

# LEASE MANAGEMENT

**College Name: KG COLLGE OF ARTS AND SCIENCE**

**TEAM ID:NM2025TMID23825**

**COLLEGE CODE: BRU4Y**

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## 1.INTRODUCTION

### 1.1 Project Overview

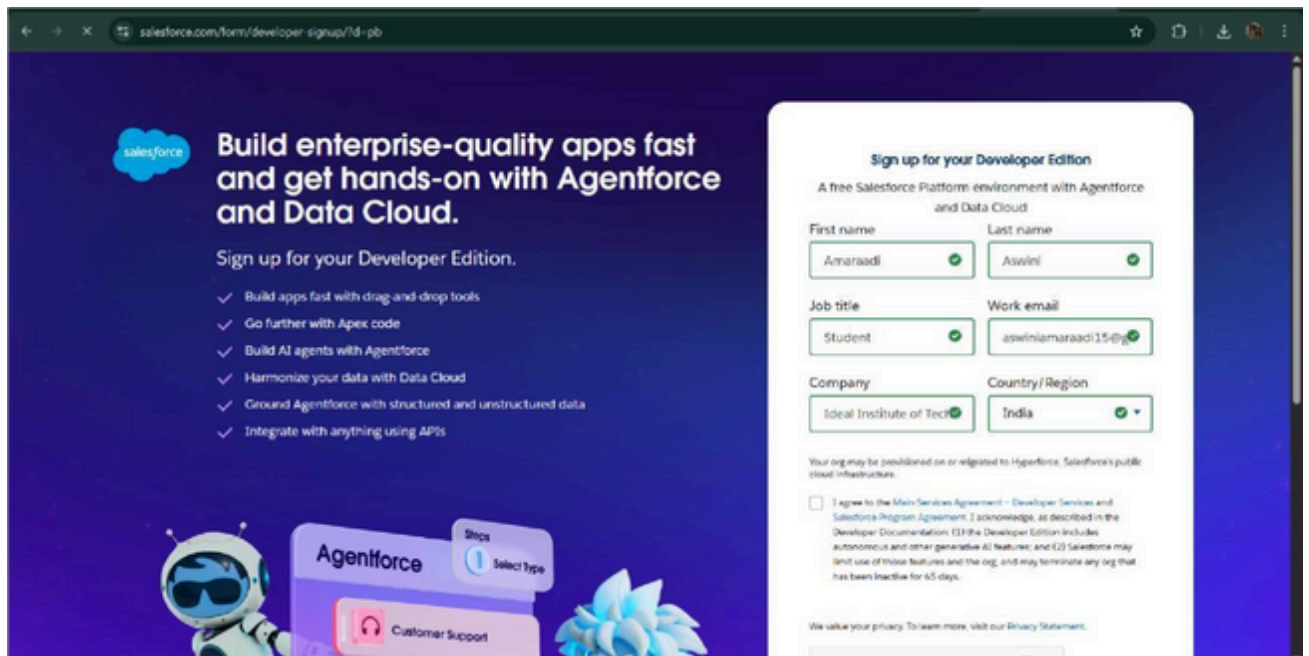
The Lease Management System is a Salesforce-based application designed to streamline the processes associated with leasing real estate properties. It handles tenant management, lease contracts, payments, and communication with automation features such as flows, approval processes, and email alerts.



