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

**Proposed Solution Document**

**Project Title:** Lease Management System  
**Technology:** Salesforce (Admin & Developer tools)

**Problem statement:**

Traditional lease management in property firms is primarily manual—relying on spreadsheets, email communication, and disconnected tools. This outdated approach results in:

* Missed deadlines for rent payments and lease renewals
* Data entry errors and duplication
* Lack of workflow automation and approval controls
* Poor communication with tenants
* No real-time tracking or reporting

**1. Objective**

To design and implement a centralized lease management system using Salesforce that allows property managers and tenants to manage leasing activities such as lease agreements, payments, approvals, and communications efficiently.

**2. Proposed Solution Overview**

A custom Salesforce application will be developed which includes:

* Custom objects to manage properties, tenants, leases, and payments.
* Email templates to automate communication.
* Approval processes to handle lease approvals.
* Validation rules to maintain data integrity.
* Automation tools such as flows and Apex triggers for business logic enforcement.
* Scheduled job for sending monthly payment reminders via email.

**3. System Components and Features**

**a. Custom Objects**

* **Property:** Stores property information.
* **Tenant:** Stores tenant data, linked with properties.
* **Lease:** Stores lease agreements with start and end dates.
* **Payment for Tenant:** Tracks payment status, amount, and related lease/property.

**b. Fields & Relationships**

* Standard and custom fields added to each object as required.
* Master-detail and lookup relationships between Property-Tenant, Payment-Tenant, etc.
* Picklist fields for unit type (1BHK, 2BHK, 3BHK), status (Paid/Not Paid), etc.

**c. Tabs and Lightning App**

* Custom tabs created for all custom objects.
* A Lightning App named “Lease Management” built for easy navigation.

**d. Validation Rules**

Example: End date must be greater than start date in Lease object.

**e. Email Templates**

* Tenant leaving request
* Leave approval/rejection
* Monthly rent payment reminder
* Payment confirmation

**f. Approval Processes**

Automated approval workflow for lease activities like leave requests.

**g. Apex Triggers & Classes**

* Validation to ensure one tenant is linked to only one property.
* Trigger handler and logic classes implemented using Apex.

**h. Scheduled Class**

* **MonthlyEmailScheduler:** Sends rent reminders on the 1st of every month to tenants.

**4. Benefits of the Proposed System**

* Centralized data access and role-based visibility.
* Improved communication using automated emails.
* Validation and automation reduce errors and manual follow-ups.
* Easy scalability and customizability using Salesforce.

**5. Tools & Technologies**

| **Layer** | **Tool/Technology** | **Purpose** |
| --- | --- | --- |
| CRM Backend | Salesforce Platform | Data handling, logic, UI |
| Scripting | Apex | Custom logic and automation |
| Automation | Flows, Triggers | Business process automation |
| Communication | Email Templates | Notifications and alerts |

**6. Architecture Diagram**

I can create and share a visual **Technology Stack Architecture Diagram** if needed.

**7. Conclusion**

This Lease Management solution provides an effective Salesforce-based platform to handle lease operations with automation, validation, and user-friendly access. It meets the requirements of modern lease administration and reduces administrative overhead for property managers.