LEASE MANAGEMENT

College Name: HINDUSTHAN COLLEGE OF SCIENCE AND COMMERCE

College Code: CA

Team ID : NM2025TMID28185

<u>**TEAM MEMBERS: 4**</u>

Team LeaderName: ZUVAIRIYA THASHLIMA.B

<u>**Email:**</u> zuvairiyathaslima@gmail.com

Team Member: RAJASHRI.M

<u>**Email**</u>: rajashrimuthu2006@gmail.com

Team Member: SABARIGIRI.M

<u>**Email:**</u> sabarigiri688@gmail.com

Team Member: SUKANTH.M

<u>**Email:**</u> sukanthm@gmail.com

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

property (Object Manager)

SETUP > OBJECT MANAGER
property

Details   Edit   Delete

Description

API Name
property__c

Custom
✓

Singular Label
property

Plural Label
property

Enable Reports
✓

Track Activities
✓

Track Field History
✓

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Sidebar:
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules

Tenant (Object Manager)

SETUP > OBJECT MANAGER
Tenant

Details   Edit   Delete

Description

API Name
Tenant__c

Custom
✓

Singular Label
Tenant

Plural Label
Tenants

Enable Reports
✓

Track Activities
✓

Track Field History
✓

Deployment Status
Deployed

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Scoping Rules
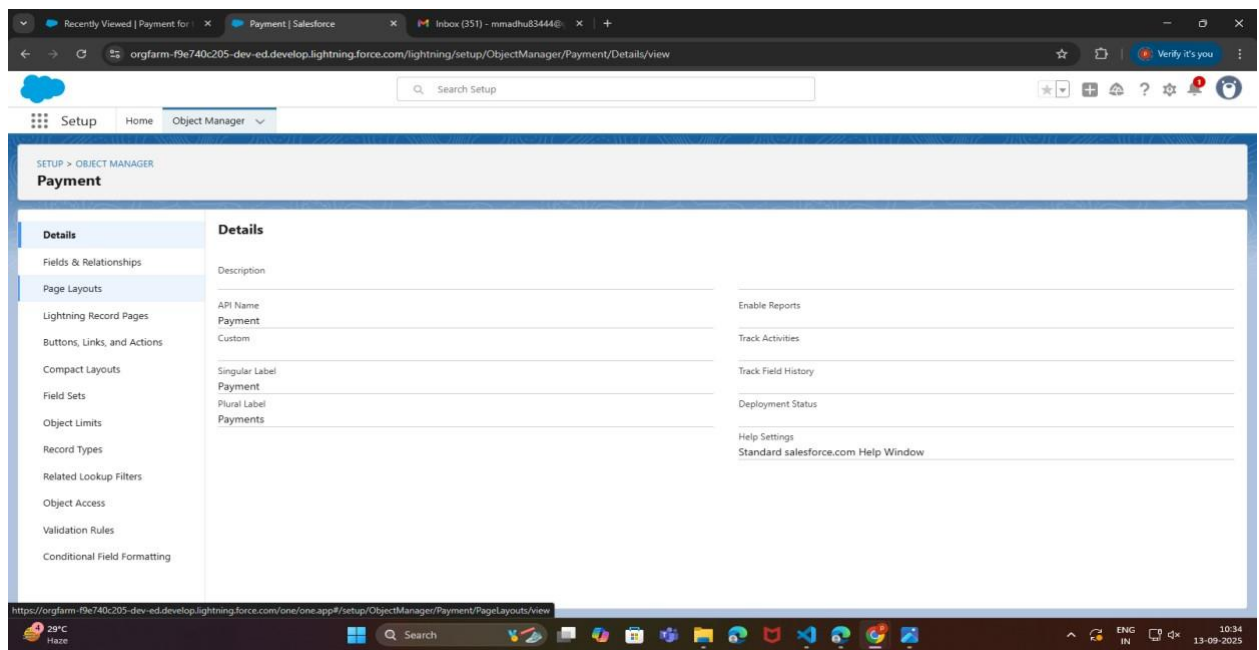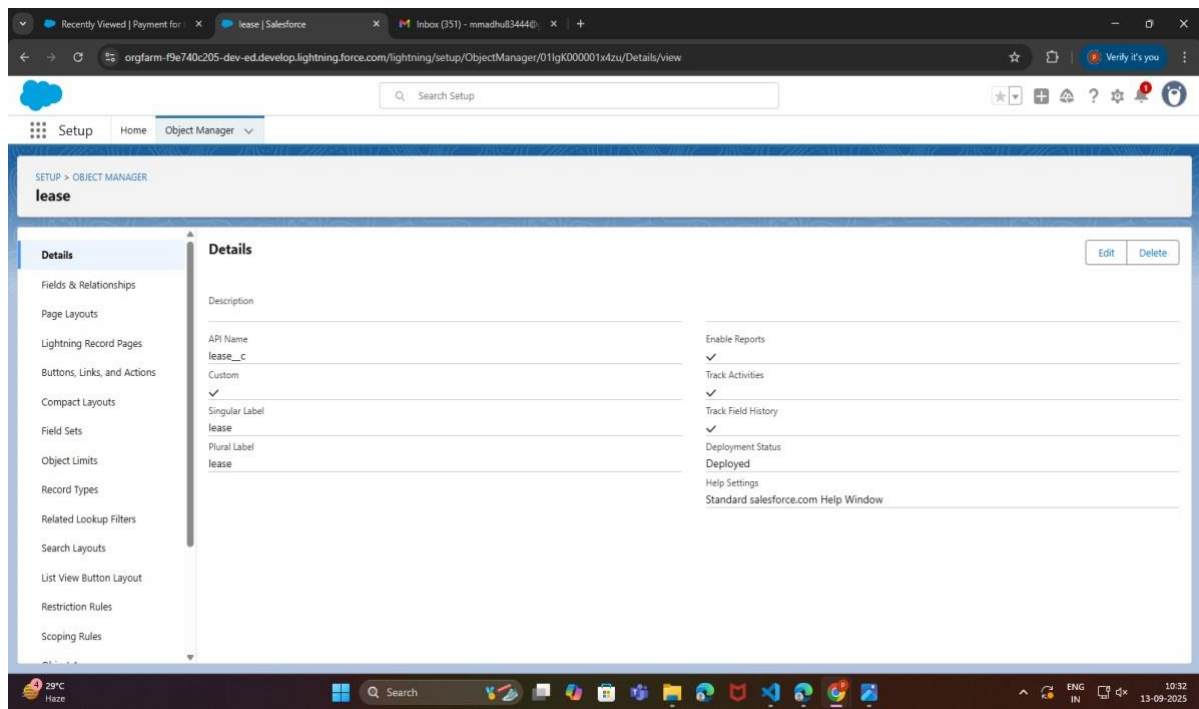
● Configured fields and relationships