## 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



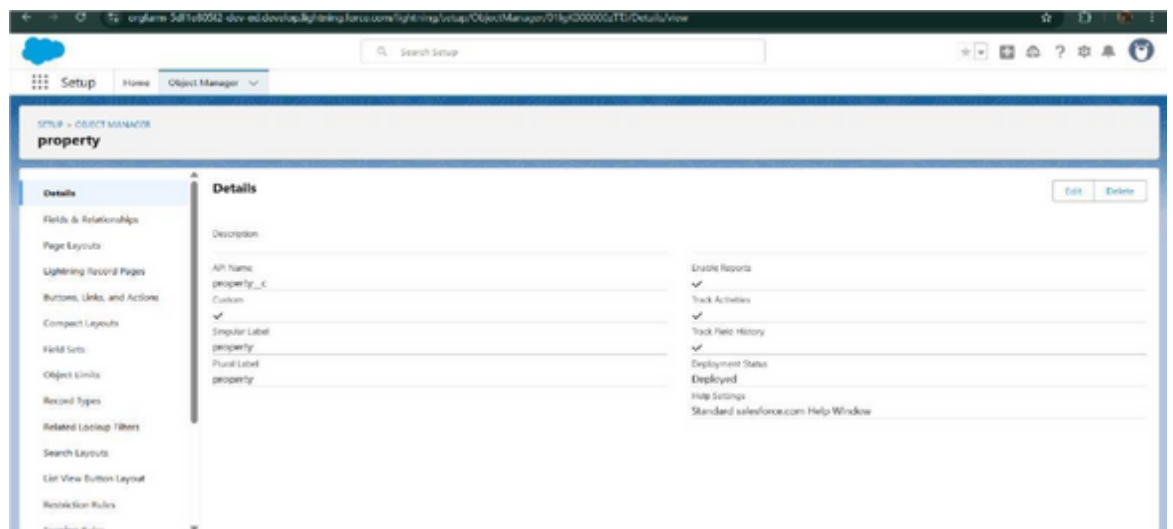
The image shows the Salesforce Developer Edition sign-up page. The left side features a dark blue background with the Salesforce logo and the text "Build enterprise-quality apps fast and get hands-on with Agentforce and Data Cloud." Below this, it says "Sign up for your Developer Edition." and lists several benefits with checkmarks: "Build apps fast with drag-and-drop tools", "Go further with Apex code", "Build AI agents with Agentforce", "Harmonize your data with Data Cloud", "Ground Agentforce with structured and unstructured data", and "Integrate with anything using APIs". At the bottom of this section is an illustration of an Agentforce robot and a "Customer Support" button.

The right side is a white sign-up form titled "Sign up for your Developer Edition". It includes a sub-header "A free Salesforce Platform environment with Agentforce and Data Cloud". The form fields are as follows:

- First name:** Amaraadi
- Last name:** Aswini
- Job title:** Student
- Work email:** aswiniamaraadi15@gmail.com
- Company:** Ideal Institute of Tech
- Country/Region:** India

Below the form, there is a checkbox for "I agree to the Main Services Agreement - Developer Services and Salesforce Program Agreement..." and a link to the "Privacy Statement".

- Created objects: Property, Tenant, Lease, Payment



The image shows the Salesforce Setup page for the 'property' object. The left sidebar contains a navigation menu with the following items: "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", and "Automation Rules". The main content area is titled "property" and has a "Details" tab selected. The "Details" section shows the following information:

- Description:** Custom
- API Name:** property\_\_c
- Custom:** Custom
- Single Label:** property
- Plural Label:** properties
- Enable Reports:** ☒
- Track Activities:** ☒
- Track Field History:** ☒
- Deployment Status:** Deployed
- Help Settings:** Standard | Salesforce.com Help Window

org/iam-5d11e00502-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/011gk000000zTbN/Details/view

Setup Home Object Manager

SETUP > OBJECT MANAGER

### Tenant

**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

**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

Help Settings: Standard salesforce.com Help Window

org/iam-5d11e00502-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/011gk000000zTbN/Details/view

