- o Create, view, edit, and delete property records.
- Track details: property name, address, type, ownership, status.

### 2. Tenant Management

- o Maintain tenant profiles with contact info, lease history, and documents.
- o Link tenants to properties and leases.

# 3. Lease Agreement Tracking

- o Generate new lease agreements.
- o Track start/end dates, duration, terms, rent amount, status (active/expired).
- Upload scanned copies or PDFs.

### 4. Rent/Payment Tracking

- o Record monthly/quarterly payments.
- o Set due dates and automatic payment reminders.
- o Integrate with Salesforce Flow to notify tenants or admin for late payments.

### 5. Renewals & Terminations

- o Track lease expiry dates and send renewal alerts.
- o Allow early termination with reason tracking.

# 6. Reporting and Dashboards

- o Generate reports for:
  - Active/expired leases
  - Payment history
  - Property occupancy
- o Visual dashboards for lease health and payment status.

### 7. User Roles and Permissions

- o Admin: Full access
- o Property Manager: Manage leases & payments
- o Tenant (Community User): View lease & payment status

# **Non-Functional Requirements**

These refer to **how** the system should perform.

### 1. Scalability

o Should support 100+ properties and tenants with no performance lag.

### 2. Usability

o User-friendly interface with clear navigation for both admin and tenants.

### 3. Data Security

- o Only authorized users can access/edit lease and payment records.
- o Role-based sharing and field-level security enabled.

### 4. Availability

o 99.9% uptime – accessible 24/7 via Salesforce Cloud.

### 5. Integration

- o Integration with email (Outlook/Gmail) and calendar for reminders.
- o Optional: Payment gateway (e.g., Razorpay, Stripe).

### 6. Automation

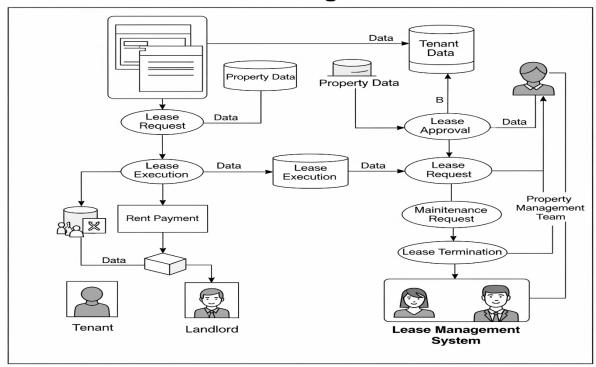
- o Salesforce Flows to automate:
  - Payment reminders
  - Lease renewal notices
  - Monthly reports

# **System Requirements (Salesforce Specific)**

Component	Requirement
Salesforce Edition	Enterprise/Developer
Objects Used	Custom Objects: Property, Tenant, Lease, Payment
Automation Tools	Flows, Process Builder, Approval Processes
Reports & Dashboards	Custom report types and dashboards
Page Layouts	Record pages customized using Lightning App Builder
Арр Туре	Lightning App

# 3.3 Data Flow Diagram

# **Lease Management**



# 3.4 Technology Stack:

# MySQL Node Node.j Relational Database Oracle Node.js Leanage Lease Agreements, Core Logic **Property Data** Tenant Backend Frontend Angular Vue Norcle Java Spring Tenant reliability Google Cloud **API Gateway**

# Lease Management System

The Lease Management System is built using tools and technologies provided by Salesforce. The main technologies used are:

### 1. Salesforce Platform

- Main platform used for building the application.
- Provides tools for development, automation, and data storage.

# 2. Frontend (User Interface)

• **Lightning App Builder** – to design pages.

- **Lightning Web Components** (LWC) to create custom components.
- **Tabs & Page Layouts** to organize data views.

### 3. Backend (Logic & Automation)

- **Apex** used to write custom logic (classes, triggers).
- **SOQL** used to query data from Salesforce objects.
- **Flow Builder** to automate tasks without code (e.g., send emails, update fields).

### 4. Database

- Custom Objects like Lease, Tenant, Property, and Payment to store project data.
- **Standard Objects** like Account and Contact, used if needed.

### 5. Integration (if required)

- **REST API / SOAP API** to connect with other apps.
- Named Credentials to store external API login info securely.

### 6. Development Tools

- **Developer Console** for writing and testing code.
- **VS Code** + **Salesforce CLI** for professional development.
- **Change Sets** for moving changes from sandbox to production.

### 7. Testing Tools

- **Apex Test Classes** to test code.
- **Debug Logs** to find and fix errors.
- Workbench to run queries and test APIs.