

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	5 November
Team ID	NM2025TMID00401
Project Name	Garage management system
Maximum mark	4 Marks

Technical Architecture:

The Garage management include the architectural diagram as below and the information as per the table1 & table 2 .

Example: Order processing during pandemics for offline mode

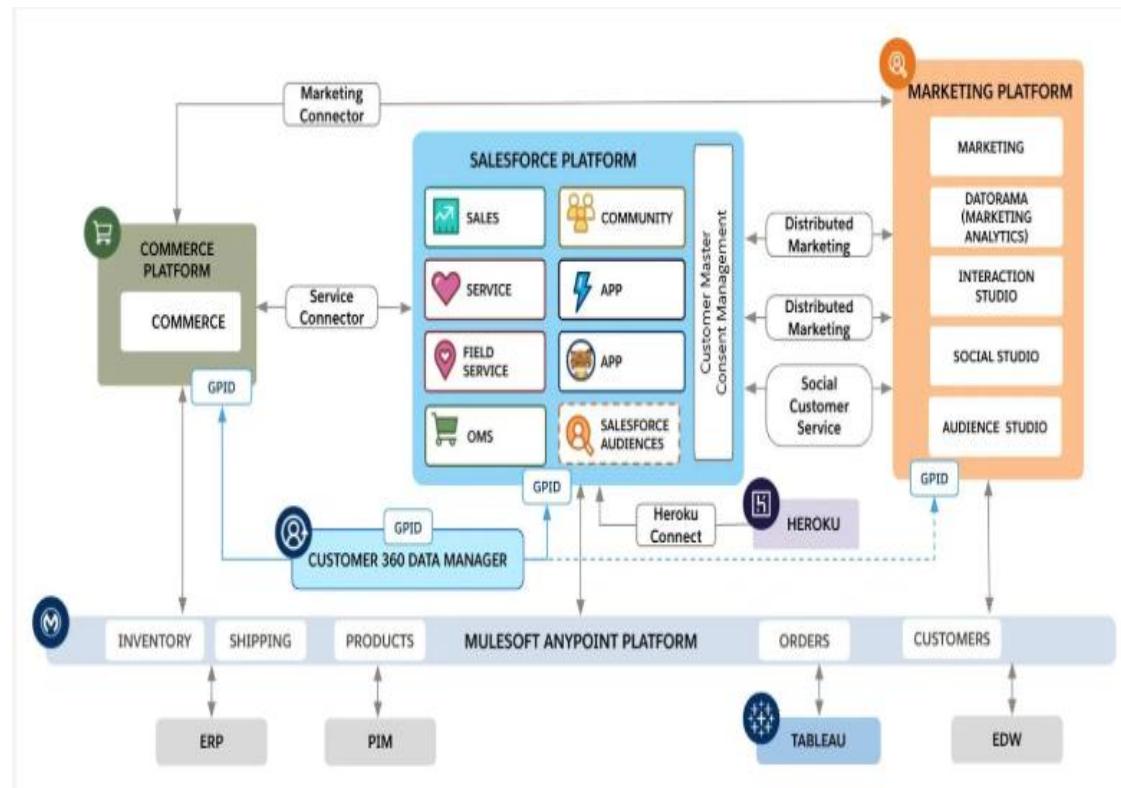


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	Frontend (User Interface)	Interface for garage staff and admin users to manage vehicles, customers, and service records.	Salesforce Lightning Experience, Lightning Web Components (LWC)
2	Backend (Business Logic)	Handles business rules such as job creation, billing, and inventory management.	Salesforce Apex Classes, Triggers, Flows
3	Database / Data Layer	Stores customer, vehicle, job, and invoice data securely within Salesforce.	Salesforce Objects (Custom & Standard), SOQL
4	Integration Layer	Connects Salesforce with external systems like payment gateways or accounting software.	Salesforce REST & SOAP APIs, MuleSoft
5	Reporting & Analytics	Provides reports and dashboards for performance monitoring and decision-making.	Salesforce Reports, Dashboards, Einstein Analytics

Table-2: Application Characteristics:

S.No	Application Characteristic	Description	Technology
1	Scalability	The application can easily support growing numbers of customers, vehicles, and service transactions without impacting performance.	Salesforce Cloud Platform, Multi-Tenant Architecture
2	Security	Protects sensitive customer and service data using secure authentication, authorization, and encryption mechanisms.	Salesforce Shield, Role-Based Access Control (RBAC), OAuth 2.0
3	Performance	Ensures fast response times for operations like service record retrieval, job card creation, and billing.	Salesforce Lightning Framework, Apex Optimization
4	Reliability	Provides consistent system availability and fault tolerance to ensure continuous garage operations.	Salesforce Platform Services (99.9% SLA)
5	Maintainability	Enables admins to modify workflows, rules, and reports without code changes for easy maintenance.	Salesforce Flow Builder, DevOps Center, Metadata API