Setup Home Object Manager

SETUP > OBJECT MANAGER

### lease

**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

**Details**

Edit Delete

Description

API Name: lease\_c

Custom: ☒

Singular Label: lease

Plural Label: leases

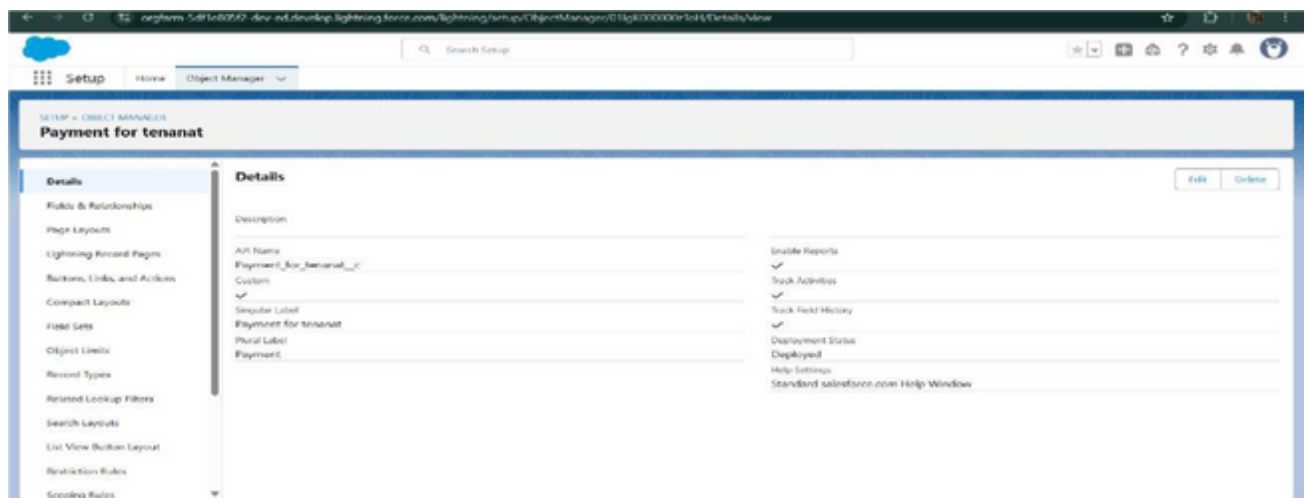
Enable Reports: ☒

Track Activities: ☒

Track Field History: ☒

Deployment Status: Deployed

Help Settings: Standard salesforce.com Help Window



- Configured fields and relationships

Setup

Home

Object Manager

Search Setup

Star

Grid

Help

Settings

Notifications

Profile

Setup > OBJECT MANAGER

property

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

Fields & Relationships

9 items, Sorted by Field Label

Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Long Text Area(32768)		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Name	Name__c	Text(255)		
Owner	OwnerId	Lookup(User,Group)		✓
property	property__c	Lookup(property)		✓
property Name	Name	Text(30)		✓
slgt	slgt__c	Text(18)		
Type	Type__c	Picklist		

Setup

Home

Object Manager

Search Setup

Star

Grid

Help

Settings

Notifications

Profile

Setup > OBJECT MANAGER

Payment for tenanat

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

Fields & Relationships

7 items, Sorted by Field Label

Quick Find


New

Deleted Fields








Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount__c	Number(18, 0)		
check for payment	check_for_payment__c	Picklist		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Payment date	Payment_date__c	Date		
Payment Name	Name	Text(30)		✓



Search Setup



SetupHomeObject Manager

SETUP > OBJECT MANAGER

lease

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

Fields & Relationships

7 Items, Sorted by Field Label

Quick Find


New

Deleted Fields








Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
End date	End_date__c	Date		
Last Modified By	LastModifiedById	Lookup(User)		
lease Name	Name	Text(80)		✓
Owner	OwnerId	Lookup(User.Group)		✓
property	property__c	Lookup(property)		✓
start date	start_date__c	Date		



