LEASE MANAGEMENT

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ABSTARCT

A Lease Management Project focuses on developing a system or application designed to efficiently manage the processes related to leasing real estate properties, equipment, or other valuable assets. The primary objective of the system is to streamline and automate various tasks associated with lease agreements, such as property listing, tenant registration, contract generation, payment tracking, and renewal management. By integrating these features into a single platform, the system minimizes manual work, reduces the chances of human error, and ensures smooth handling of leasing operations.

Furthermore, the project emphasizes accurate record-keeping, regulatory compliance, and effective communication between all parties involved, including landlords, tenants, and administrators. By adopting this digital solution, users can monitor payments, track lease expirations, generate invoices, and receive automated notifications, improving transparency and operational efficiency. Such a system not only simplifies the overall leasing process but also enhances decision-making for property managers and owners by providing real-time insights and reports. Ultimately, this project aims to deliver a reliable, user-friendly, and scalable platform that improves the management of lease agreements and supports efficient property and asset management.

As a team We've learned,

Salesforce
Object
Tabs
The Lightning App
Fields
Validation Rule
Email Templates
Approval Process
Apex Trigger
FLOWS
Schedule Class

1.INTRODUCTION

1.1 Project Overview

The Lease Management System is a Salesforce-based application designed to streamline the processes associated with leasing real estate properties. It handles tenant management, lease contracts, payments, and communication with automation features such as flows, approval processes, and email alerts.



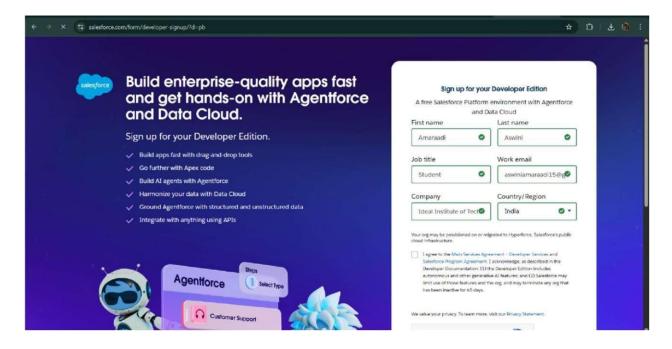
1.2 Purpose

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

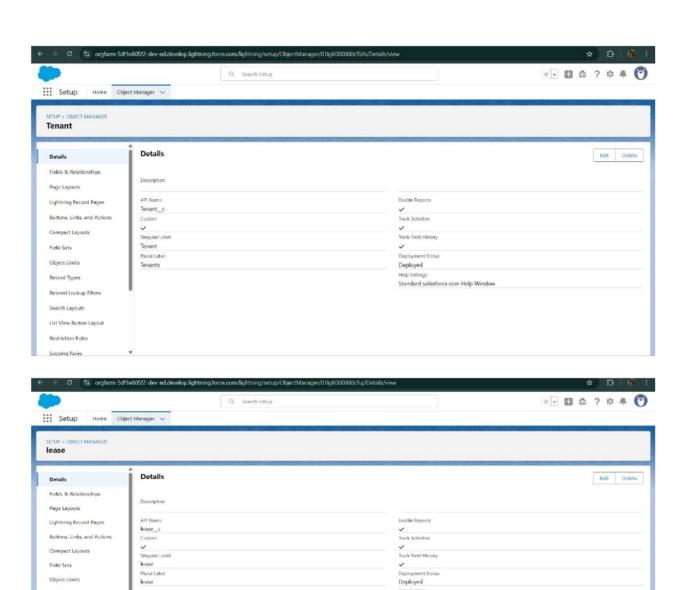
Creating Developer Account:

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



• Created objects: Property, Tenant, Lease, Payment

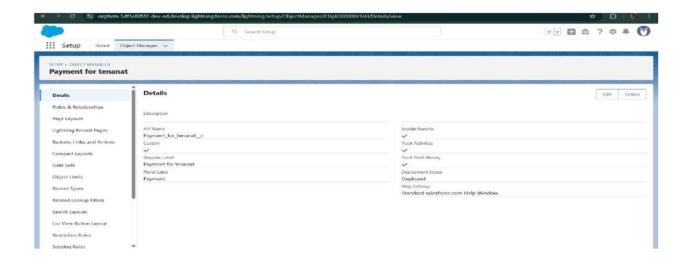




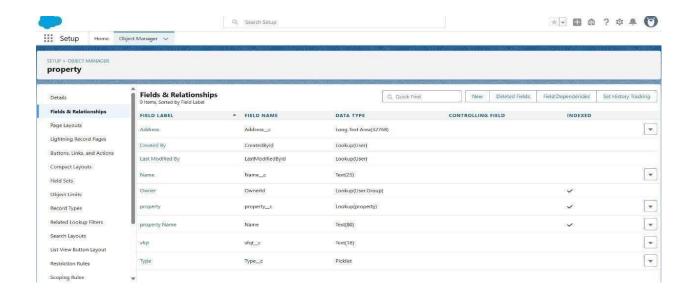
Standard salesforce.com Help Window

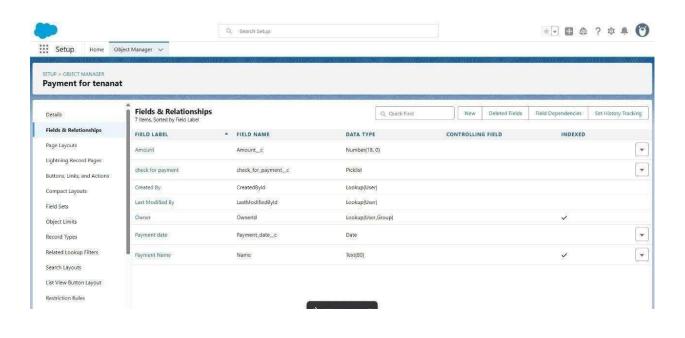
Field Sets Object Limits Record Types

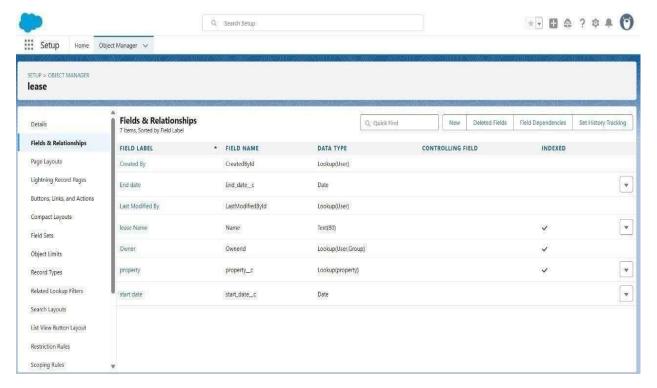
Related Lookup Filters Search Layouts List View Button Layout Restriction Rules