Setup   Home   Object Manager ∨

SETUP > OBJECT MANAGER
property

Details	**Fields & Relationships** 8 Items, Sorted by Field Label			Quick Find New Deleted Fields Field Dependencies Set History Tracking	
Fields & Relationships					
Page Layouts	**FIELD LABEL** ▲	**FIELD NAME**	**DATA TYPE**	**CONTROLLING FIELD**	**INDEXED**
Lightning Record Pages	Address	Address__c	Text(50)		▼
Buttons, Links, and Actions	Created By	CreatedById	Lookup(User)		
Compact Layouts	Last Modified By	LastModifiedById	Lookup(User)		
Field Sets	Name	Name__c	Text(25)		▼
Object Limits	Owner	OwnerId	Lookup(User,Group)		✓
Record Types	property Name	Name	Text(80)		✓ ▼
Related Lookup Filters	sfqt	sfqt__c	Text(18)		▼
Search Layouts	Type	Type__c	Picklist		▼
List View Button Layout					
Restriction Rules					
Scoping Rules					

29°C Haze   Q Search   ENG IN   10:37 13-09-2025

Setup   Home   Object Manager ∨

SETUP > OBJECT MANAGER
lease

Details	**Fields & Relationships** 11 Items, Sorted by Field Label			Quick Find New Deleted Fields Field Dependencies Set History Tracking	
Fields & Relationships	Amount	Amount__c	Number(16, 0)		▼
Page Layouts	check for payment	check_for_payment__c	Picklist		▼
Lightning Record Pages	Created By	CreatedById	Lookup(User)		
Buttons, Links, and Actions	End date	End_date__c	Date		▼
Compact Layouts	Last Modified By	LastModifiedById	Lookup(User)		
Field Sets	lease Name	Name	Text(80)		✓ ▼
Object Limits	Payment	Payment__c	Lookup(Payment)		✓ ▼
Record Types	Payment date	Payment_date__c	Date		▼
Related Lookup Filters	property	property__c	Lookup(property)		✓ ▼
Search Layouts	property	propertys__c	Master-Detail(property)		✓ ▼
List View Button Layout	start date	start_date__c	Date		▼
Restriction Rules					
Scoping Rules					

29°C Haze   Q Search   ENG IN   10:50 13-09-2025

● Developed Lightning App with relevant tabs

Lightning App Builder · App Settings · Pages ⌄ · Lease ManagementDeveloper · ? Help

App Settings

- **App Details & Branding**
- App Options
- Utility Items (Desktop Only)
- Navigation Items
- User Profiles

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

* App Name ⓘ
Lease ManagementDeveloper

* Developer Name ⓘ
Lease_ManagementDeveloper

Description ⓘ
Enter a description...
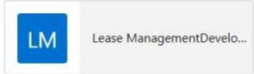
App Branding

Image ⓘ

⬆ Upload

Primary Color Hex Value ⓘ
▾ #0070D2

Org Theme Options
☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview

LM   Lease ManagementDevelo...

Lightning App Builder · App Settings · Pages ⌄ · Lease ManagementDeveloper · ? Help

App Settings

- App Details & Branding
- App Options
- Utility Items (Desktop Only)
- **Navigation Items**
- User Profiles

Navigation Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Available Items

Create ⌄

🔍 Type to filter list...

- Accounts
- Activation Targets
- Activations
- All Sites
- Alternative Payment Methods
- Analytics
- App Launcher
- Appointment Categories
- Appointment Invitations
- Approval Requests
- Approval Submission Details

Selected Items

- Payment for tenanat
- Tenants
- property
- lease
- Tenant Approval

Lightning App Builder · App Settings · Pages ∨ · Lease ManagementDeveloper · ? Help

App Settings
App Details & Branding
App Options
Utility Items (Desktop Only)
Navigation Items
User Profiles

User Profiles
Choose the user profiles that can access this app.

Available Profiles

Type to filter list...

Analytics Cloud Integration User
Analytics Cloud Security User
Anypoint Integration
Authenticated Website
Authenticated Website
B2B Reordering Portal Buyer Profile
Contract Manager
Custom: Marketing Profile
Custom: Sales Profile
Custom: Support Profile
Customer Community Login User
Customer Community Plus Login User

