LEASEMANAGEMENT

College Name: Hindusthan College Of Science And Commerce College Code: CA

TEAM ID: NM2025TMID28247 TEAM MEMBERS:

Team Leader Name: DHARANIDHARAN S

Email: 21dharani21s@gmail.com

Team Member: HARISH RAGAVENDRA S

Email: harishragavendra 9306@gmail.com

Team Member: SAKTHIVEL

Email: sakthivelseeni743@gmail.com

Team Member: INDHIRESH

Email: indhireshe@gmail.com

Team Member: SANTHOSH S

Email: santoshsabariss513@gmail.com

1. INTRODUCTION

1. Project Overview

This project is focused on the development and implementation of a Lease Management System using Salesforce, designed to address the challenges of manual property lease tracking, tenant management, payment processing, and

communication within the organization. The goal is to deliver a comprehensive solution that streamlines and automates various aspects of lease management, from contract creation to payment tracking, approval workflows, and reporting.



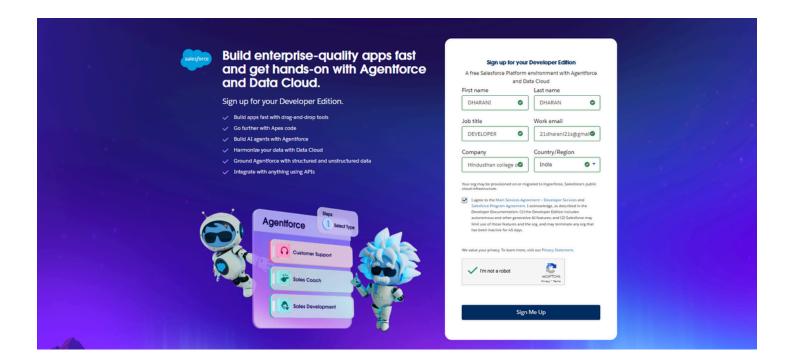
1. Purpose

The main objective of the project is to enable organizations to efficiently manage properties, tenants, and lease-related activities. It reduces manual intervention, improves accuracy, and ensures better compliance and communication.

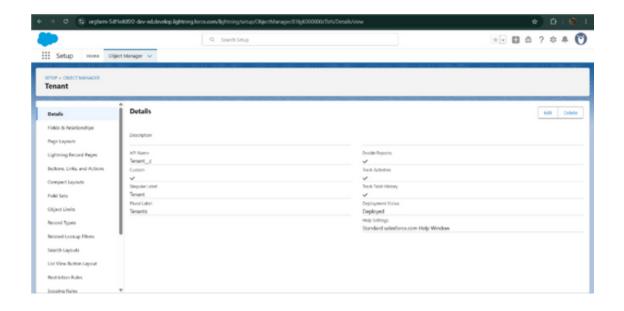
DEVELOPMENT PHASE

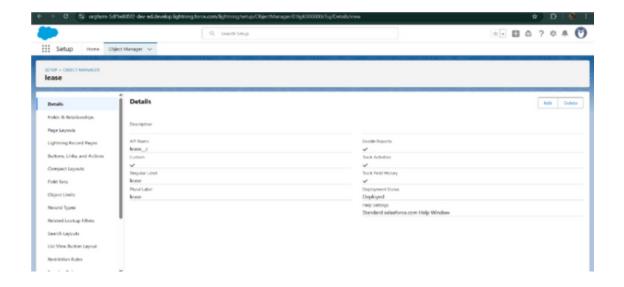
Creating Developer Account:

By using this URL <u>-https://www.salesforce.com/form/developer-signup/?d=pb - https://www.salesforce.com/form/developer-signup/?d=pb</u>



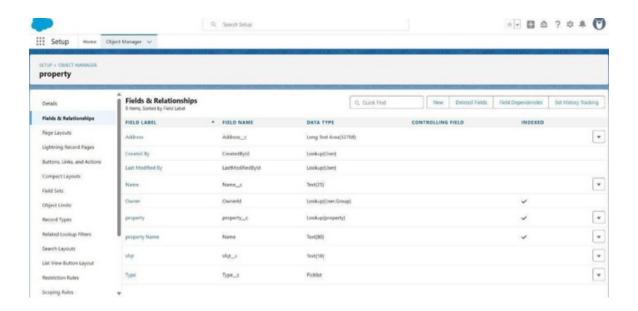
• Created objects: Property, Tenant, Lease, Payment

