

Requirement Analysis Phase

Technology Stack

Date	07-11-2025
Team ID	NM2025TMID06244
Project Name	Lease Management

1. Introduction

The Lease Management System (LMS) is developed on the Salesforce cloud platform to streamline lease lifecycle management, tenant communication, rent invoicing, payment tracking, and maintenance workflows.

This section describes the tools, platforms, and technologies used in building the LMS and ensures that the solution is scalable, secure, and easy to maintain.

2. Technology Layer Architecture

Layer	Technologies Used	Purpose
User Interface Layer	Salesforce Lightning, Lightning Web Components (optional)	UI & user workflows
Application Layer	Salesforce CRM Platform	Business logic, automation & UI handling
Logic/Automation Layer	Apex Classes, Apex Triggers, Flow Builder, Process Builder	Automations, validation, workflow logic
Database Layer	Salesforce Objects, SOQL	Data storage & querying
Document Storage	Salesforce Files, Attachments	Lease agreements & tenant documents
Messaging / Notification Layer	Email Alerts, Flow Notification, Salesforce Scheduler	Auto reminders & communication
Reporting Layer	Reports & Dashboards	Data insights & analytics

Technology Layer Architecture



3. Technology Components

a. Platform

Salesforce Lightning Platform

Cloud-based, customizable, scalable CRM infrastructure

b. Development Tools

Tool	Purpose
Apex Programming	Backend logic and validation
Flow Builder	No-code automations, approval workflows
Process Builder (legacy support)	Automation flows
Lightning App Builder	UI customization
SOQL & SOSL	Database querying
Salesforce Admin Console	Configurations, roles, security

c. Front-End

Technology	Purpose
Lightning Pages	Screens & record pages
Standard Salesforce Forms	User input screens
Lightning Web Components (optional)	Custom UI enhancement

4. Testing Tools

Tool	Use
Salesforce Sandbox	Development & testing
Apex Test Classes	Unit testing business logic
UAT Scripts	User Acceptance Testing

5. Software & Hardware Requirements

Requirement	Specification
OS	Windows / macOS / Linux
Browser	Chrome / Edge / Safari / Firefox
Memory	4GB+ RAM recommended
Internet	Stable broadband connection
Salesforce Access	License (Admin/User)

6. Conclusion

The LMS leverages the powerful Salesforce ecosystem to deliver:

- Cloud scalability
- Robust automation
- Strong security
- Real-time analytics
- Seamless data storage & processing

This technology stack ensures the system is future-ready, customizable, and capable of supporting large-scale lease management needs efficiently.