Search Setup



SetupHomeObject Manager

SETUP > OBJECT MANAGER

Tenant

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

Fields & Relationships

7 Items, Sorted by Field Label

Quick Find

New

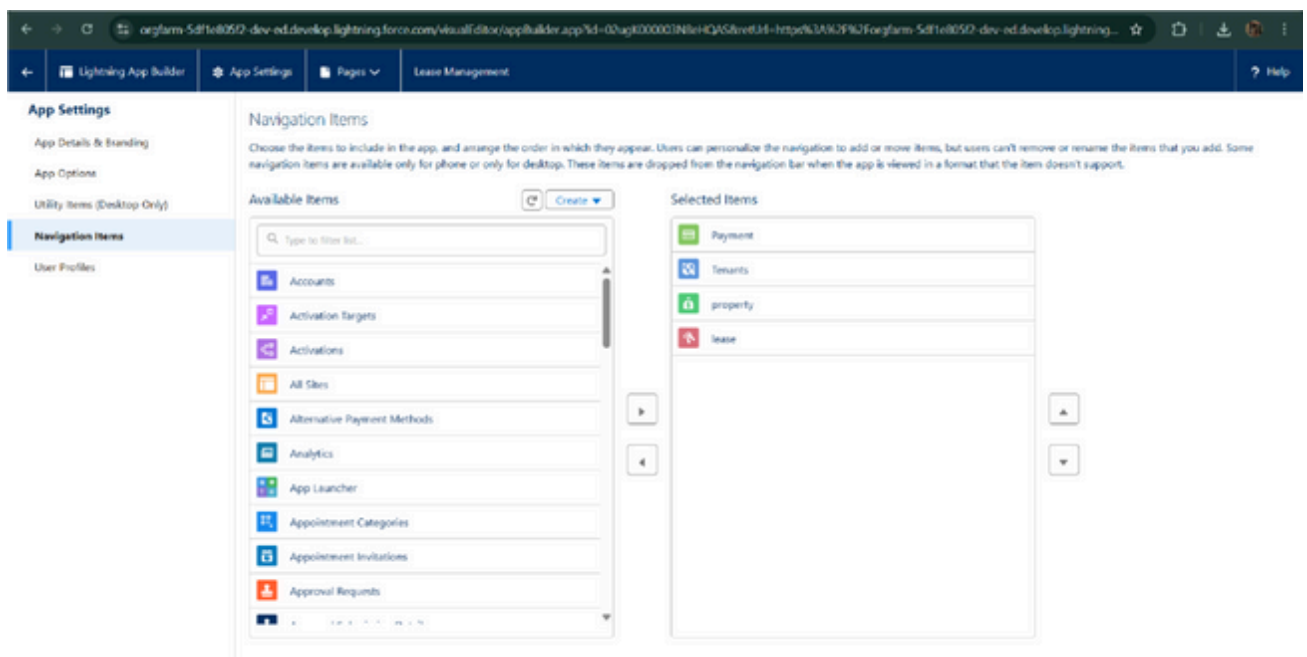
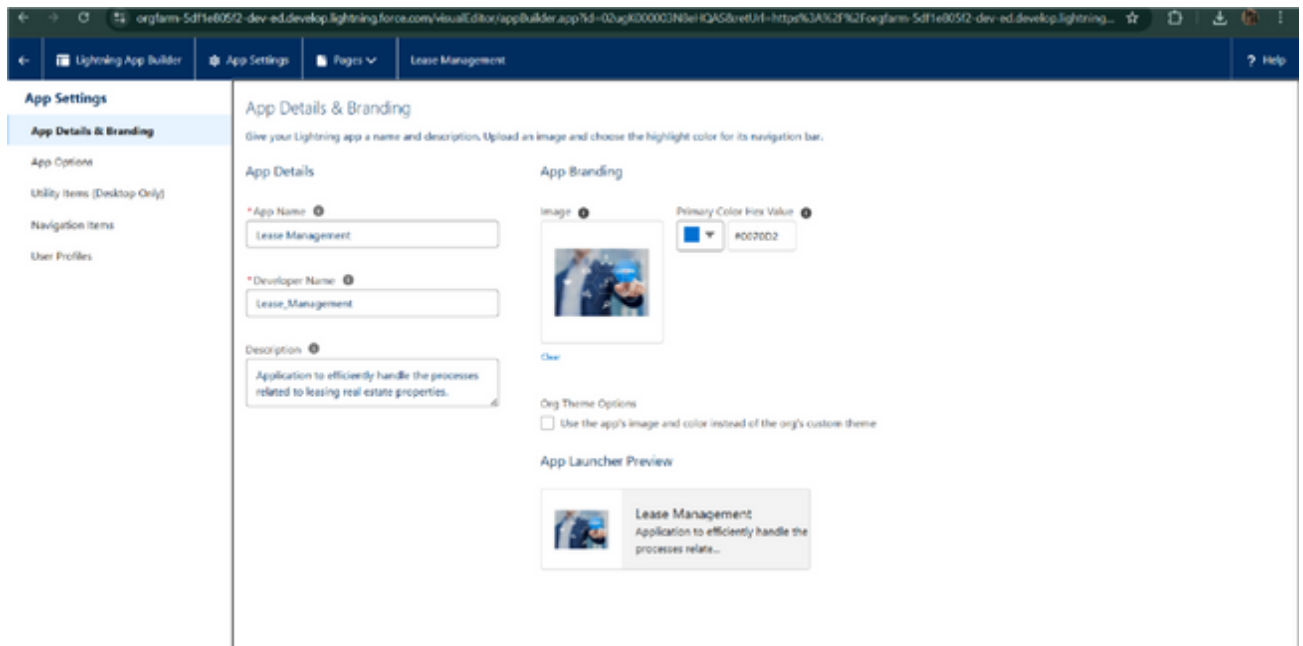
Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User.Group)		✓
Phone	Phone__c	Phone		
status	status__c	Picklist		
Tenant Name	Name	Text(80)		✓

