SOLUTION REQUIREMENT DOCUMENT

Date	3 August 2025
Team ID	LTVIP2025TMID30830
Project name	Lease management
Maximum Marks	

INTRODUCTION:

The development of a Lease Management System requires a well-defined set of functional and non-functional requirements to ensure that the final solution effectively addresses the current challenges faced in property and lease administration.

📌 **Project Name:**

Lease Management System

✳️ **Team ID:**

LTVIP2025TMID30830

📅 **Date:**

3 August 2025

🔍 **1. Solution Requirements**

✅ **Functional Requirements**

1. **Lease Tracking**

   o   Record start and end dates

   o   Auto-reminders before lease expiration

2. **Tenant Management**

   o   Store tenant details, contact info, lease status

   o   Prevent assigning multiple tenants to the same property

3. **Property Management**

   o   Store property metadata (name, type, address, area)

4. **Payment Processing**

   o   Record rent amounts, payment dates, and status

   o   Mark as Paid/Not Paid

SOLUTION REQUIREMENT DOCUMENT

5. **Automated Communication**

   o Monthly rent reminders

   o Email alerts for approval, rejection, and payment confirmation

6. **Approval Workflows**

   o Approve or reject tenant requests for lease creation or ending

7. **Validation Rules**

   o Lease end date must be after start date

   o Mandatory fields check

8. **Role-Based Access**

   o Admin, Manager, and (future) Tenant user roles

🧪 Non-Functional Requirements

- Response Time: Page load <1 sec

- Trigger execution: ~0.5 sec

- Scalability: Support more than 1000 tenants

- Security: Role-based access and data sharing rules

- Availability: 99.9% uptime through Salesforce

📊 2. Proposed Solution Architecture

Layer	Component	Purpose
Data Layer	Salesforce Custom Objects	Store and link Property, Lease, Tenant, Payment
Logic Layer	Apex Triggers & Classes	Validation, email logic, relationship enforcement
Workflow Layer	Approval Process & Flows	Automate actions based on conditions
Scheduler Layer	Apex Scheduler	Send periodic email reminders
UI Layer	Lightning App	User interface for Admins/Managers

SOLUTION REQUIREMENT DOCUMENT

Layer	Component	Purpose
Notification Layer	Email Templates	Notify users of approvals, payments, alerts

---

📠 3. Salesforce Implementation Plan

- ◆ **Custom Objects**
  - **Property**
  - **Tenant**
  - **Lease**
  - **Payment for Tenant**

- ◆ **Fields & Relationships**
  - Text, Picklist, Email, Phone, Long Text
  - Master-Detail and Lookup relationships between entities

- ◆ **Tabs & Lightning App**
  - Custom Tabs for each object
  - Lease Management App with personalized branding

- ◆ **Automation Components**
  - **Apex Trigger:** Prevent duplicate property assignments
  - **Validation Rules:** Ensure data correctness
  - **Approval Process:** Automate lease workflows
  - **Scheduled Apex Job:** Email reminder on 1st of every month

---

✉️ 4. Email Templates

Template Name	Use Case
Tenant Leaving	Request leave approval
Leave Approved	Notify tenant of approval
Leave Rejected	Deny tenant request with reason

SOLUTION REQUIREMENT DOCUMENT

Template Name	Use Case
Monthly Reminder	Rent payment reminder
Payment Confirmation	Confirm payment received

📈 5. Expected Outcomes

✅ Short-Term Benefits

- Centralized data access
- Reduced manual work
- Auto-alerts and reminders
- Faster lease processing

📊 Long-Term Impact

- Dashboards for insights
- Future integration with payment gateways
- Mobile app readiness
- AI-powered rent forecasting

▓ 6. Conclusion

This Salesforce-based solution will replace manual processes with an automated, accurate, and scalable lease management system. It enhances operational efficiency, ensures compliance, improves tenant satisfaction, and sets the foundation for future growth.