Selected Profiles
System Administrator
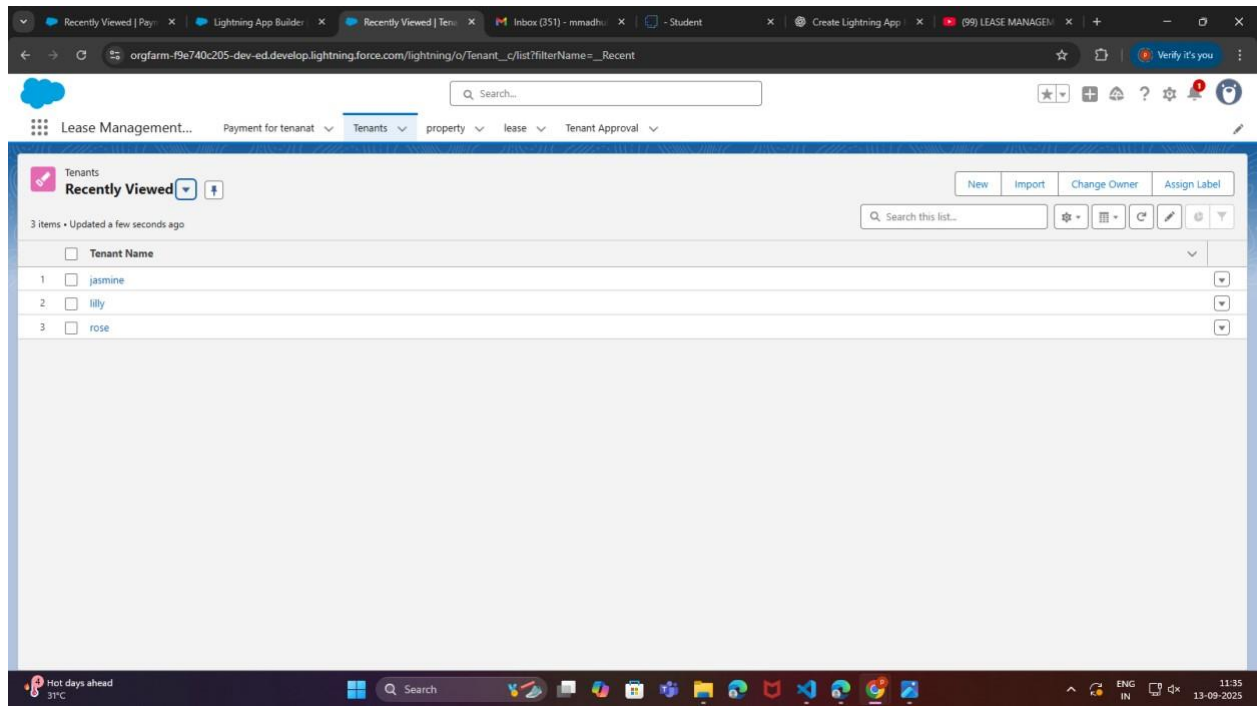
● Implemented Flows for monthly rent and payment success
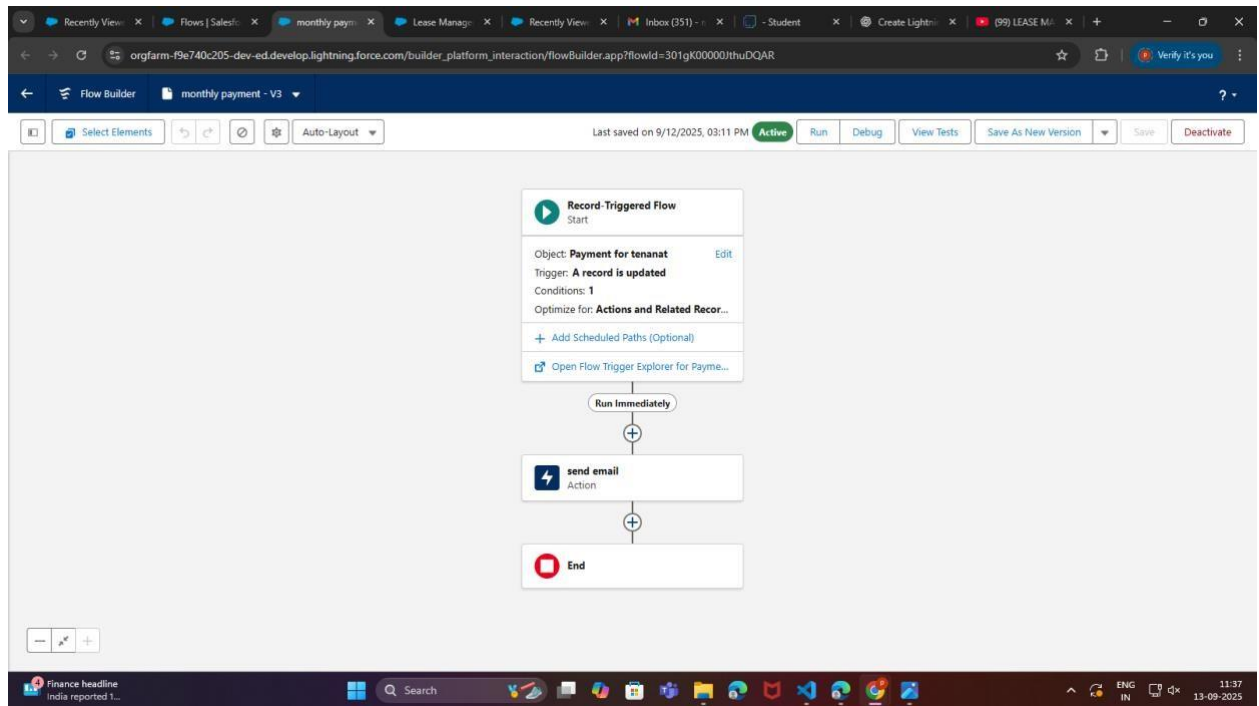
● To create a validation rule to a Lease Object

● Added Apex trigger to restrict multiple tenants per property
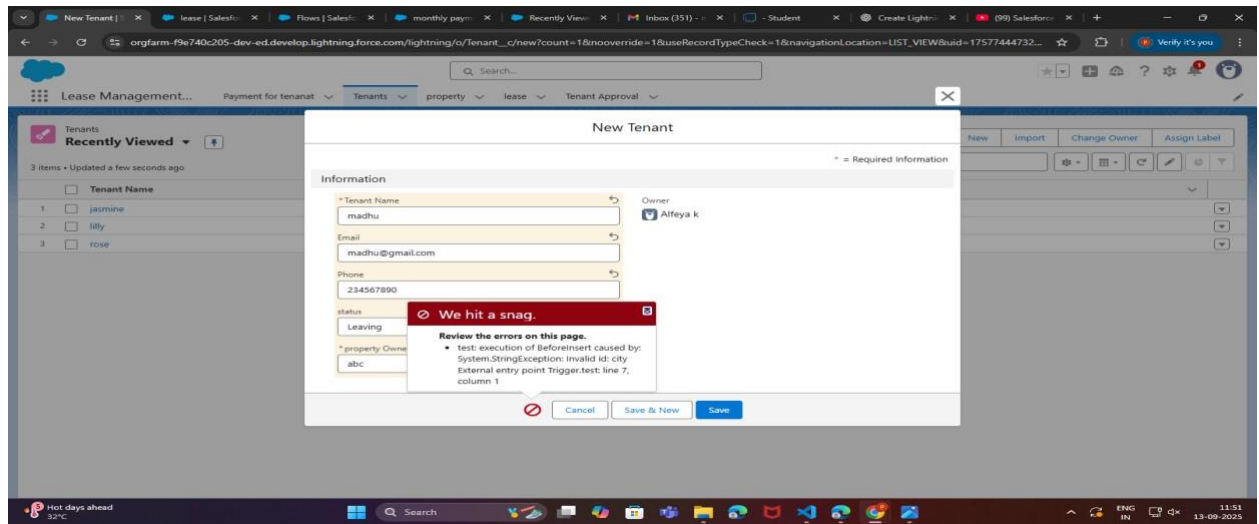
● Scheduled monthly reminder emails using Apex class


```
1   global class MonthlyEmailScheduler implements Schedulable {