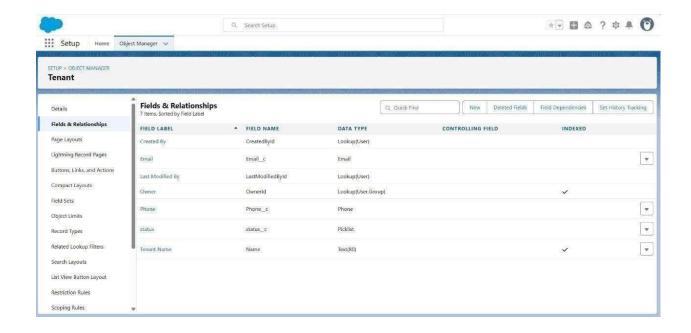


• Configured fields and relationships

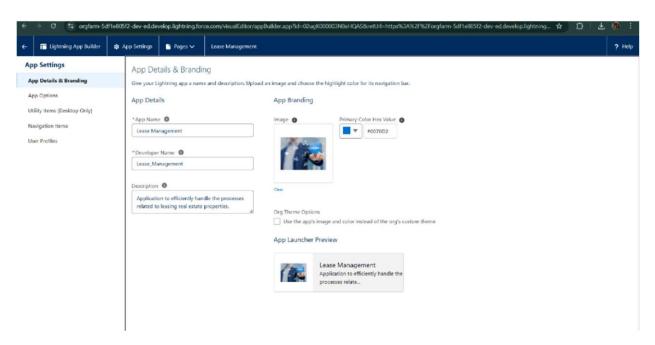


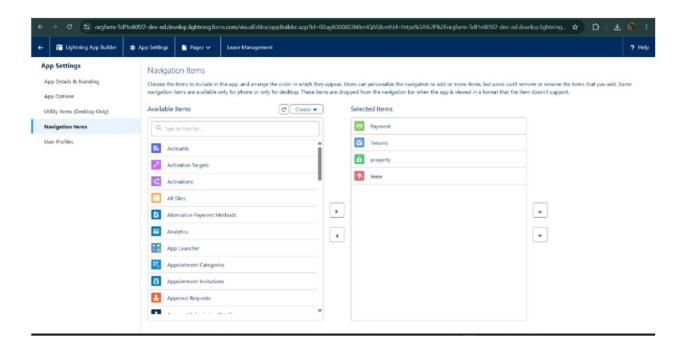


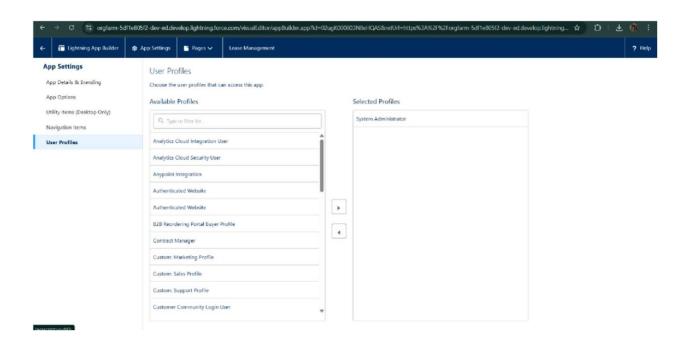


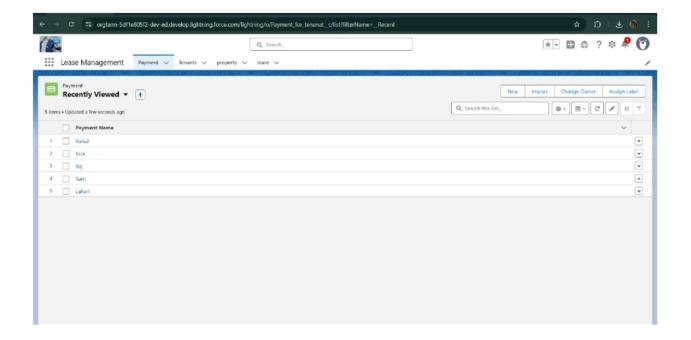


• Developed Lightning App with relevant tabs

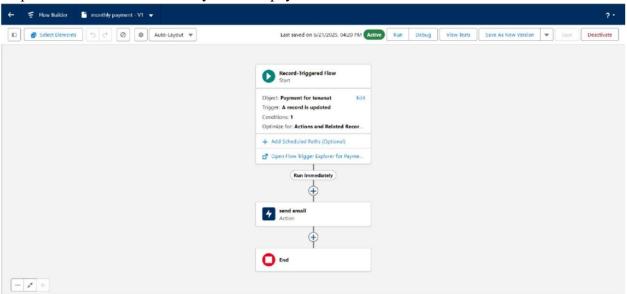




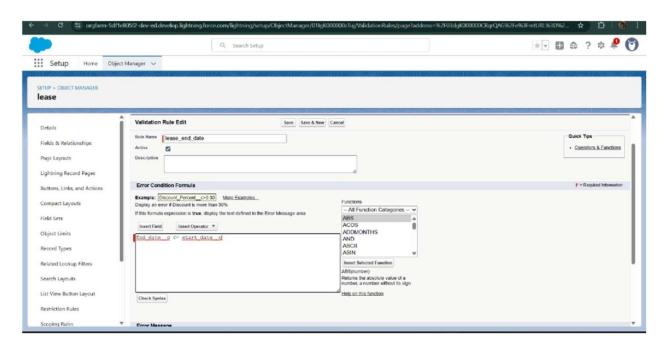


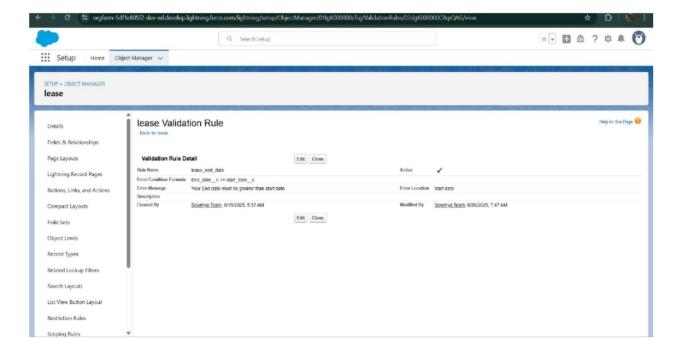


• Implemented Flows for monthly rent and payment success

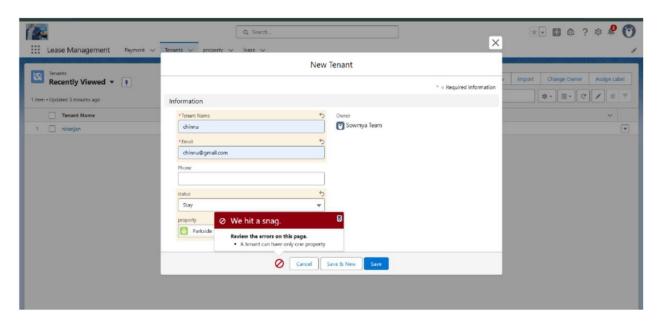


• To create a validation rule to a Lease Object





