PHASE III: REQUIREMENT ANALYSIS

Date	06 November 2025
Team ID	NM2025TMID06735
Project Name	Lease Management
Maximum Marks	4 Marks

Title: Requirement Analysis for "Lease Management"

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1. Objective

The Requirement Analysis Phase focuses on identifying, defining, and validating the functional and technical requirements needed to develop the Lease Management application on the Salesforce platform.
This document ensures clarity of scope, system behaviour, data structure, automation needs, and performance expectations, providing a strong foundation for system design and implementation.

2. Scope of the System

The Lease Management system is designed to digitize and automate end-to-end lease agreement processes between property owners and tenants.

The scope includes:

- Digital lease document storage & tenant onboarding
- Automated rent reminders & lease renewal alerts
- Payment tracking and overdue alerts
- Dashboard & report-based analytics
- Secure, role-based access for Owner, Tenant & Admin

3. Functional Requirements

3.1 Core Functional Modules

Module	Functionality	Salesforce Feature Used
Property Management	Register properties & unit details	Custom Object
Tenant Management	Store tenant details & lease info	Custom Object + Flow
Lease Agreement Handling	Create, upload & track lease documents	File Upload + Lookup
Rent Reminder System	Auto-reminds tenants of due dates	Flow + Email Alert

Payment Tracking	Records paid, pending & overdue rents	Custom Object + Reports
Renewal & Expiry Alerts	Alerts owner & tenant before lease expiry	Scheduled Flow
Dashboard Analytics	Tracks total rent, pending rent, expiring leases	Reports + Dashboards

3.2 System Workflow (Process Flow)

1. Owner/Agent adds property and tenant details.

2. Lease record is created with start date, end date, and rent value.

3. System auto-schedules monthly rent reminder emails/SMS.

4. Tenant updates payment status or admin logs payment.

5. Dashboard updates real-time rent collection status.

6. System alerts both parties 30 days before lease expiry.

4. Technical Requirements

Category	Requirement	Description
Platform	Salesforce Developer Edition	CRM cloud for automation
Programming	Apex (if needed)	Auto constraints & validation
Automation	Salesforce Flow	Auto rent reminder & renewal alerts
Database	Salesforce Objects	Property, Tenant, Lease, Payment
Visualization	Dashboard Builder	Rent status, lease expiry chart
Security	Profiles & Roles	Owner, Tenant, Admin access control

4.1 Software Tools Used

- Salesforce Lightning Experience

- Flow Builder

- Schema Builder

- Reports & Dashboards

- Developer Console

4.2 Hardware Requirements

Component	Minimum Requirement
Processor	Intel i3 or above
RAM	4 GB+
Internet	Min 2 Mbps stable
Storage	500 MB browser cache
Browser	Chrome / Edge latest