2
3       global void execute(SchedulableContext sc) {
4
5           Integer currentDay = Date.today().day();
6
7           if (currentDay == 1) {
8
9               sendMonthlyEmails();
10
11          }
12
13      }
14
15
16      public static void sendMonthlyEmails() {
17
18
19
20
```
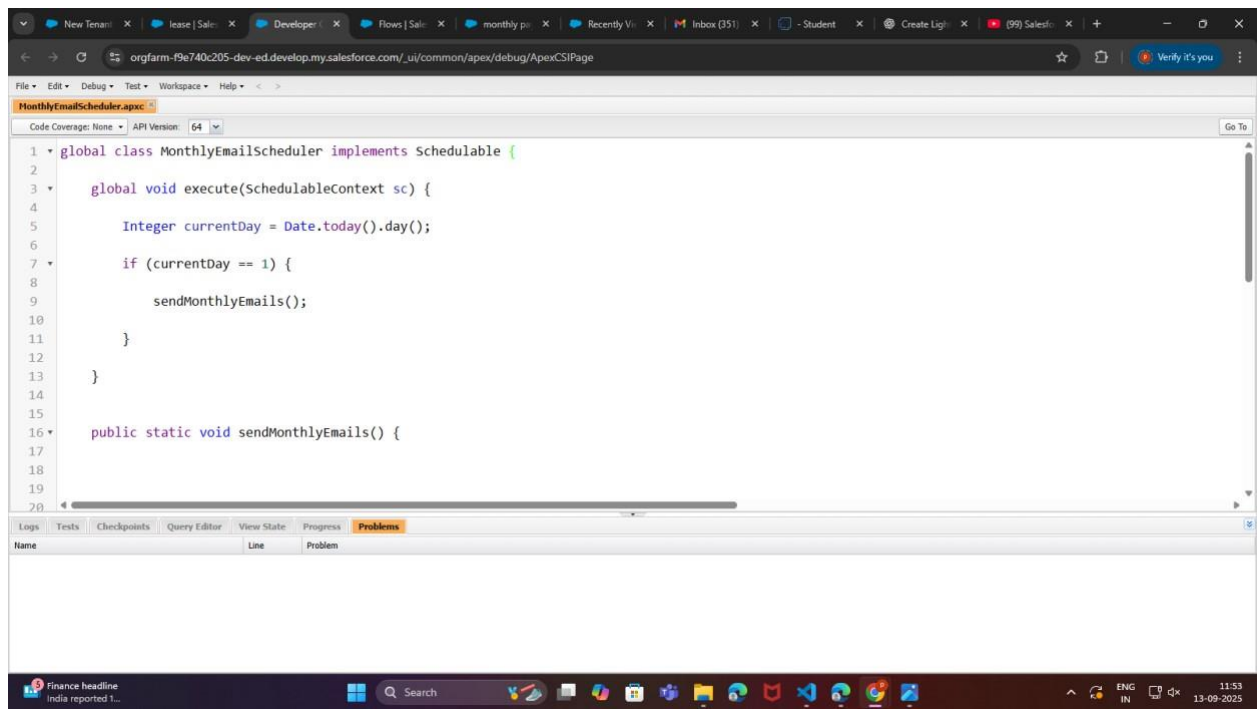
● Built and tested email templates for leave request, approval, rejection, payment, and