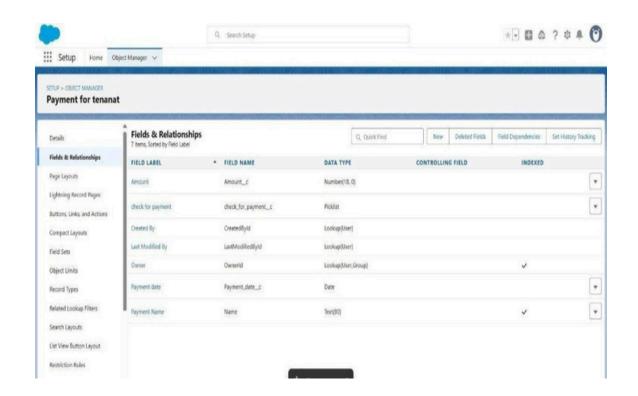


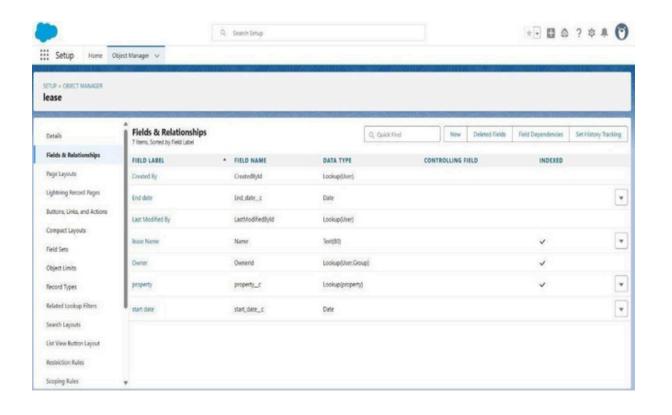


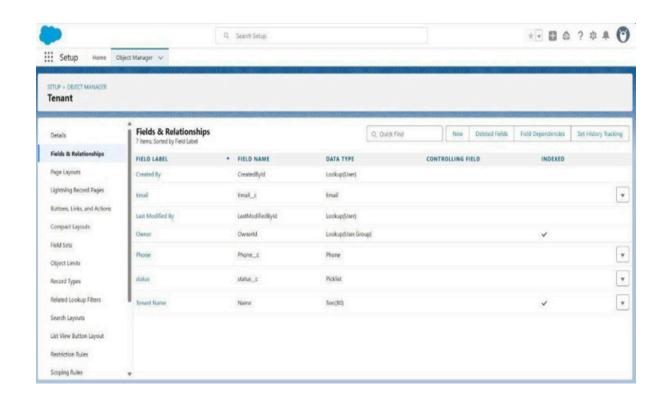


■ Configured fields and relationships

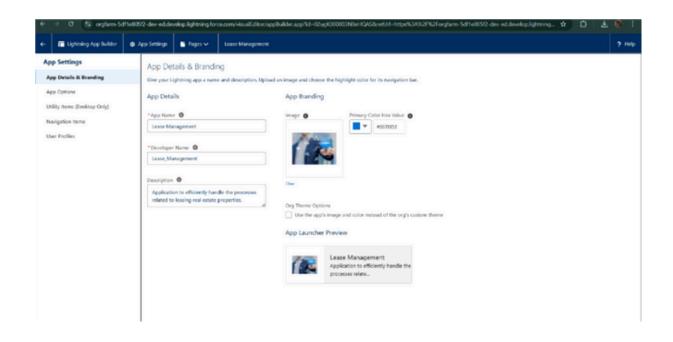


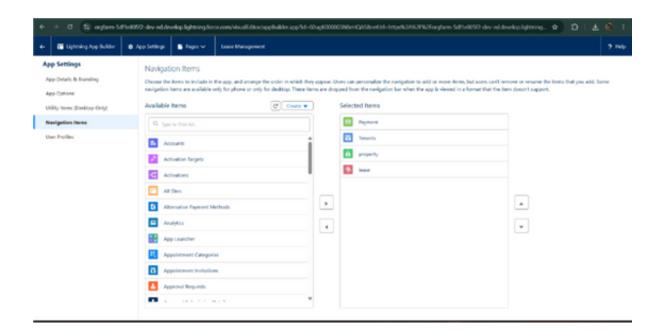


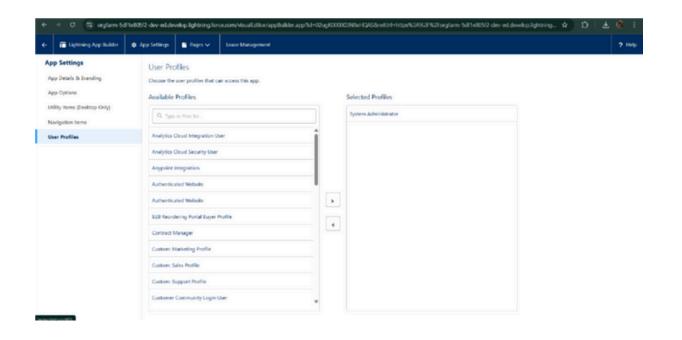


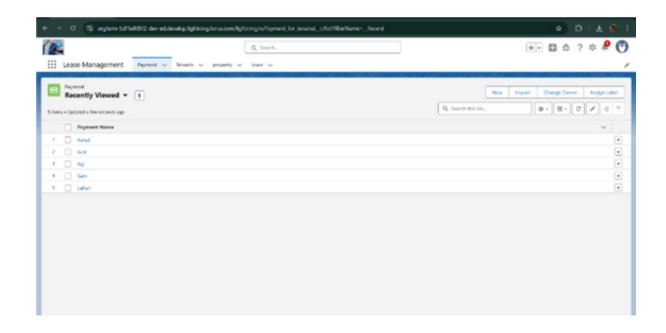


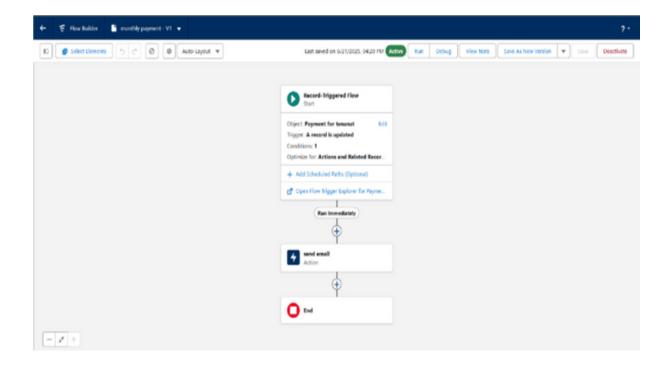