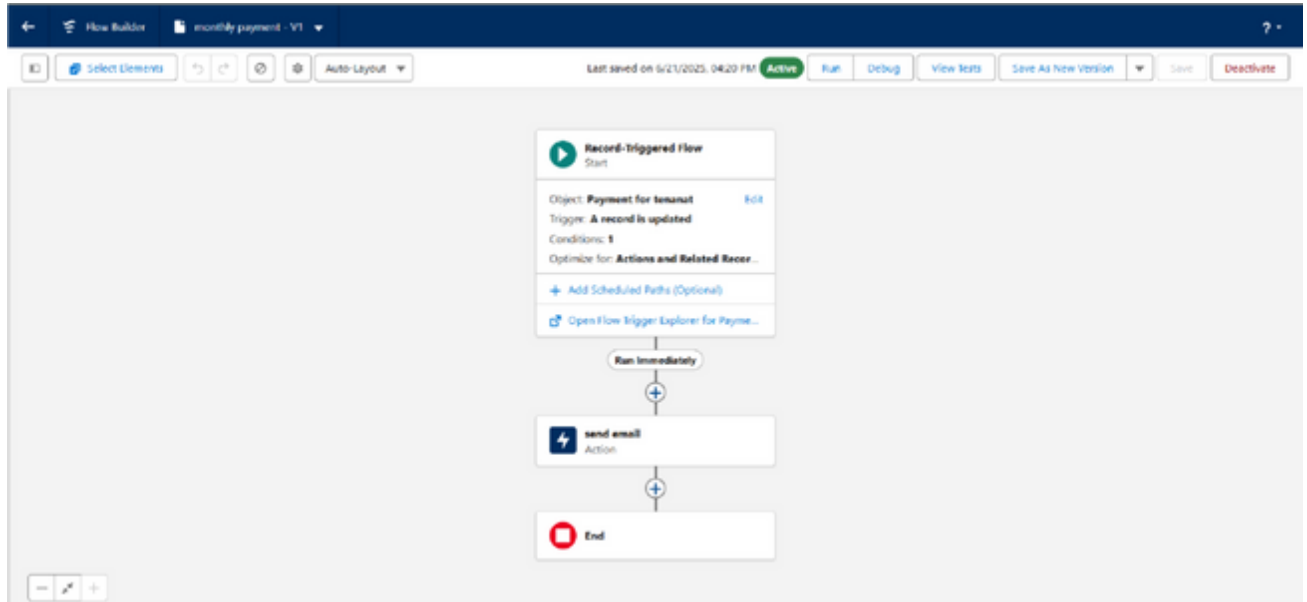
- Developed Lightning App with relevant tabs