Reminders

SETUP
Classic Email Templates

Text Email Template
Leave approved

Preview your email template below.

Email Template Detail   [Edit] [Delete] [Clone]

Email Templates from Salesforce	Unfiled Public Classic Email Templates		
Email Template Name	Leave approved	Available For Use	✓
Template Unique Name	Leave_approved	Last Used Date	
Encoding	Unicode (UTF-8)	Times Used	
Author	Alfeya k [Change]		
Description			
Created By	Alfeya k, 9/1/2025, 11:10 PM	Modified By	Alfeya k, 9/10/2025, 11:54 PM

[Edit] [Delete] [Clone]

Email Template   [Send Test and Verify Merge Fields]

Subject | Leave approved

Plain Text Preview

dear(!01IgK000001xAji.Name),

I hope this message finds you well. I am writing to inform you that I have received your email confirming the approval of my leave request. I would like to express my gratitude for considering and approving my time off.

your leave is approved. You can leave now

SETUP
Classic Email Templates

Text Email Template
tenant leaving

Preview your email template below.

Email Template Detail   [Edit] [Delete] [Clone]

Email Templates from Salesforce	Unfiled Public Classic Email Templates		
Email Template Name	tenant leaving	Available For Use	✓
Template Unique Name	tenant_leaving	Last Used Date	
Encoding	Unicode (UTF-8)	Times Used	
Author	Alfeya k [Change]		
Description			
Created By	Alfeya k, 9/10/2025, 11:50 PM	Modified By	Alfeya k, 9/10/2025, 11:54 PM

[Edit] [Delete] [Clone]

Email Template   [Send Test and Verify Merge Fields]

Subject | request for approve the leave

Plain Text Preview

Dear {!Tenant__c.CreatedBy},

Please approve my leave

Search Setup

Setup   Home   Object Manager ∨

Q class

∨ Email
   Classic Email Templates
   Classic Letterheads
∨ Custom Code
   Apex Classes
∨ Data Classification
   Data Classification Download
   Data Classification Settings
   Data Classification Upload

Didn't find what you're looking for?
Try using Global Search.

SETUP
Classic Email Templates

Leave rejected

Preview your email template below.

Email Template Detail

[Edit] [Delete] [Clone]

Email Templates from Salesforce	Unfiled Public Classic Email Templates		
Email Template Name	Leave rejected	Available For Use	✓
Template Unique Name	Leave_rejected	Last Used Date	
Encoding	Unicode (UTF-8)	Times Used	
Author	Alfeya k [Change]		
Description			
Created By	Alfeya k, 9/1/2025, 11:11 PM	Modified By	Alfeya k, 9/10/2025, 11:54 PM

[Edit] [Delete] [Clone]

Email Template

[Send Test and Verify Merge Fields]

Subject Leave rejected

Plain Text Preview

Dear (!01lgK000001xAii.Name),

I hope this email finds you well. Your contract has not ended. So we can't approve your leave

your leave has rejected

SETUP
Classic Email Templates

Text Email Template
Tenant Email

Help for this Page

Preview your email template below.

Email Template Detail

[Edit] [Delete] [Clone]

Email Templates from Salesforce	Unfiled Public Classic Email Templates		
Email Template Name	Tenant Email	Available For Use	✓
Template Unique Name	Tenant_Email	Last Used Date	
Encoding	Unicode (UTF-8)	Times Used	
Author	Alfeya k [Change]		
Created By	Alfeya k, 9/1/2025, 11:12 PM	Modified By	Alfeya k, 9/10/2025, 11:54 PM

Text Email Template: Tenant Email – Salesforce - Developer Edition

[Edit] [Delete] [Clone]

Email Template

[Send Test and Verify Merge Fields]

Subject Urgent: Monthly Rent Payment Reminder

Plain Text Preview

Dear (!01lgK000001xAii.Name),

I trust this email finds you well. We appreciate your continued tenancy at our property and I hope you have been comfortable in your residence.

This communication is a friendly reminder regarding your monthly rent payment, which is currently outstanding. As outlined in our rental agreement, the payment is due . To ensure the smooth operation of our property management and to avoid any inconvenience, we kindly request you to settle the payment at your earliest convenience.