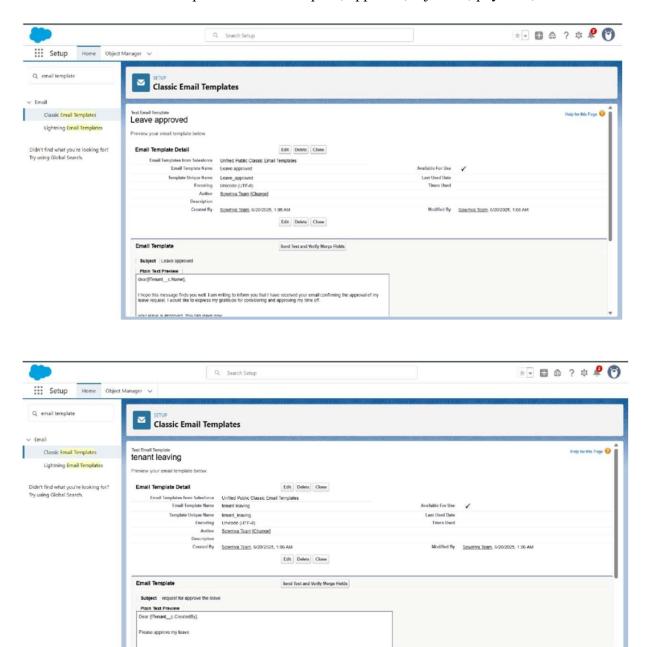
Added Apex trigger to restrict multiple tenants per property

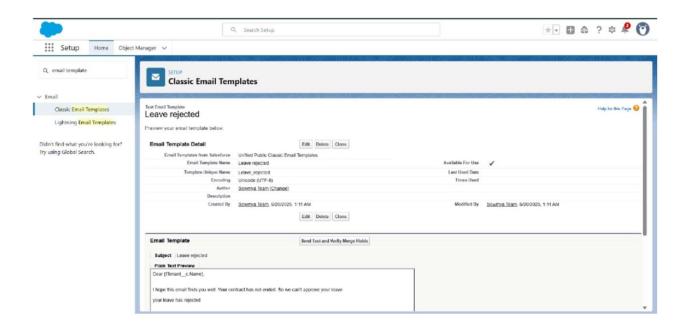


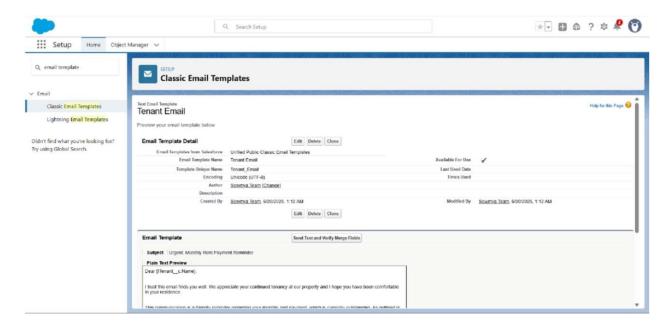
• Scheduled monthly reminder emails using Apex class

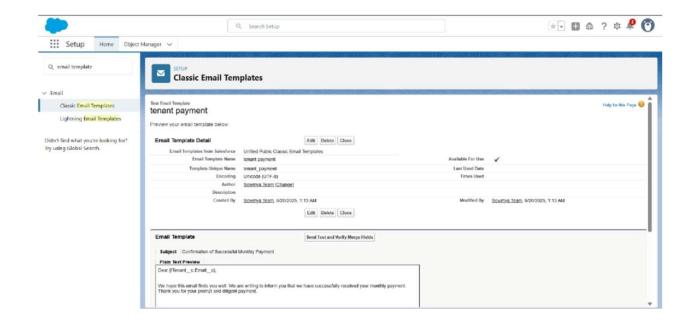
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• Built and tested email templates for leave request, approval, rejection, payment, and reminders



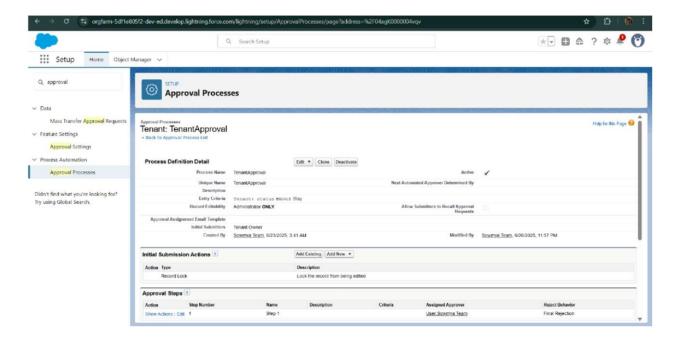




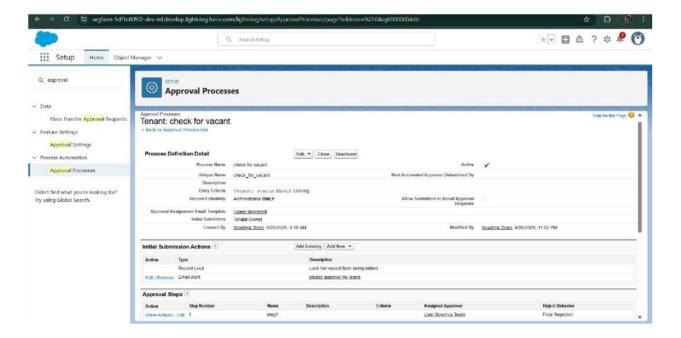


• Approval Process creation

For Tenant Leaving:

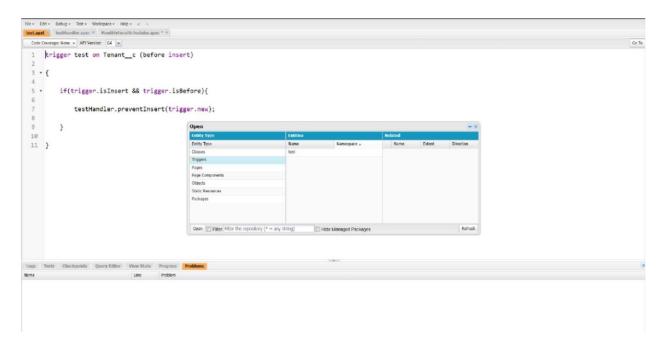


For Check for Vacant:



• Apex Trigger

Create an Apex Trigger

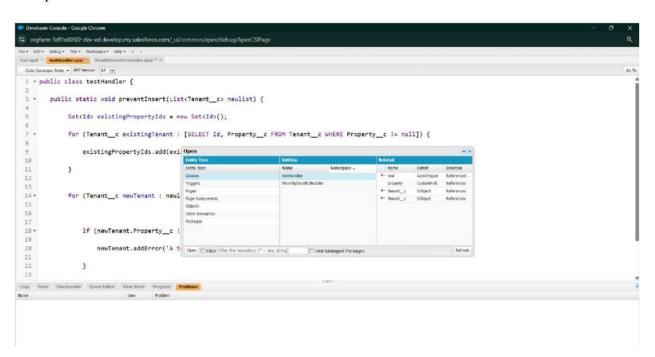


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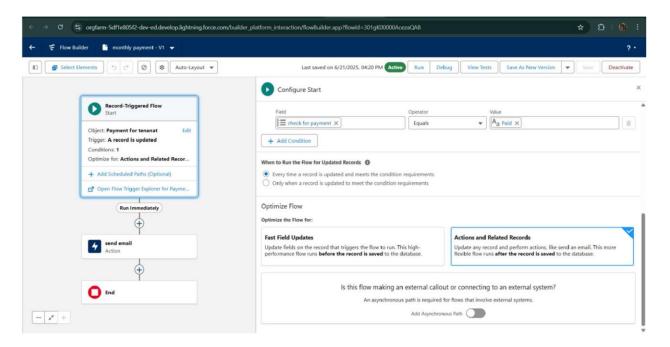
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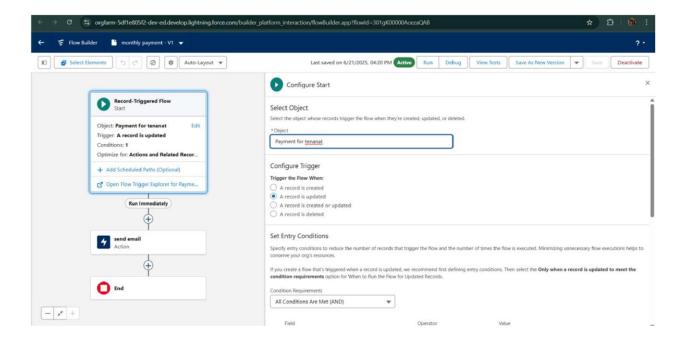
Create an Apex Handler class



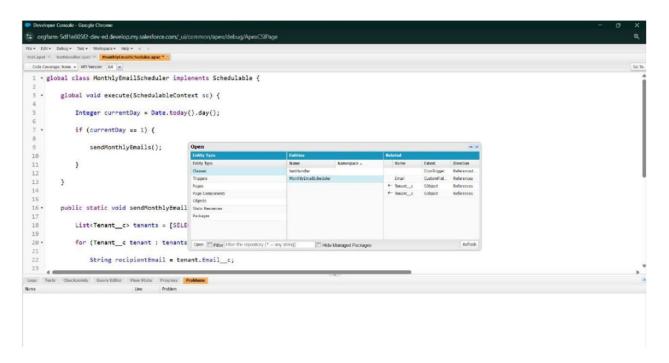
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• FLOWS