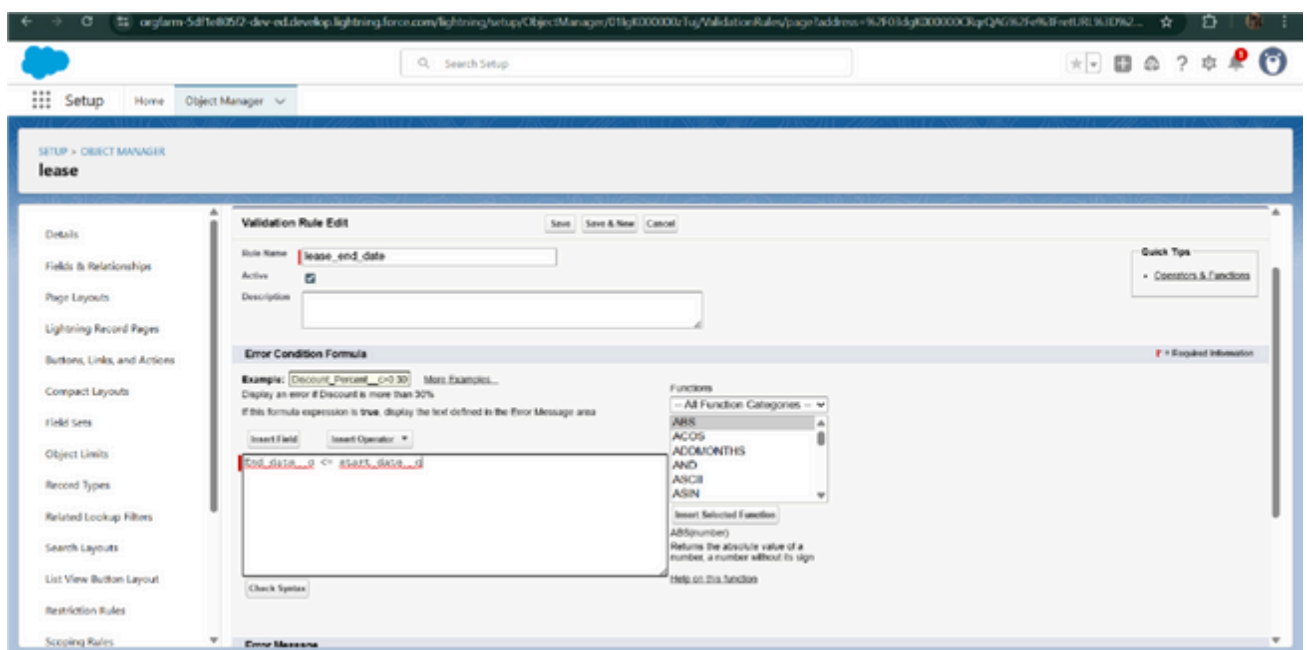


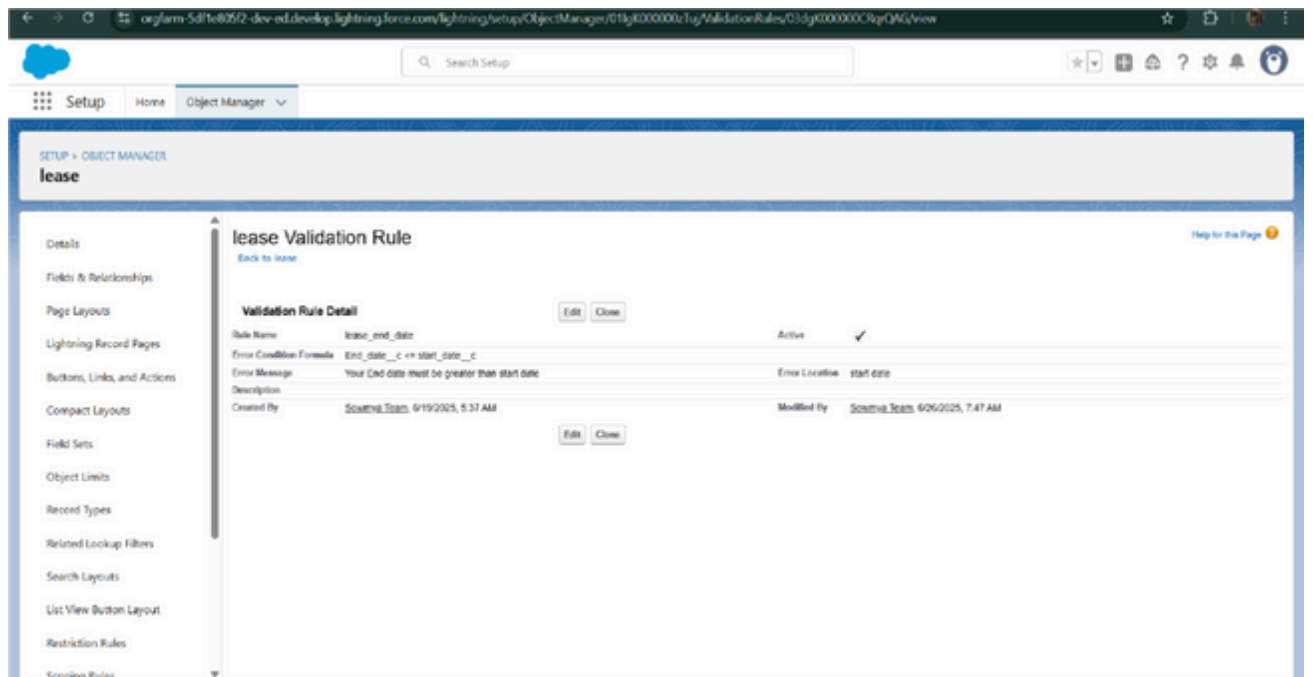