Developed Lightning App with relevant tabs



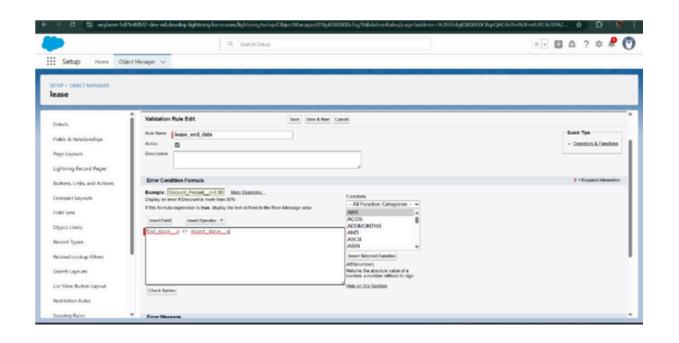


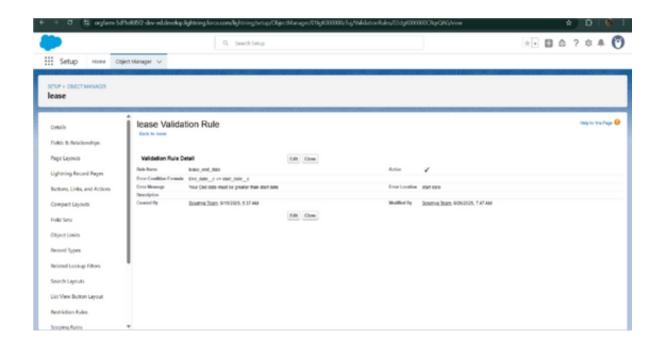




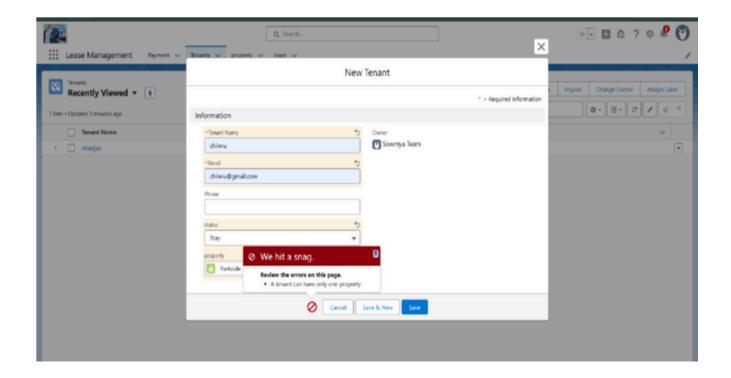


- Implemented Flows for monthly rent and payment success To create a validation rule to a Lease Object





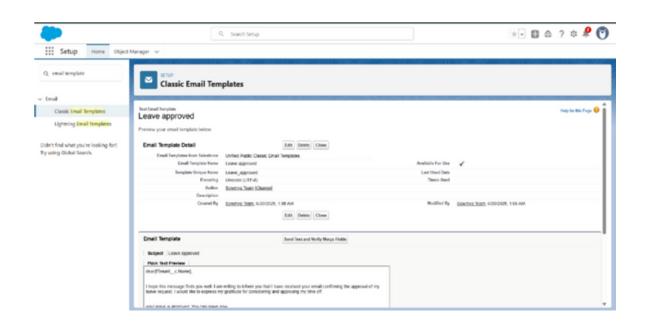
• Added Apex trigger to restrict multiple tenants per property