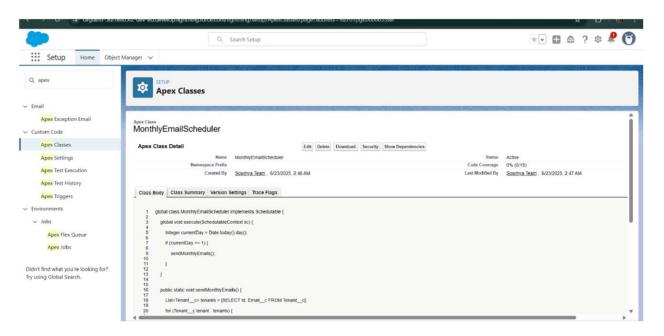


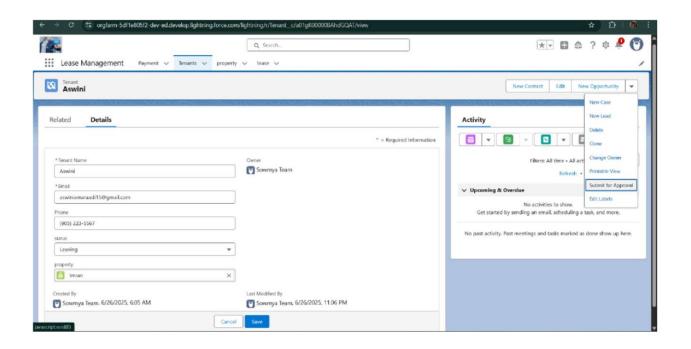
• Schedule class: Create an Apex Class

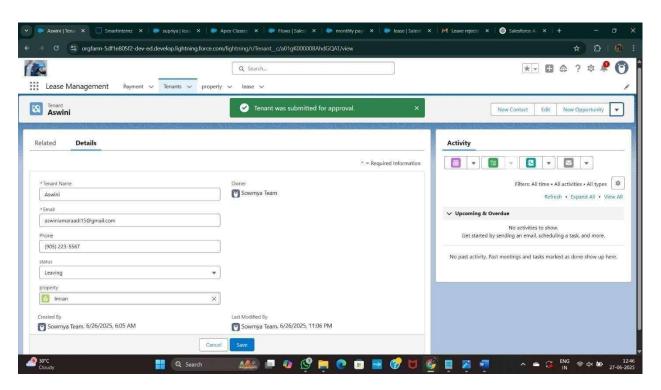


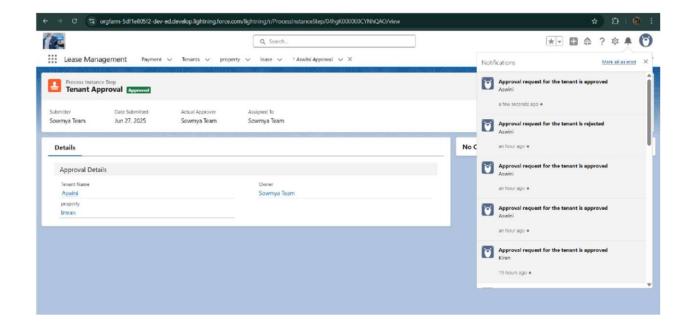
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Schedule Apex class





