TECHNOLOGY STACK

Date	02 November 2025
Team ID	NM2025TMID03695
Project Name	Lease Management System
Maximum Marks	4 Marks

Technical Architecture:
The Lease Management System is built on the Salesforce cloud platform, integrating modules for property, tenant, and payment management. It uses Apex, Flows, and Lightning components to automate lease operations and ensure secure data handling. Real-time dashboards and reports provide instant insights, enabling efficient tracking and management of lease records.
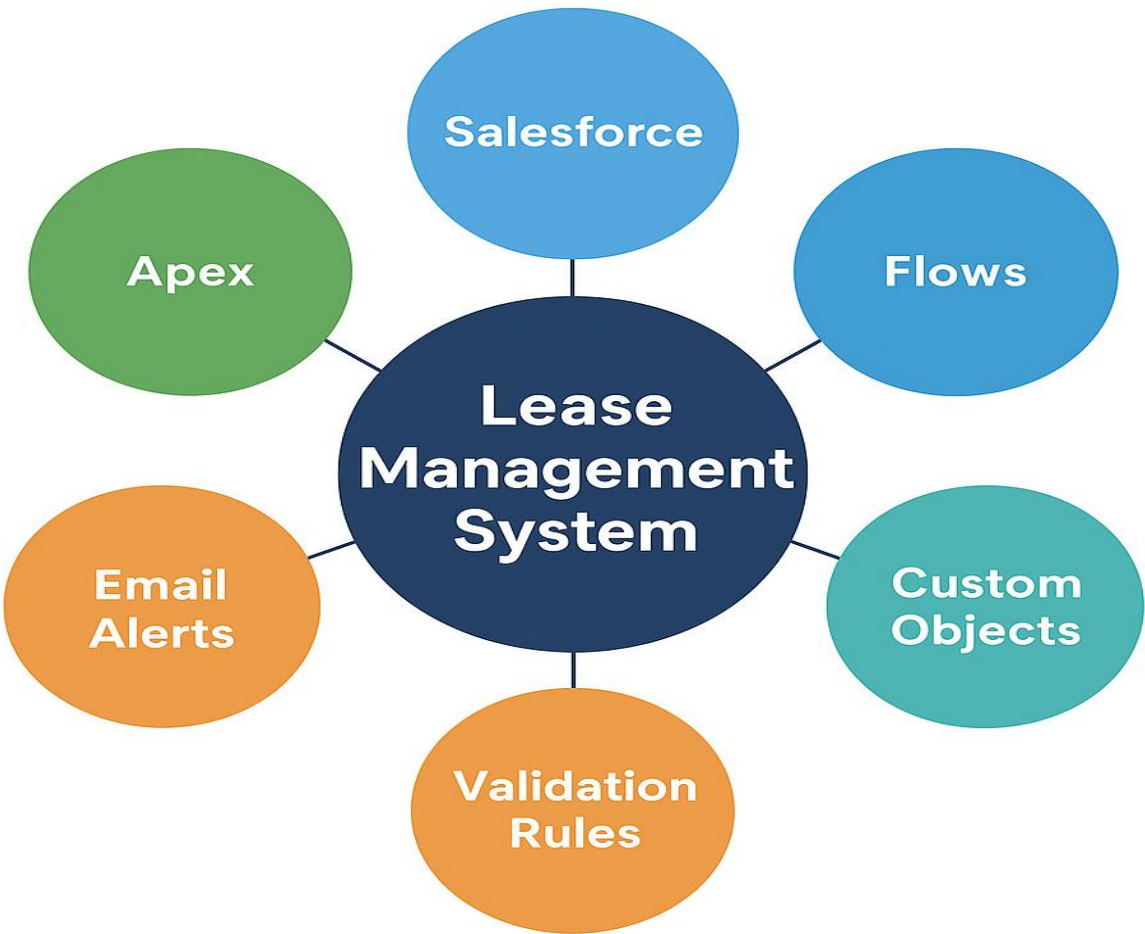
Table-1 : Components & Technologies :

The Lease Management System utilizes Salesforce technologies such as Apex, Flows, and Custom Objects to automate core leasing operations. Each component—from tenant and property management to reporting—works cohesively to ensure data accuracy, operational efficiency, and secure role-based access within the cloud environment.

Component	Technology / Salesforce Feature	Purpose / Functionality
Tenant & Property Management	Custom Objects, Apex Classes	Store and manage tenant info, lease agreements, and property details.
Lease Tracking	Record-Triggered Flows, Apex Triggers	Automate lease creation, renewal reminders, and status updates.
Payment & Invoice Management	Apex, Validation Rules	Handle rent payments, generate invoices, and maintain payment accuracy.
Document Management	Files, Attachments, Custom Metadata	Store and manage lease-related documents securely.
Role-Based Access	Profiles, Permission Sets	Control data access for admins, property owners, and tenants.
Reports & Dashboards	Salesforce Reports, Dashboards	Visualize lease performance, revenue trends, and occupancy status.
Notifications & Alerts	Process Builder, Email Alerts, Flow Actions	Auto-notify tenants for rent due dates and lease expirations.
Automation & Integration	Apex Triggers, Salesforce Flows	Streamline workflows and ensure system-wide automation within the cloud.

Table-2: Application Characteristics:

The **Lease Management System** exhibits key characteristics such as **scalability, automation, and data security**. Built on the Salesforce platform, it provides **real-time reporting, seamless integration, and reliable cloud-based access**, ensuring efficient and intelligent management of leasing operations across tenants, properties, and payments.

Characteristic	Description
Scalability	The system can easily scale to manage multiple properties, tenants, and leases without affecting performance.
Automation	Automates key processes such as lease renewals, payment reminders, and document management using Flows and Apex.
Data Security	Ensures secure data storage and access through Salesforce's role-based permissions and authentication controls.
Real-Time Reporting	Provides up-to-date insights on lease status, payments, and occupancy through dynamic dashboards and reports.
Integration	Seamlessly integrates with external systems for payment gateways, notifications, and document handling.
Cloud Accessibility	Being built on Salesforce, the system offers 24/7 cloud access from any device with an internet connection.
User-Friendly Interface	Delivers an intuitive and responsive interface for admins, tenants, and property managers.