● Approval Process creation For Tenant Leaving:

For Check for Vacant:

● Apex Trigger

Create an Apex Trigger

Create an Apex Handler class

● FLOWS

● Schedule class:

Create an Apex Class

Schedule Apex class

Setup Home Object Manager

apex

Email
  Apex Exception Email
Custom Code
  Apex Classes
  Apex Settings
  Apex Test Execution
  Apex Test History
  Apex Triggers
Environments
  Jobs
    Apex Flex Queue
    Apex Jobs

Didn't find what you're looking for?
Try using Global Search.

SETUP
Apex Classes

Apex Class
MonthlyEmailScheduler

Help for this Page

Apex Class Edit   Save Quick Save Cancel

Apex Class | Version Settings

```
1  global class MonthlyEmailScheduler implements Schedulable {
2
3      global void execute(SchedulableContext sc) {
4
5          Integer currentDay = Date.today().day();
6
7          if (currentDay == 1) {
8
9              sendMonthlyEmails();
10
11         }
12
13     }
14
15
16     public static void sendMonthlyEmails() {
17
18
19
20         List<Tenant__c> tenants = [SELECT Id, Email__c FROM Tenant__c];
21
22
23
24         for (Tenant__c tenant : tenants) {
```

Search...

Lease Management...   Payment for tenanat ∨   Tenants ∨   property ∨   lease ∨   Tenant Approval ∨

Tenant
rose   New Contact   New Opportunity   New Lead ▼

                                                                    New Case
Related   **Details**   Submit for Approval

Tenant Name   Owner   Sharing Hierarchy
rose   Alfeya k   Edit
Email   Clone
rose@gmail.com   Edit Labels
Phone   Change Owner
(123) 789-6540   Delete
status   Sharing
Stay   Printable View
property Owner
cap

Created By   Last Modified By
Alfeya k, 9/11/2025, 9:29 PM   Alfeya k, 9/11/2025, 9:29 PM

Activity

Filters: All time • All act...
                    Refresh •

∨ Upcoming & Overdue

            No activities to show.
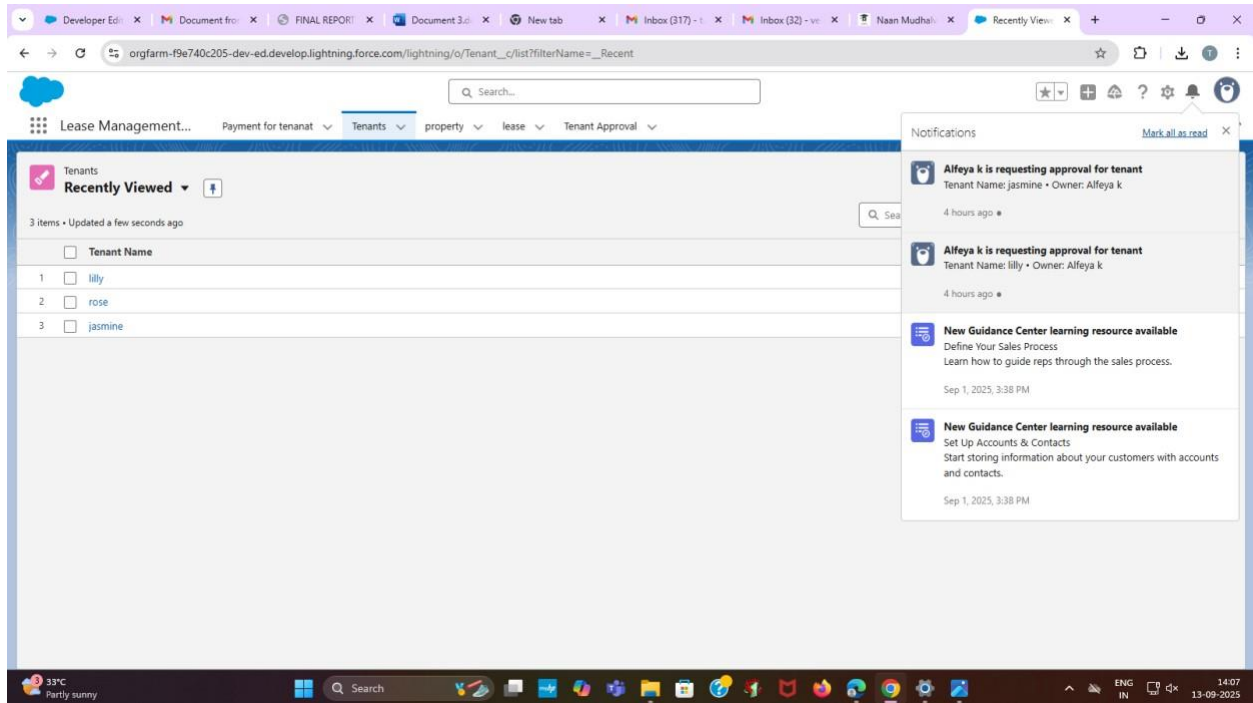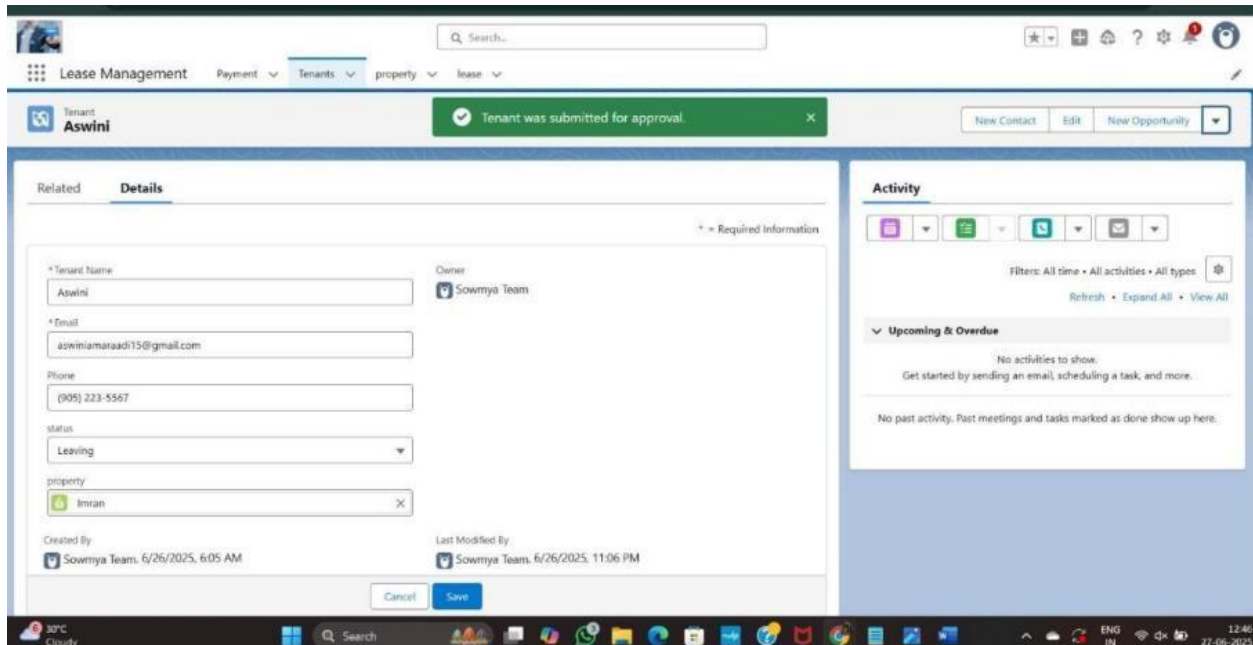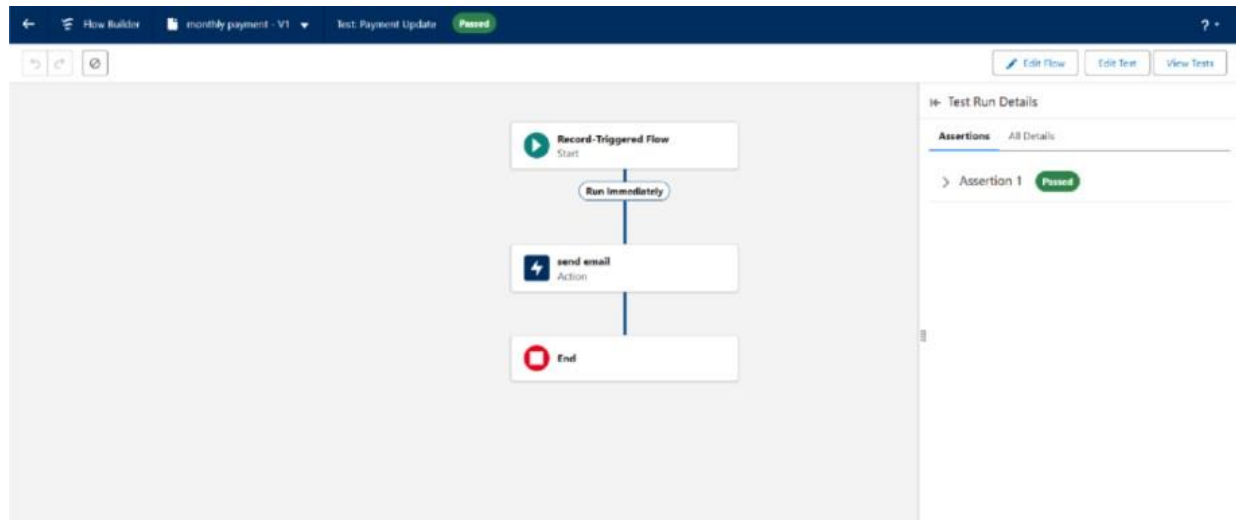Get started by sending an email, scheduling a ta...