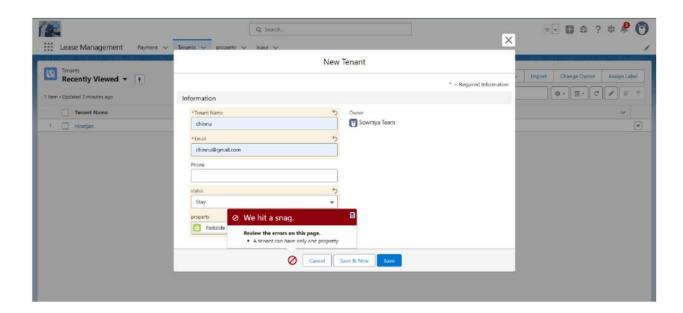




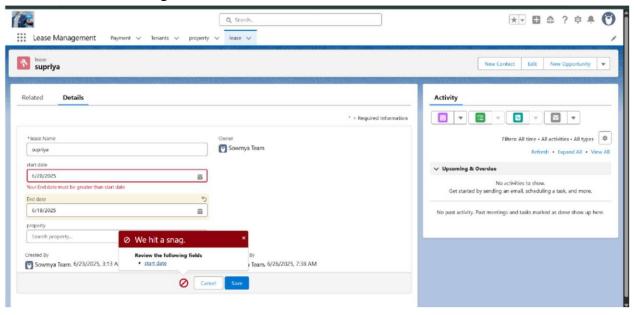
FUNCTIONAL AND PERFORMANCE TESTING

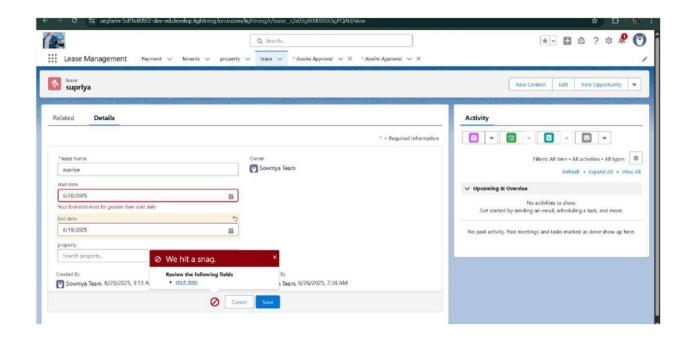
Performance Testing

• Trigger validation by entering duplicate tenant-property records

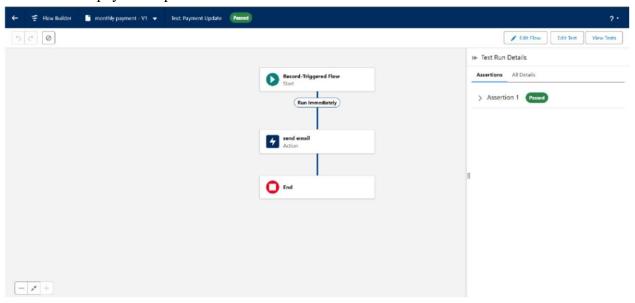


• Validation Rule checking

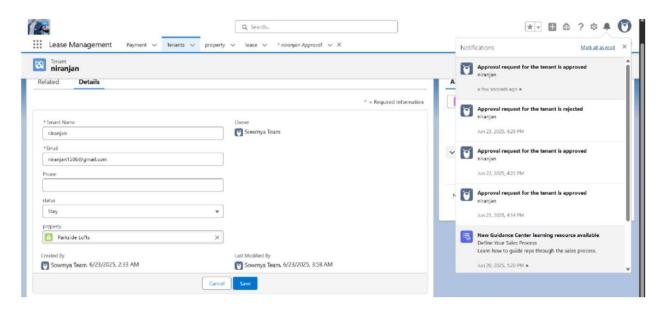


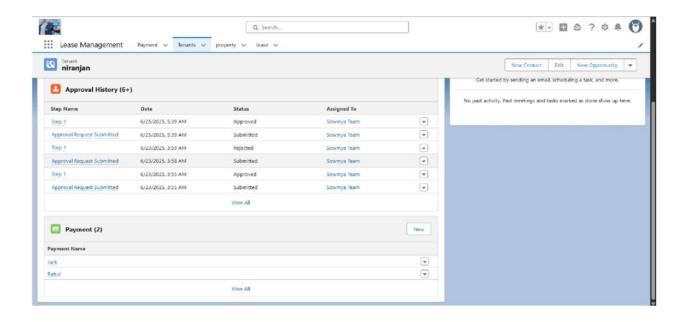


• Test flows on payment update



• Approval process validated through email alerts and status updates

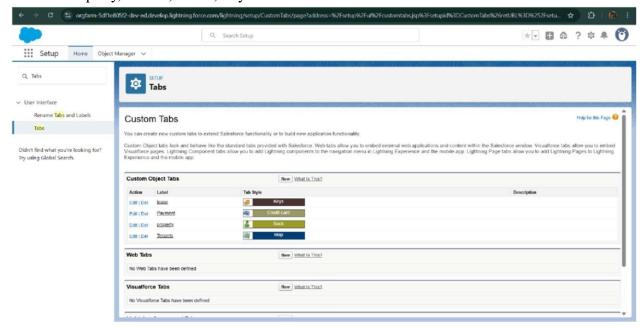




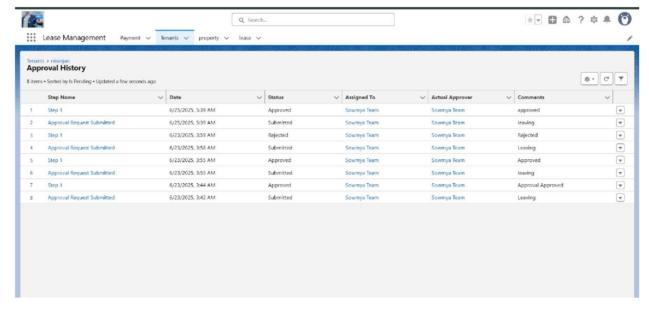
RESULTS

Output Screenshots

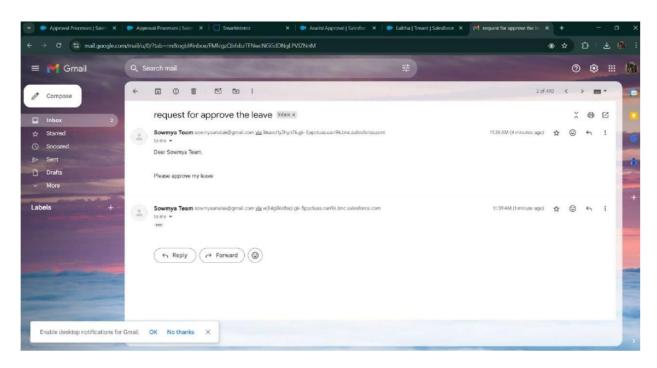
• Tabs for Property, Tenant, Lease, Payment



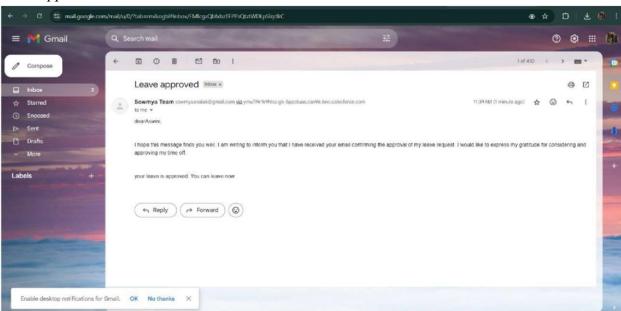
Email alerts



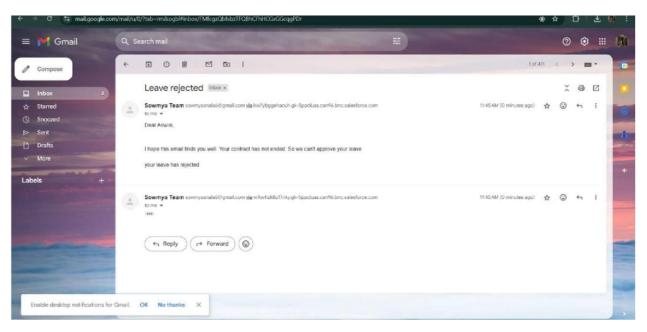
Request for approve the leave



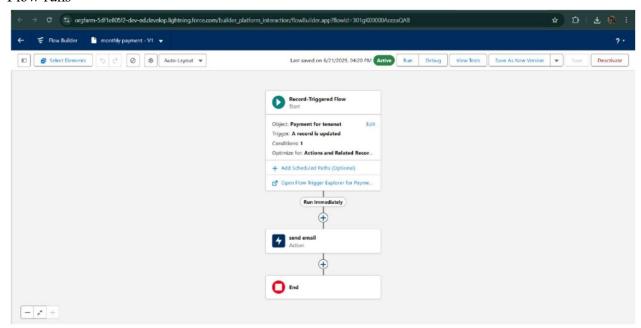
• Leave approved