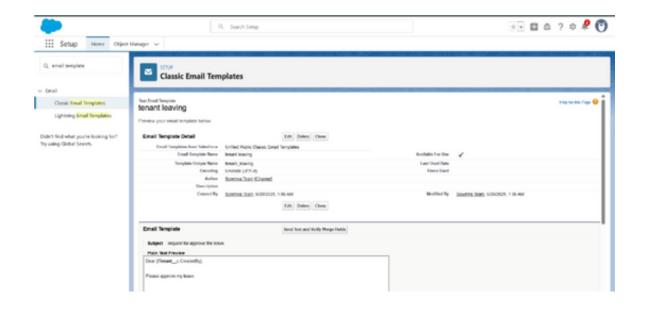


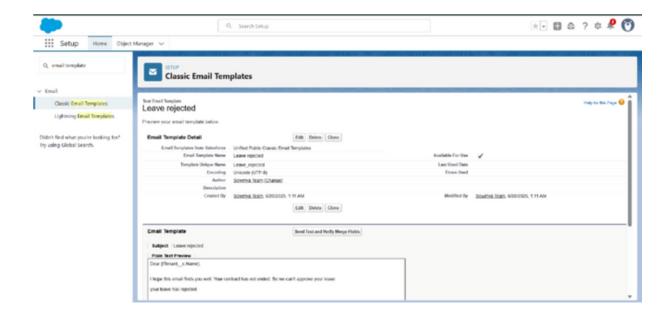
• Scheduled monthly reminder emails using Apex class

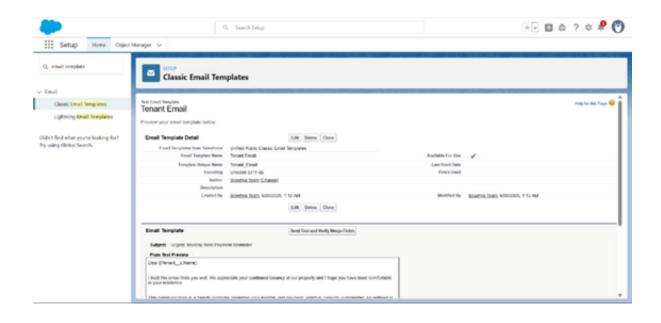
```
No. 10. No. 10
```

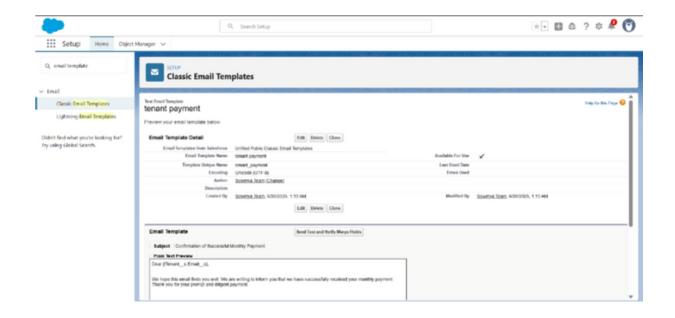
• Built and tested email templates for leave request, approval, rejection, payment, and reminders





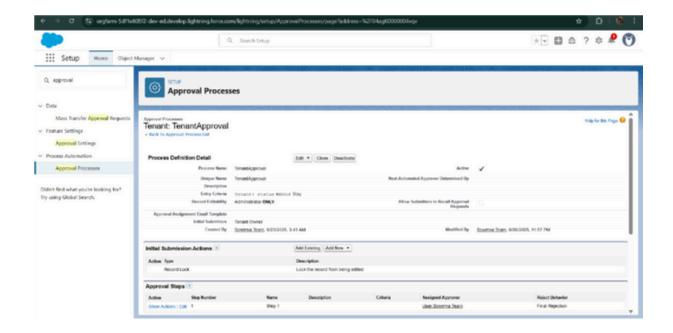




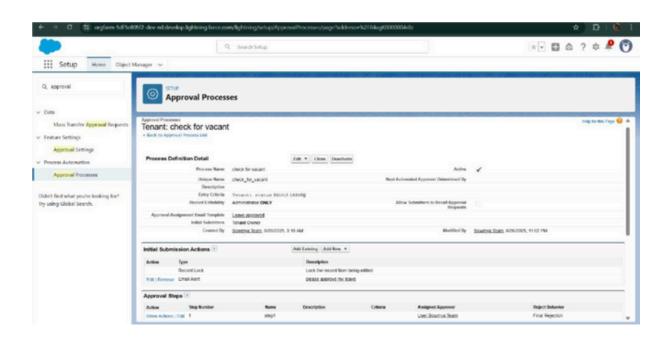


• Approval Process creation

For Tenant Leaving:

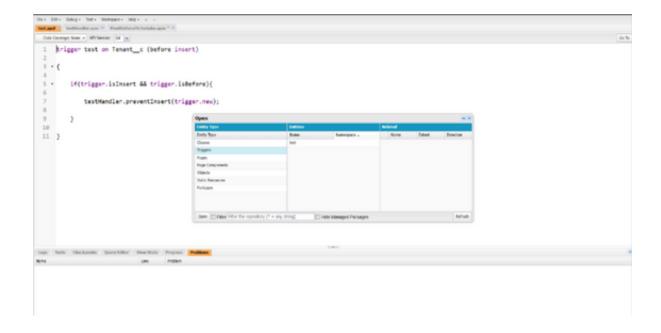


For Check for Vacant:



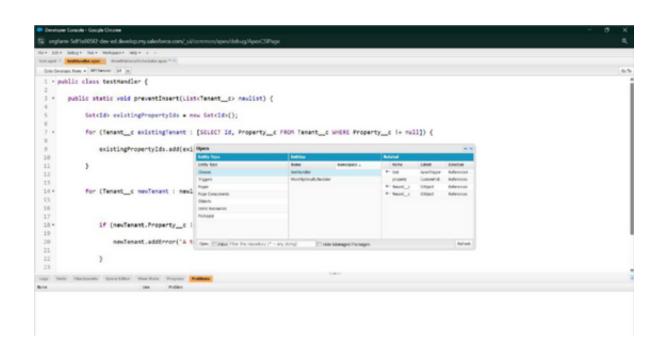
• Apex Trigger

Create an Apex Trigger



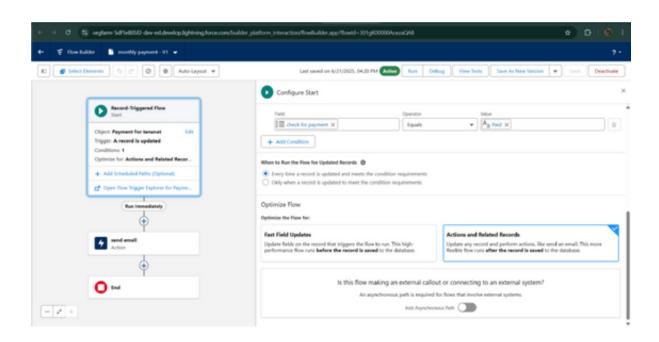
```
| Dept. | Dept. | Compared Consult | Compared Consu
```

