Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	1 Nov 2025
Team ID	NM2025TMID02085
Project Name	Garage Management System
Maximum Marks	4 Marks

Technical Architecture:

The Garage Management System is built on the Salesforce cloud platform, leveraging its SaaS capabilities and robust framework for scalable and secure garage operations.

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Admin and staff interact via a web dashboard on Salesforce.	Salesforce Lightning Web Components (LWC) and Web UI
2.	Application Logic-1 Application	Manages validation for deletion requests	Salesforce Flow Designer, Apex Triggers
3.	Logic-2	Validates service and billing statuses using server-side scripts.	Apex Server-side Scripts
4.	Application Logic-3	Sends real-time notifications and alerts	Salesforce Notification Service
5.	Database	Stores customers, appointments, service records, billing, and feedback data.	Salesforce Custom Objects
6.	Cloud Database	Managed securely on Salesforce backend cloud infrastructure.	Salesforce Cloud Database
7.	File Storage	Minimal use, primarily for system logs and audit trails.	Salesforce File Storage and Logs
8.	External API-1	Integration with third-party services	REST API
9.	External API-2	Not applicable in the current scope of this project.	-
10.	Machine Learning Model	Not applicable for this use case, as no AI/ML features are involved.	-
11.	Infrastructure (Server / Cloud)	Hosted and maintained on Salesforce's highly available SaaS platform.	Salesforce Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Te c hnology
1.	Open-Source Frameworks	Not applicable	-
2.	Security Implementations	Enforces role-based access	ACLs, Scoped Applications
3.	Scalable Architecture	Horizontally scalable SaaS platform	ServiceNow Cloud Architecture
4.	Availability	Offers high availability	Salesforce Cloud with SLA guarantees
5.	Performance	Optimized using asynchronous flows	Asynchronous Apex