No past activity. Past meetings and tasks marked as d...

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

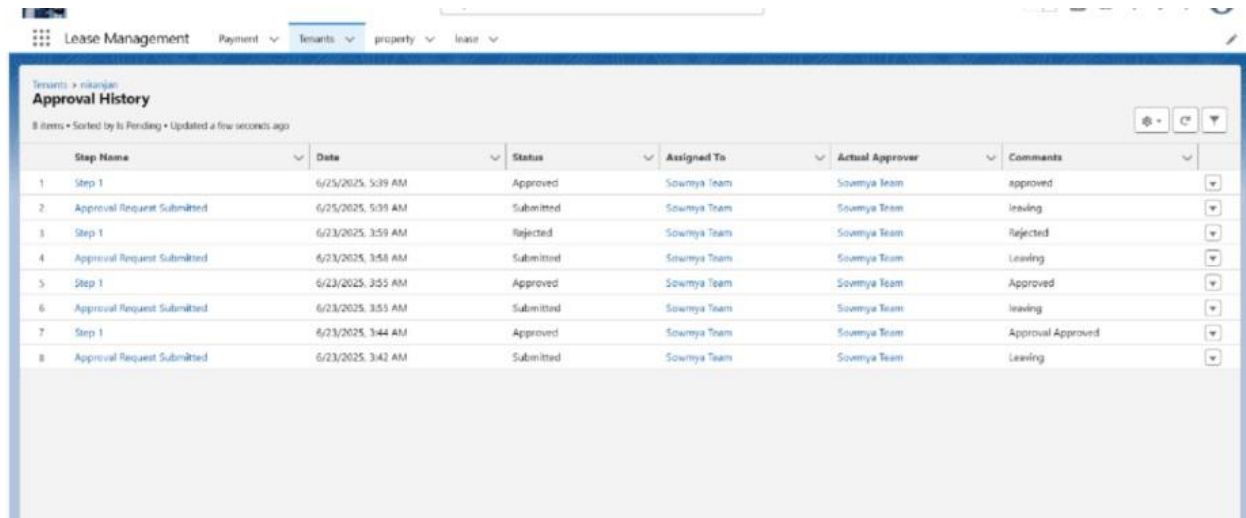# RESULTS

Output Screenshots

● Tabs for Property, Tenant, Lease, Payment
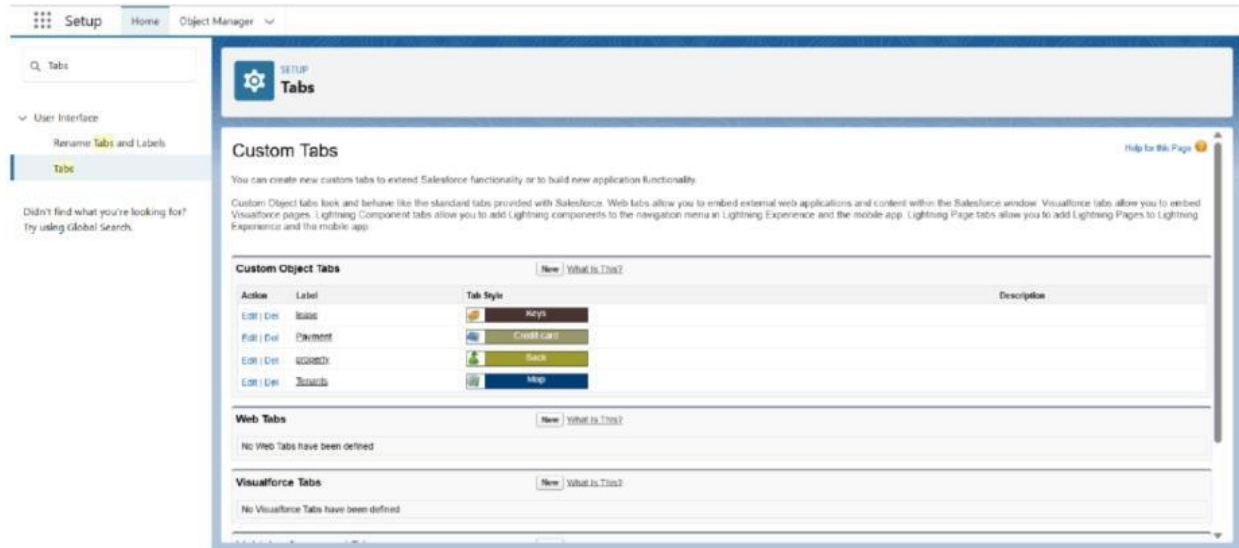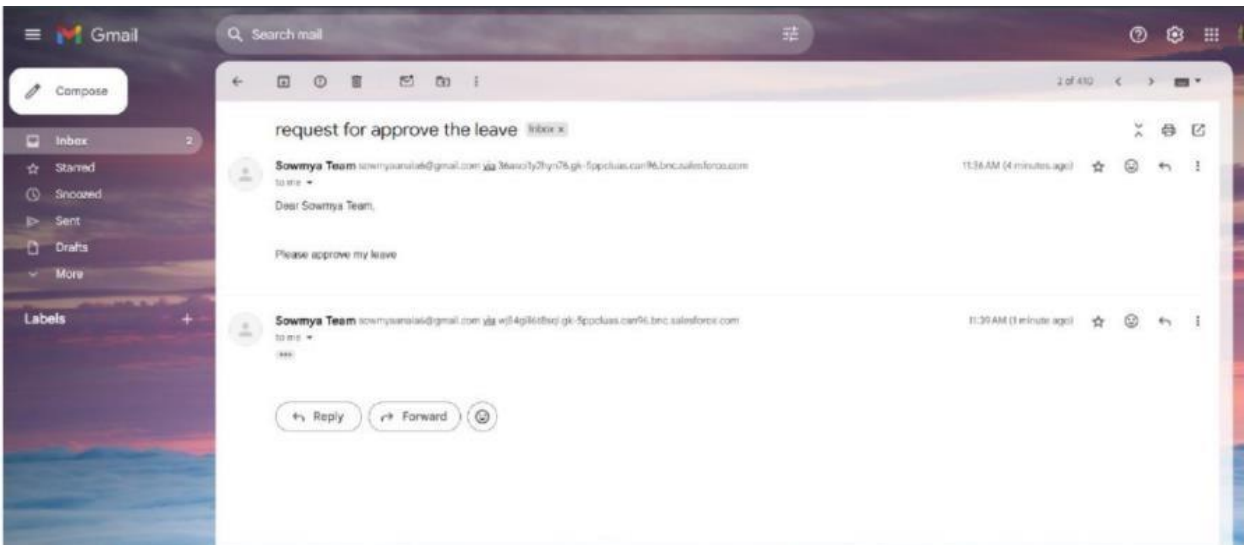