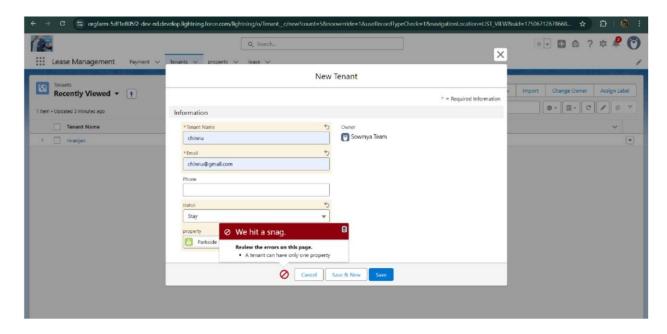
Leave rejected



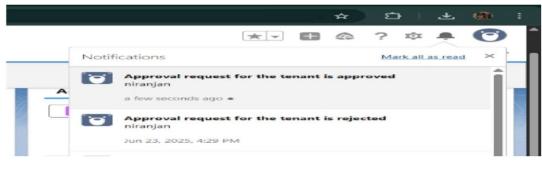
Flow runs



Trigger error messages



• Approval process notifications



CONCLUSION

The Lease Management System successfully streamlines the operations of leasing through a structured, automated Salesforce application. It improves efficiency, communication, and data accuracy for both admins and tenants.

APPENDIX

• Source Code: Provided in Apex Classes and Triggers

```
Test.apxt: trigger test on Tenant c (before
insert) { if (trigger.isInsert &&
trigger.isBefore){
testHandler.preventInsert(trigger.new);
testHandler.apxc:
public
               class
testHandler { public
static
                void
preventInsert(List<</pre>
Tenant c> newlist)
            Set<Id>
existingPropertyIds
= new Set<Id>()
               for (Tenant c existing Tenant : [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});

}
```