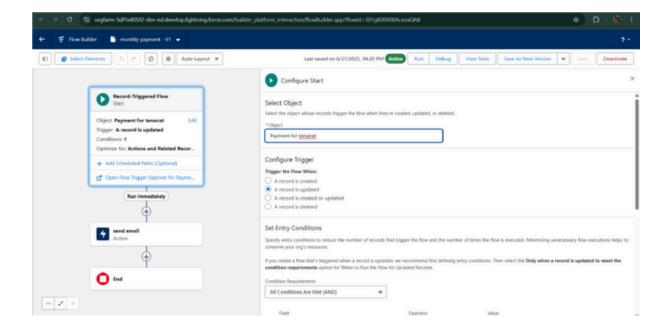
Create an Apex Handler class



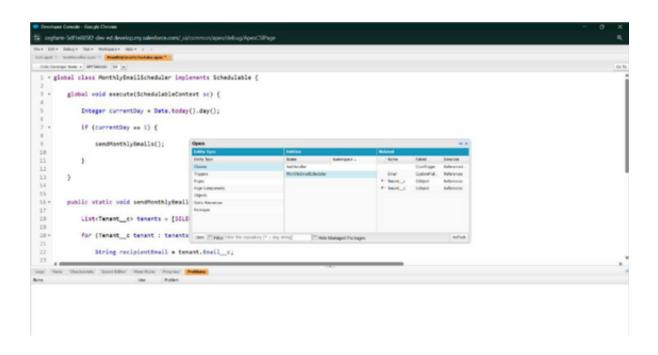
```
| Compleme Control Con
```

• FLOWS



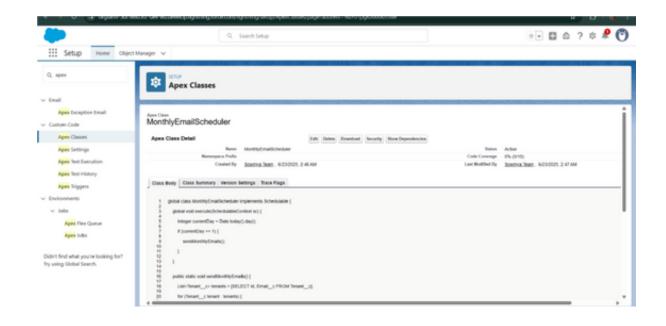


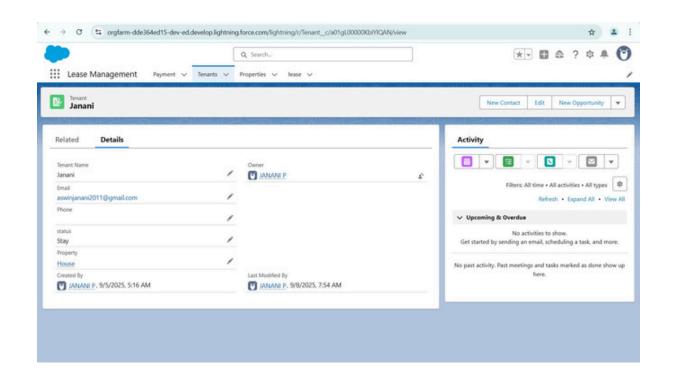
• Schedule class: Create an Apex Class

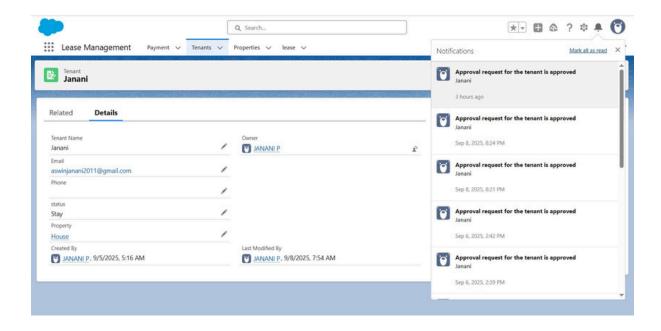


```
Execution Consider Co
```

Schedule Apex class







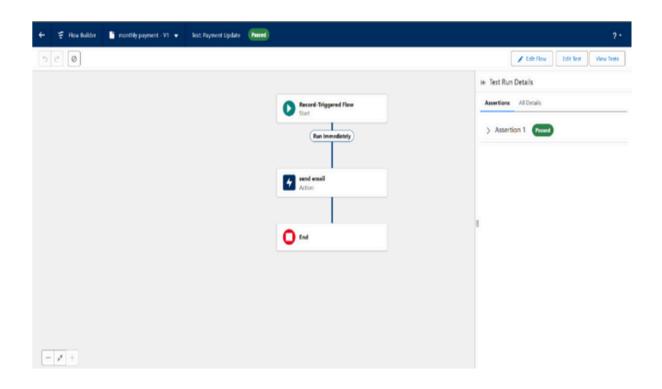
FUNCTIONALAND PERFORMANCE TESTING

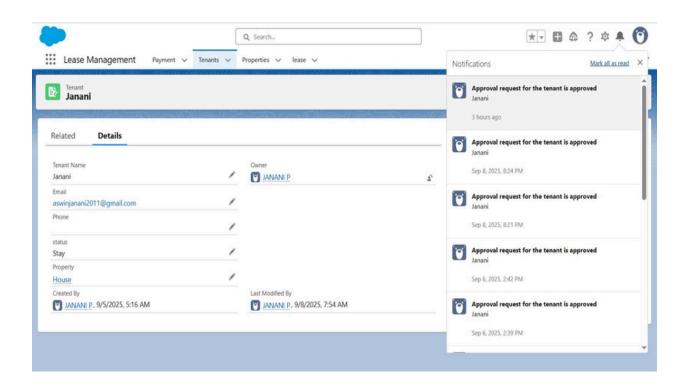
Performance Testing

o Trigger validation by entering duplicate tenant-property records

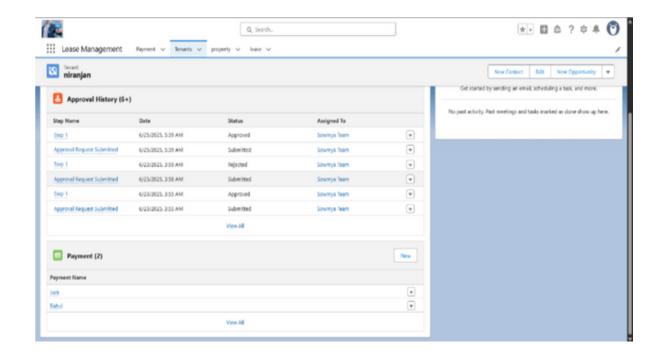


o Validation Rule checking

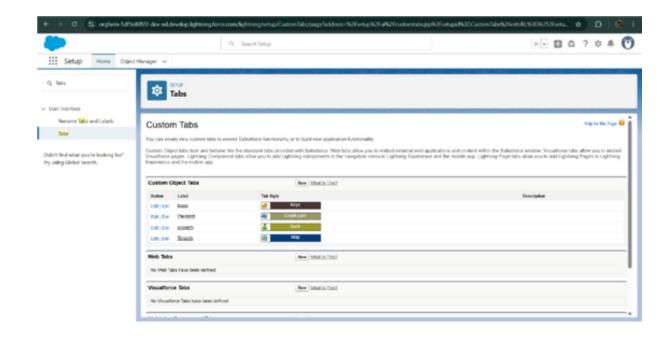




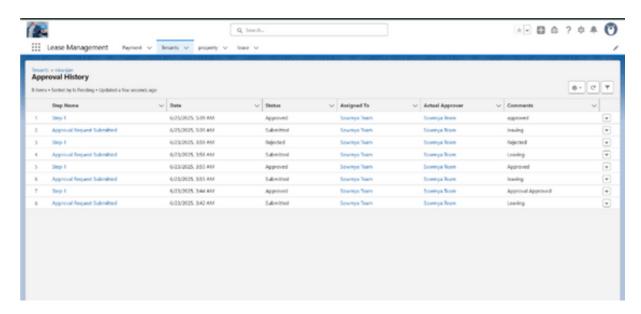