● Email alerts

● Request for approve the leave
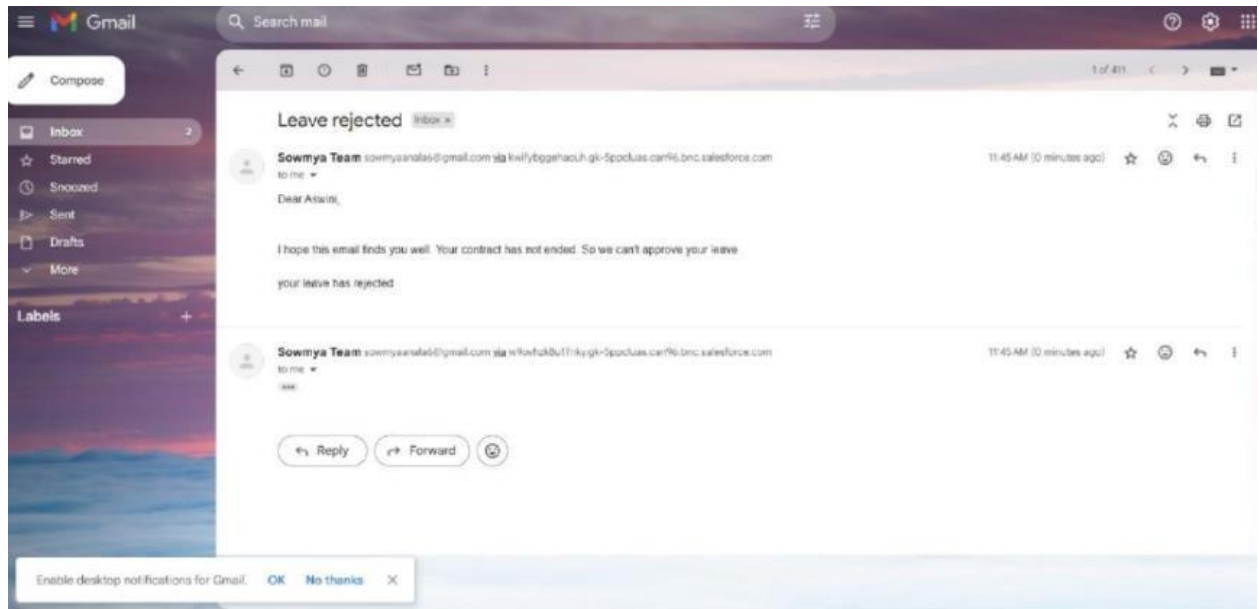
● Leave approved
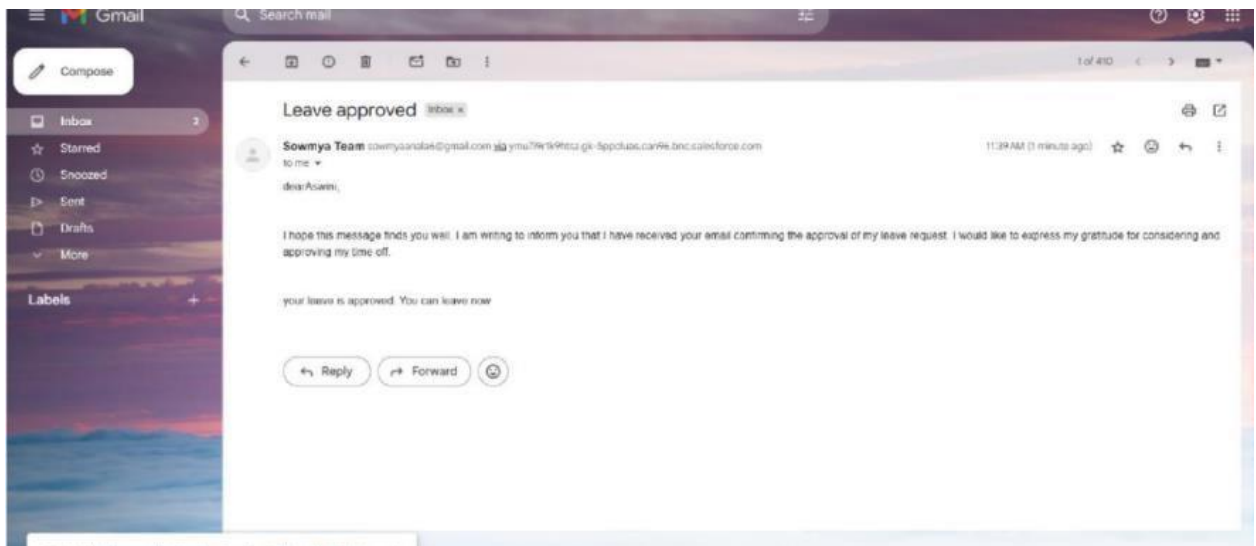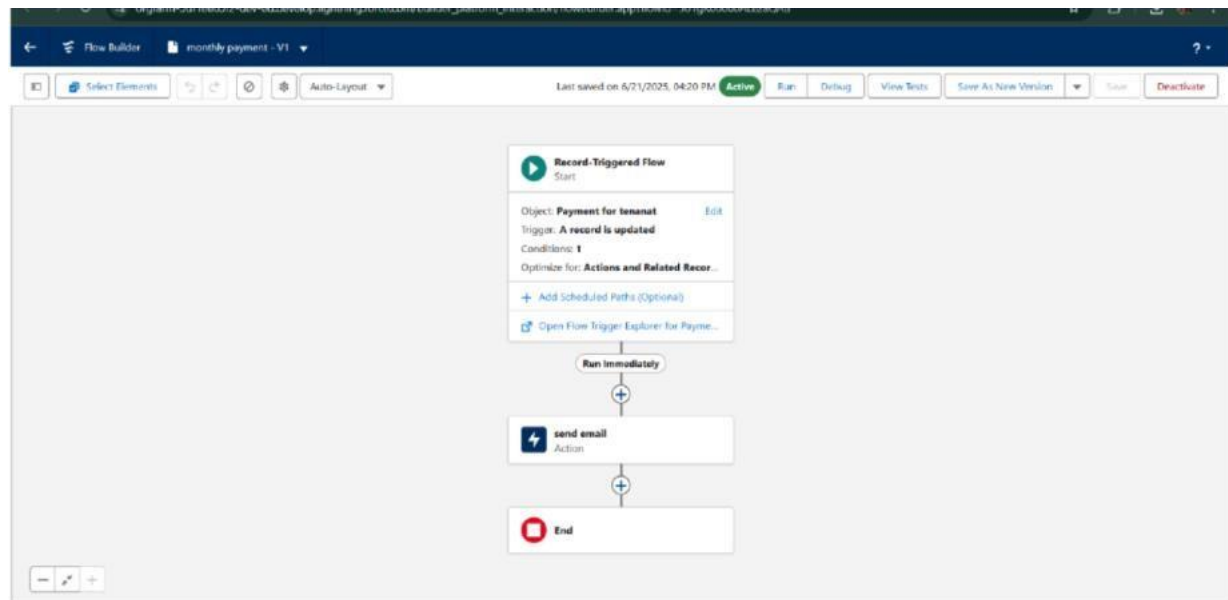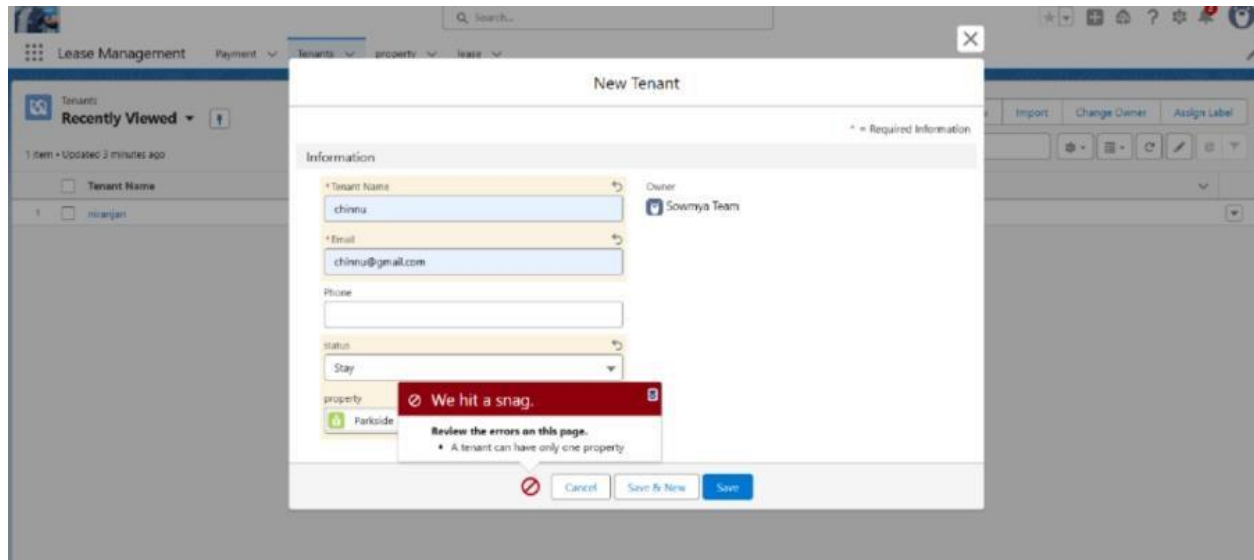

● Leave rejected

● Flow runs

● Trigger error messages

● Approval process notifications

ADVANTAGES & DISADVANTAGES

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

<u>Test.apxt:</u>

trigger test on Tenant__c (before insert) { if (trigger.isInsert && trigger.isBefore){

testHandler.preventInsert(trigger.new); } } <u>testHandler.apxc:</u>

 public class testHandler { public static void preventInsert(List< Tenant__c> newlist) { Set existingPropertyIds = new Set()

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'); }

}

}

}

<u>MothlyEmailScheduler.apxc:</u> global class

MonthlyEmailScheduler implements Schedulable { global void

execute(SchedulableContext sc) { Integer currentDay =

Date.today().day(); if (currentDay == 1) { sendMonthlyEmails();

}

} public static void sendMonthlyEmails() { List 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});

}

}

}