

Project Design Phase-II
Data Flow Diagram & User Stories

DATE	01/11/2025
TEAM ID	NM2025TMID07701
PROJECT NAME	Lease Management
MAXIMUM MARKS	4 MARKS

Data Flow Diagrams (DFD):

In a lease management system, data flows through several key stages to ensure efficient processing and monitoring of lease activities. The process begins with the **input stage**, where lease agreements, tenant details, payment terms, and property information are entered into the system. This data is then stored in a **centralized database**, allowing secure access and easy retrieval. During the **processing stage**, the system automatically analyzes lease terms, schedules payments, generates reminders for renewals, and calculates rent or maintenance charges. The **output stage** involves producing reports, invoices, alerts, and compliance summaries for management review. Throughout the process, data flows between modules such as **finance, legal, property management, and accounting**, ensuring seamless integration and consistency across departments. This automated data flow minimizes errors, enhances transparency, and supports real-time decision-making within the lease management lifecycle.

Data Flow Description:

1. **Admin/User Input:** The Admin enters lease details (tenant info, property, start date, end date, rent amount) into the system.
2. **System Validation:** Salesforce validates data (e.g., start date < end date, rent amount required).
3. **Database Update:** The data is stored in the **Lease Records Table** and linked with tenant and property data.

4. **Automation Process:** Scheduled Flows send **payment reminders** and **renewal alerts** automatically.
5. **Reporting & Dashboards:** Managers can view **lease reports** such as active leases, upcoming renewals, or unpaid rents.

User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Sprint
Administrator	Lease Management	LSM-1	As an admin, I want to create and manage lease records, linking tenants and properties.	The system should allow adding new leases with valid tenant and property details.	High	Sprint-1
System (Auto Check)	Validation & Automation	LSM-2	As a system, I must validate lease dates and automatically send payment reminders before due dates.	System should validate that start date < end date and send alerts automatically.	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Sprint
Tenant	Payment Tracking	LSM-3	As a tenant, I want to receive reminders and confirm rent payments digitally.	System sends notification 3 days before due date and marks status as "Paid" once confirmed.	Medium	Sprint-2
Manager	Reporting & Monitoring	LSM-4	As a manager, I want to view dashboards showing active leases, overdue payments, and upcoming expirations.	Dashboards should show real-time data of all leases and payments.	High	Sprint-2
System (Auto Update)	Renewal & Alert Notifications	LSM-5	As a system, I must alert admin and tenant before lease expiration for timely renewal.	Renewal alert is sent 7 days before lease end date via email or in-app notification.	Medium	Sprint-3

Explanation:

This DFD-based design ensures:

- **Accuracy** of lease and payment data through validation rules.
- **Automation** via Salesforce Flows for reminders and renewals.
- **Transparency** through dashboards and reports.
- **Scalability**, allowing new modules (e.g., maintenance requests or deposit tracking) to be added easily.