OUTPUT DOCUMENT

Date	19 JUNE 2025
Team ID	LTVIP2025TMID30830
Project Name	Lease Management
Maximum Marks	

The outputs of this project come in the form of :

1.Salesforce-Based Lease Management Application:

A custom application developed using Salesforce Lightning App, tailored for managing leases, tenants, properties, and payments**.**

2.Custom Data Model:

- Created **custom objects:** Property, Tenant, Lease, Payment.

- Defined **custom fields** and **relationships** (master-detail and lookup) for seamless data tracking.

3. User Interface & Navigation:

- Built an intuitive Lightning App interface with custom tabs for each object.

- Provided user-specific access and visibility settings.

4. Data Validation and Integrity:

- Implemented validation rules to ensure accurate data entry (e.g., lease end date > start date).

- Applied Apex triggers to prevent assigning multiple tenants to a single property.

5.Automated Workflows and Communication:

- Used email templates for automated notifications (rent reminders, approvals, etc.).

- Scheduled Apex classes for background processing without manual triggers.

6.Testing and Performance Validation:

- Ensured efficient load times (<1 second per object navigation).

- Verified trigger execution time (~0.5 seconds per record), indicating high performance.

7.Documented Business Rules:

- Set up validation and approval processes aligned with real-world leasing scenarios.

8. Challenges Addressed:

- Handled complexities in data relationships, business rule enforcement, and user interface design.
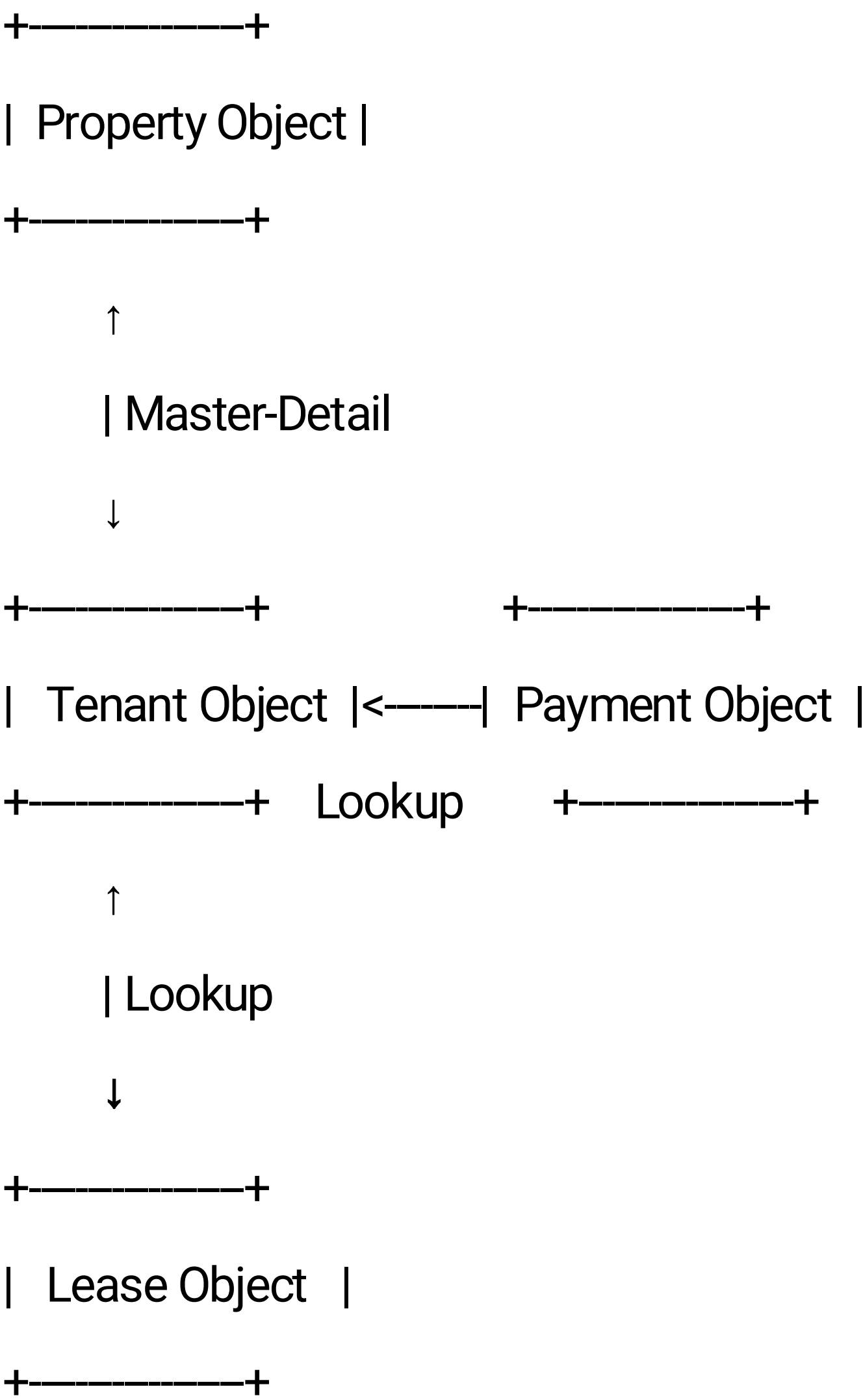
9. Scalability & Maintainability:

- Code written for reusability using Apex handlers and classes with future growth in mind.

10.Preparation for Future Enhancements:

- Outlined roadmap for integrating mobile apps, payment gateways, tenant portals, and AI features.

◆ System Architecture Diagram

```
+------------+

| Property Object |

+------------+

     ↑

     | Master-Detail

     ↓

+------------+            +------------+

|  Tenant Object  |<------|  Payment Object  |

+------------+   Lookup    +------------+

     ↑

     | Lookup

     ↓

+------------+

|  Lease Object   |

+------------+
```

[Lightning App UI] → Tabs for Property, Tenant, Lease, Payment

[Apex Triggers] → Validate tenant-property mapping

[Flows, Email Templates] → Automate rent reminders, approvals

1.Approval Workflow Status

- 📌**Chart Type:** Funnel / Gauge
- 🔍**Metrics:**

Requests in Each Stage (Submitted → Pending → Approved / Rejected)

2.Lease Renewal Alerts

- 📌**Chart Type:** Line Chart or Table
- 🔍**Metrics:**
  - Leases Expiring in Next 30/60 Days
  - Renewal Status (Sent / Approved / Declined)

3. Property Occupancy Report

- 📌**Chart Type:** Stacked Bar or Heatmap
- 🔍**Metrics:**
  - Number of Occupied vs Vacant Properties
  - Occupancy by Property Type or Location

🔹 Conclusion:

The **Lease Management System**, built on the Salesforce platform, offers a **structured and efficient solution** for real estate firms to manage lease operations. With custom data models, validation rules, automation, and performance optimization, the system achieves its goal of reducing manual efforts and ensuring operational consistency.