5. Non-Functional Requirements
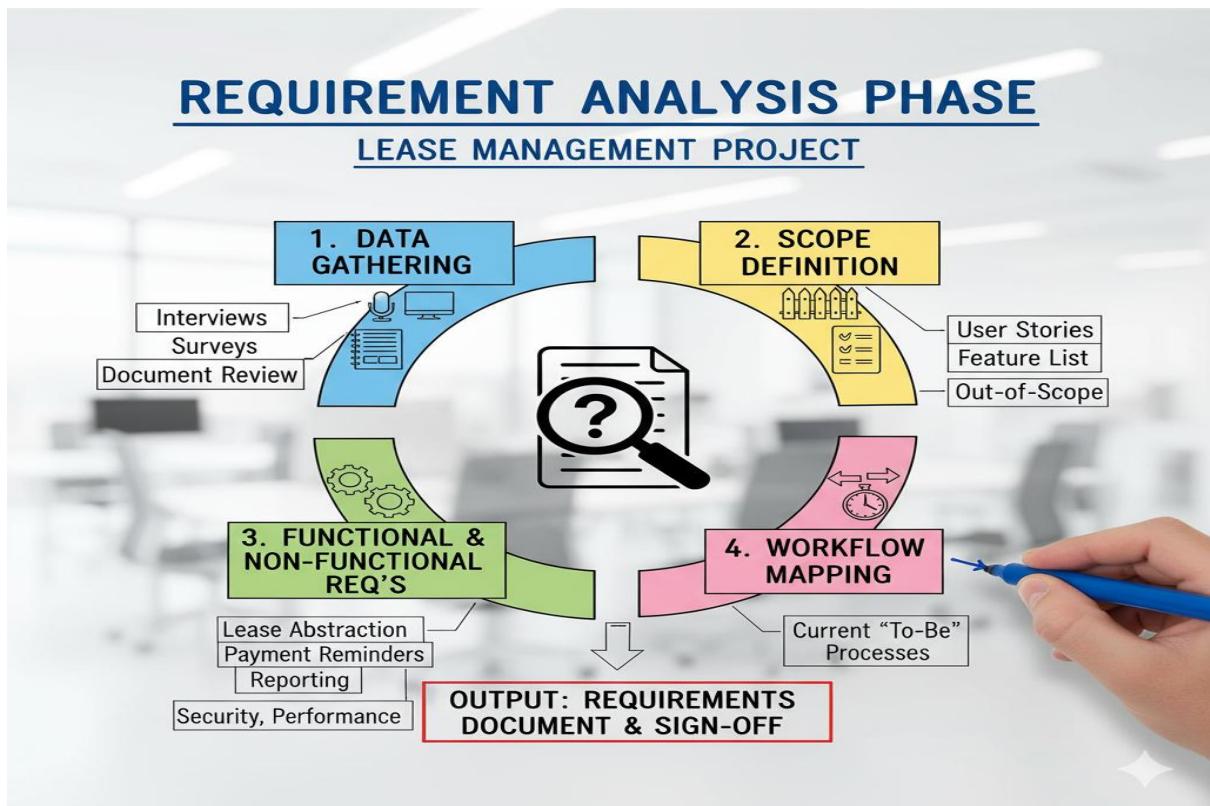
Category	Requirement	Description
Performance	System must support 200+ active leases	Handled via Salesforce architecture
Security	Role-based access	Tenants cannot see other tenant data
Usability	Simple UI for non-technical users	Lightning App Navigation
Scalability	Should support multi-property owners	Object relationships dynamic
Reliability	99.9% uptime	Salesforce cloud standards
Maintainability	Low-code updates	Flow-based automation

7. Data Model Design

Object	Key Fields	Relationship Type
Property	Name, Location, Unit Count	Lookup to Owner
Tenant	Name, Phone, Email	Lookup to Property
Lease Agreement	Start Date, End Date, Rent Amount	Master-Detail (Tenant)
Payment	Month, Amount, Status, Date	Master-Detail (Lease Agreement)
Reminder Log	Reminder Date, Type	Lookup to Lease

Example Formula Field (Lease Duration):
End_Date__c - Start_Date__c

7. User Interface (UI) Requirements

Navigation tabs inside Salesforce Lightning App:

1. Properties

2. Tenants

3. Lease Agreements

4. Payments

5. Dashboards

7.1 UI Expectations

- One-click create Lease Agreement with auto-calculated fields

- Mobile-friendly layout for tenants

- Dashboard embedded in Home Page

- Auto status indicators: Paid, Pending, Overdue

8. System Validation Requirements

Test Area	Description	Expected Result
Flow Execution	Auto-rent reminder every month	Email/SMS triggered
Lease Expiry Alert	30-day before alert	Notification to Owner & Tenant
Dashboard	Payment & lease summary	Auto refresh with latest data
Permission Test	Tenant access control	Tenant sees only own record

9. Risk Identification & Mitigation

Risk	Description	Mitigation
Data Loss	Lease docs deleted accidentally	Enable recycle bin & backup
Wrong Access	Tenants viewing other data	Profile-based object rules
Payment Disputes	No proof of payment	Add Receipt Upload & Log
Automation Failure	Flow errors	Add Debug logs + Test class

10. Summary

The Requirement Analysis Phase establishes a complete blueprint for the Lease Management point. It documents the functional, technical, data, and validation needs, ensuring smooth development in the upcoming design phase.

Key achievements of this phase:

- Defined all core modules & workflows
- Mapped data model & object relationships
- Established UI layout & automation logic
- Identified risks and mitigation plans

This phase ensures the Lease Management project is clear, structured, scalable, and implementation-ready.