- Implemented Flows for monthly rent and payment success

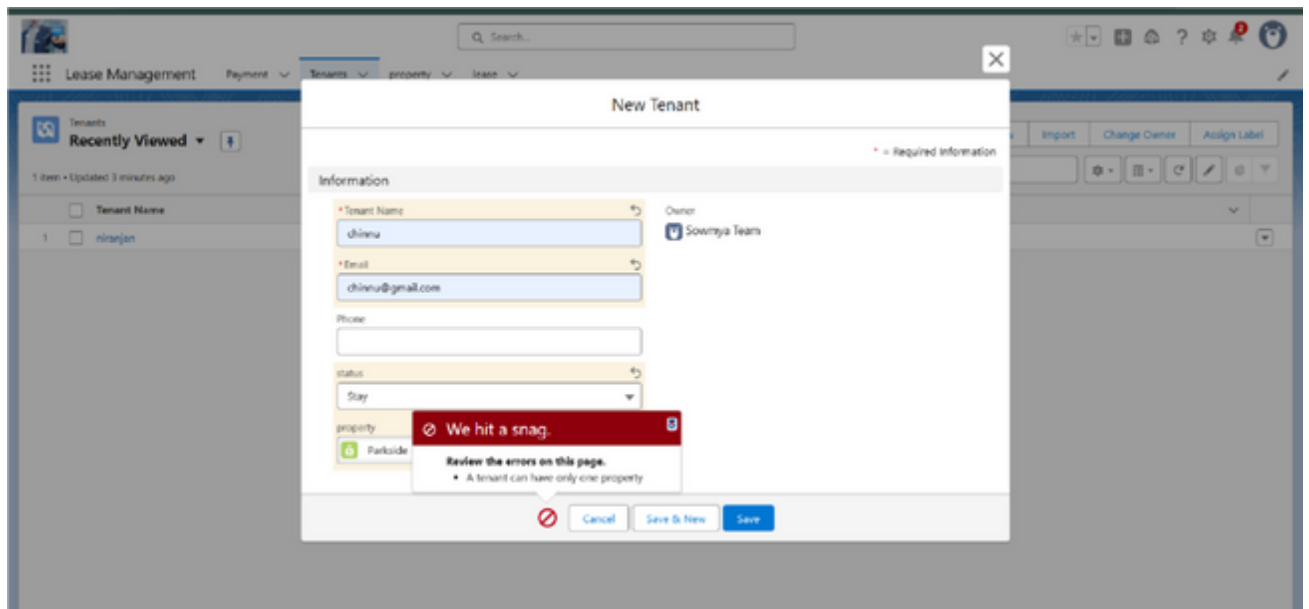