• Test flows on payment update



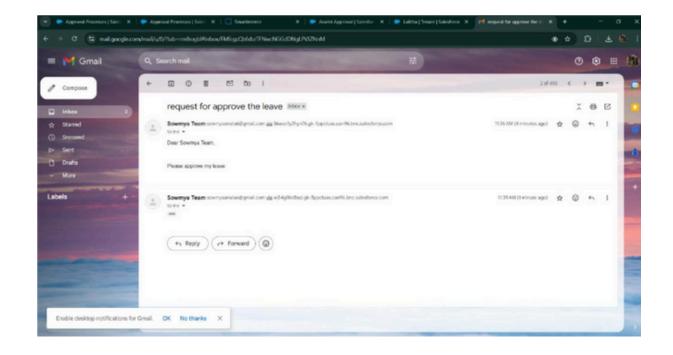
RESULTS

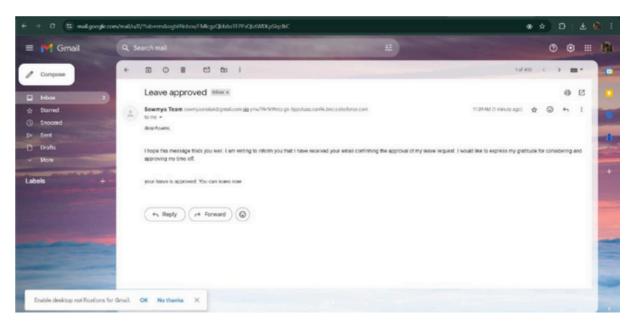


Output Screenshots

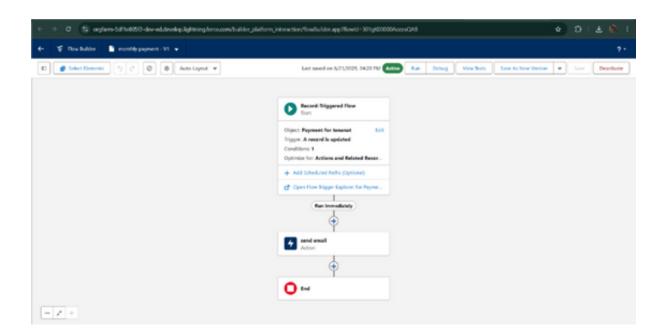


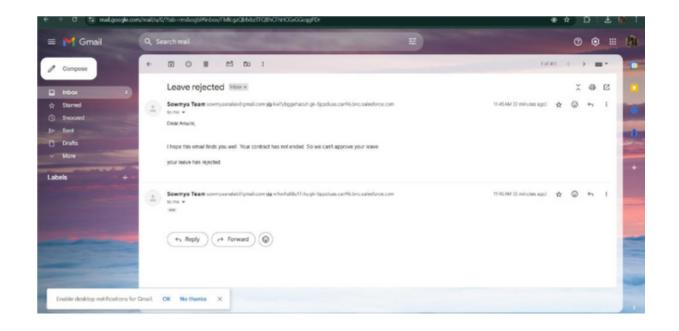
• Request for approve the leave



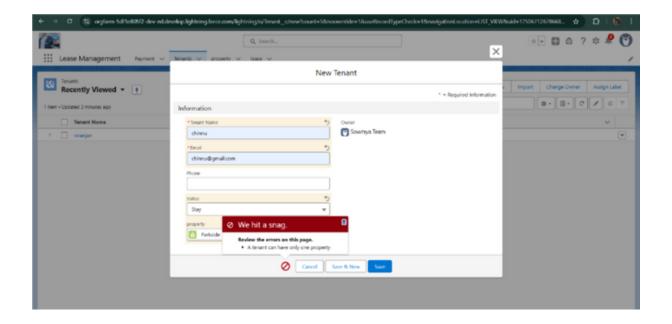


■ Leave rejected





■ Trigger error messages



Approval process notifications

ADVANTAGE
Lower Upfront Costs: Leasing eliminates large capital expenditures, allowing businesses to preserve cash for other needs.
Flexibility: Businesses can easily upgrade assets at the end of a lease term helping to avoid obsolescence.
Tax Benefits: Lease payments are often deductible as operating expenses, providing a tax providing a tax advantage for the lessee.

