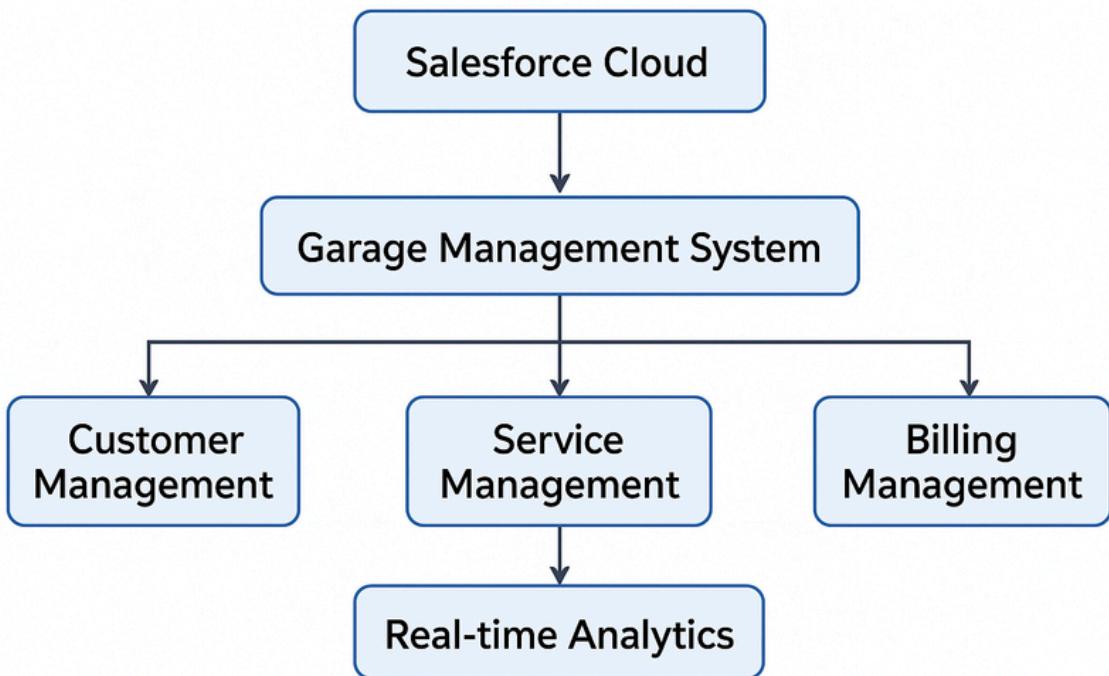
# Technology Stack

Date	23 October 2025
Team ID	NM2025TMID02904
Project Name	Garage Management System
Maximum Marks	2 marks

## Technical Architecture:

The technical architecture of the Garage Management System leverages Salesforce's cloud ecosystem to streamline customer interactions, service operations, and billing activities. It utilizes Salesforce objects and Service Cloud components to manage vehicle service requests, track job progress, and handle customer records efficiently. Automated workflows are implemented using Apex triggers, Process Builder, and Flows, enabling seamless updates and reducing manual effort. Data is stored and processed securely within the Salesforce cloud environment, ensuring high availability and compliance. Real-time insights are delivered through custom dashboards and reports, allowing administrators to monitor performance, service timelines, and revenue analytics instantly. This architecture provides a scalable, integrated, and secure foundation for managing all garage-related processes.

# Technical Architecture



**Table-1 : Components & Technologies :**

The Application Characteristics of the Garage Management System describe the key features, behavior, and performance aspects that define how the system operates and serves its users. This project is a cloud-based web application designed to automate garage operations such as vehicle servicing, customer management, and billing. It is user-friendly, secure, and scalable, allowing customers, mechanics, and administrators to access and manage information efficiently from anywhere. The system ensures real-time data processing, automated workflows, and analytical reporting using Salesforce technologies, providing an efficient and integrated platform for modern garage management.

S.No	Component	Technology / Tool	Description
1	<b>Frontend</b>	HTML5, CSS3, JavaScript, React.js	Used for creating an interactive, responsive, and
2	<b>Backend</b>	Python (Django) / Node.js (Express.js)	Handles business logic, request processing, and
3	<b>Database</b>	MySQL / MongoDB	Stores all customer, vehicle, service, and billing
4	<b>Cloud Platform</b>	Salesforce Cloud / AWS / Azure	Provides hosting, scalability, and data accessibility
5	<b>Automation Tools</b>	Apex Triggers, Salesforce Flows	Automates processes such as service updates,
6	<b>API Integration</b>	RESTful APIs / Salesforce APIs	Enables communication between frontend,
7	<b>Analytics</b>	Salesforce Dashboards / Reports	Offers real-time monitoring and performance
8	<b>Security</b>	HTTPS, JWT Authentication, Data Encryption	Ensures secure data transmission and user access
9	<b>Version Control</b>	Git, GitHub	Manages code versions, collaboration, and
10	<b>Containerization</b>	Docker	Provides isolated environments for smooth

**Table-2: Application Characteristics:**

The Application Characteristics of the Garage Management System describe the system's key features and performance aspects that enable efficient, secure, and automated garage operations through a cloud-based platform.

S.No	Characteristic	Description
1	<b>Application Type</b>	Web-based cloud application
2	<b>Platform</b>	Built on the Salesforce Cloud
3	<b>User Interface</b>	Responsive web interface for
4	<b>Functionality</b>	Handles vehicle service booking,
5	<b>Automation</b>	Uses Salesforce Flows and Apex
6	<b>Data Management</b>	Stores customer, vehicle, and
7	<b>Security</b>	Implements user authentication,
8	<b>Integration</b>	Integrates with Salesforce
9	<b>Analytics</b>	Provides real-time dashboards and
10	<b>Scalability</b>	Cloud-based architecture allows