Planning and Logic Document

₩Project Planning and Logic – Lease Management

1. Planning Phase

Project Goals:

- Digitize and automate lease operations.
- Centralize data for properties, tenants, leases, and payments.
- Reduce manual work through automation.
- Ensure data accuracy and compliance with business rules.

Project Scope:

- Build a Salesforce Lightning App.
- Use custom objects and relationships to model real estate operations.
- Integrate validation, approvals, email communication, and automation.

Stakeholders:

- Salesforce Admins App configuration and rule enforcement.
- **Developers** Backend logic (Apex, Flows).
- Managers / End Users Monitor and manage lease-related tasks.

2. Logical Design

Data Model Design:

Objects and Fields:

- o Property → Address, Type, Size
- o Tenant → Name, Email, Phone, Status
- o Lease → Start/End Dates, Status
- o Payment → Amount, Due Date, Paid Status

• Relationships:

- o Tenant ↔ Property: Master-Detail (One-to-One)
- o Payment ↔ Tenant: Lookup
- o Payment ↔ Property: Master-Detail

Business Rules and Logic:

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Requirement	Tool Used	Logic Implemented
Only one active tenant per property	Apex Trigger	Checks before assigning; throws error if property already assigned
Lease end date must be after start date	Validation Rule	End_datec > Start_datec
Lease approval before activation	Approval Process	Multi-step review and status update with email alerts
Rent reminders to tenants	Scheduled Apex Class	Automated monthly emails using templates and batch jobs
Payment logging	Manual + Apex Trigger	When payment is recorded, associated lease and tenant data are updated

User Interaction Logic:

- 1. Admin/Manager logs into Lease Management App
- 2. Creates new Tenant & Property records
- 3. Submits Lease for Approval
- 4. System validates and routes for approval
- 5. **Upon approval:**
 - o Lease marked active
 - o Scheduled job sends monthly rent reminders
- 6. Tenant makes payment
- 7. Payment is logged under Payment object
- 8. Dashboard reports update in real-time

Tools & Technologies:

- Salesforce Lightning App Builder UI components
- Object Manager Data modeling
- Flows & Process Builder Workflow automation
- Apex (Triggers, Classes) Custom logic

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- Validation Rules Data constraints
- Reports & Dashboards Output and analytics

CONCLUTION:

The Lease Management Project was executed with careful planning and strong logical structuring to meet the operational needs of property and lease administration. The planning phase focused on defining goals, identifying stakeholders, and outlining the functional scope. The logic phase centered on system design, data integrity, and automation workflows.