DISADVANTAGE

Higher Long-Term Costs:	While initial	costs ar	e lower,	the total	cost of	f leasing
	can be high	er than b	ouying o	ver the a	asset's l	ifespan.

No Ownership Equity: At the end of the lease, lessees do not gain ownership of the asset, and their payments do not build equity.

Restrictions: Leased assets often come with limitations, such as mileage caps for vehicles or restrictions on customization.

CONCLUSION

Summary of Achievements

The Salesforce implementation for Lease Management has successfully streamlined and automated critical aspects of the leasing lifecycle. Key accomplishments include:

1. Comprehensive Lease Lifecycle Management

• Implemented a robust system to manage lease agreements, from creation and amendments to renewals and terminations.

1. Automated Payment Processes

• Enabled scheduled rent tracking, payment reminders, and overdue alerts, reducing manual oversight and improving cash flow management.

1. Efficient Expiration and Renewal Workflows

 Automated notifications and streamlined renewal processes, ensuring timely follow-ups and improved lease retention rates.

1. Enhanced Property and Tenant Management

 Centralized information for properties, units, and tenants, improving operational visibility and collaboration.

1. Actionable Insights and Reporting

 Delivered custom reports and dashboards to monitor revenue, lease performance, and occupancy metrics, supporting data-driven decision-making.

1. Improved User Experience

o Provided intuitive interfaces and mobile accessibility for leasing agents, property managers, and tenants, enhancing productivity and satisfaction.

1. Secure and Scalable Solution

• Ensured role-based access, field-level security, and compliance with legal requirements, enabling a reliable and scalable system for lease management.

1. Integration with External Systems

 Established seamless connections with payment gateways and accounting systems for end-to-end process automation.

REFERENCE

1.	International Journal of Advanced Research in Science, Communication and Technology (IJARSCT): https://ijarsct.co.in/Paper7646.pdf .
1.	Lease-Management-System-on-Salesforce: https://github.com/VedantRajGaur/Lease-Management-System-on-Salesforce.
1.	Github lease Management: https://github.com/mukunthan893/NM_LEASE-MANAGEMENT
1.	Salesforce documentation:
Buil	d an Integrated Real Estate CRM for Tenant Management.
ΑF	PPENDIX Source Code: Provided in Anay Classes and Triggers
	 Source Code: Provided in Apex Classes and Triggers
	Test.apxt:
trig	ger test on Tenant_c (before insert) { if (trigger.isInsert && trigger.isBefore){
test]	Handler.preventInsert(trigger.new);
	}}
<u>test]</u>	Handler.apxc:
pub	lic class testHandler { public static void preventInsert(List<
Ten	ant_c> newlist)
{Set	<id></id>

```
existingPropertyIds
= new Set<Id>()
for (Tenant_c existingTenant : [SELECT Id, Property_c FROM Tenant_c WHERE Property_c != null]) {
existingPropertyIds.add(existingTenant.Property_c;
} for (Tenant_c newTenant :
newlist) {
if (newTenant.Property_c != null && existingPropertyIds.contains(newTenant.Property_c)) {
newTenant.addError('A
tenant can have only one property');
}
}
}
}
MothlyEmailScheduler.apxc:
global class MonthlyEmailScheduler implements Schedulable { global void execute(SchedulableContext
sc) { Integer currentDay = Date.today().day(); if (currentDay == 1) { sendMonthlyEmails();
}
} public static void sendMonthlyEmails() { List<Tenant_c>
tenants = [SELECT Id, Email_c FROM Tenant_c]; for (Tenant_c tenant :
```

```
tenants) {
String recipientEmail = tenant.Email__c;
String emailContent = 'I trust this email finds you well. I am writing to remind you that the monthly rent is
due Your timely payment ensures the smooth functioning of our rental arrangement and helps maintain a
positive living environment for all.';
String emailSubject = 'Reminder: Monthly Rent Payment Due'; Messaging.SingleEmailMessage email =
new
Messaging.SingleEmailMessage(); email.setToAddresses(new String[]{recipientEmail});
email.setSubject(emailSubject); email.setPlainTextBody(emailContent);
Messaging.sendEmail(new Messaging.SingleEmailMessage[]{email});
}
}
}
```