

# Project Design Phase

## Solution Architecture

**Date:** 28 October 2025

**Team ID:** NM2025TMID01082

**Project Name:** Lease Management System in Salesforce

**Maximum Marks:** 2 Marks

## Solution Architecture

### Goals of the Architecture

- Automate the entire lease management process for property owners and tenants.
- Maintain centralized records for properties, tenants, lease agreements, and payments.
- Reduce manual errors in rent tracking, lease renewals, and payment reminders.
- Enhance transparency and communication between landlords and tenants.
- Provide real-time dashboards for lease status, payment tracking, and renewal analytics.

## Key Components

- **Property Table:** Stores details such as Property ID, location, type, and ownership information.
- **Tenant Table:** Maintains tenant details including name, contact, lease start and end dates, and payment preferences.
- **Lease Agreement Table:** Defines relationships between properties and tenants, including lease duration, rent amount, and terms.
- **Payment Table:** Tracks rent payments, due dates, and status of transactions.
- **Notification & Reminder Module:** Automates alerts for upcoming rent due dates and lease renewals.
- **Dashboard & Reports:** Displays total leases, active tenants, rent collection summaries, and overdue payment insights.

## Development Phases

1. **Database Design:** Create Salesforce objects and relationships for Properties, Tenants, Lease Agreements, and Payments.
2. **UI Development:** Design a user-friendly Salesforce interface to simplify lease entry, tenant updates, and payment management.

3. **Automation Logic:** Implement Salesforce Flows and Triggers for automatic rent reminders and renewal alerts.
4. **Testing & Validation:** Conduct test scenarios for lease creation, payment reminders, and renewal workflows.
5. **Deployment:** Deploy the Lease Management System in Salesforce Developer Edition or production environment for real-time use.

## Solution Architecture Description

The **Lease Management System in Salesforce** is designed to streamline property leasing through automation and centralized data management.

It integrates property, tenant, lease, and payment information into a single Salesforce platform for enhanced accuracy and efficiency.

Custom objects maintain structured data flow between **Property**, **Tenant**, **Lease Agreement**, and **Payment** records. Automated flows manage notifications for rent and renewal alerts, ensuring timely communication.

Dashboards and reports offer real-time visibility into leasing performance, enabling property owners to monitor financial metrics, upcoming renewals, and payment histories efficiently.

This architecture improves productivity, reduces manual effort, and ensures a seamless leasing experience for both landlords and tenants. It supports scalability and can be adapted to manage multiple properties across different locations.