- To create a validation rule to a Lease Object

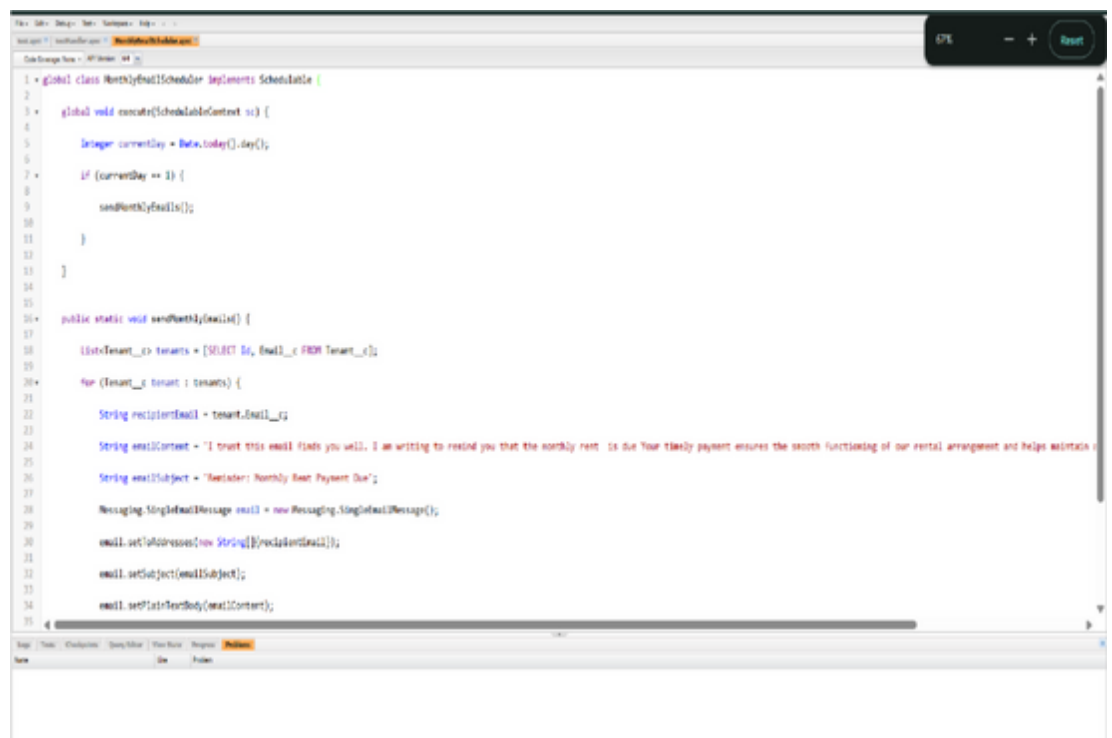




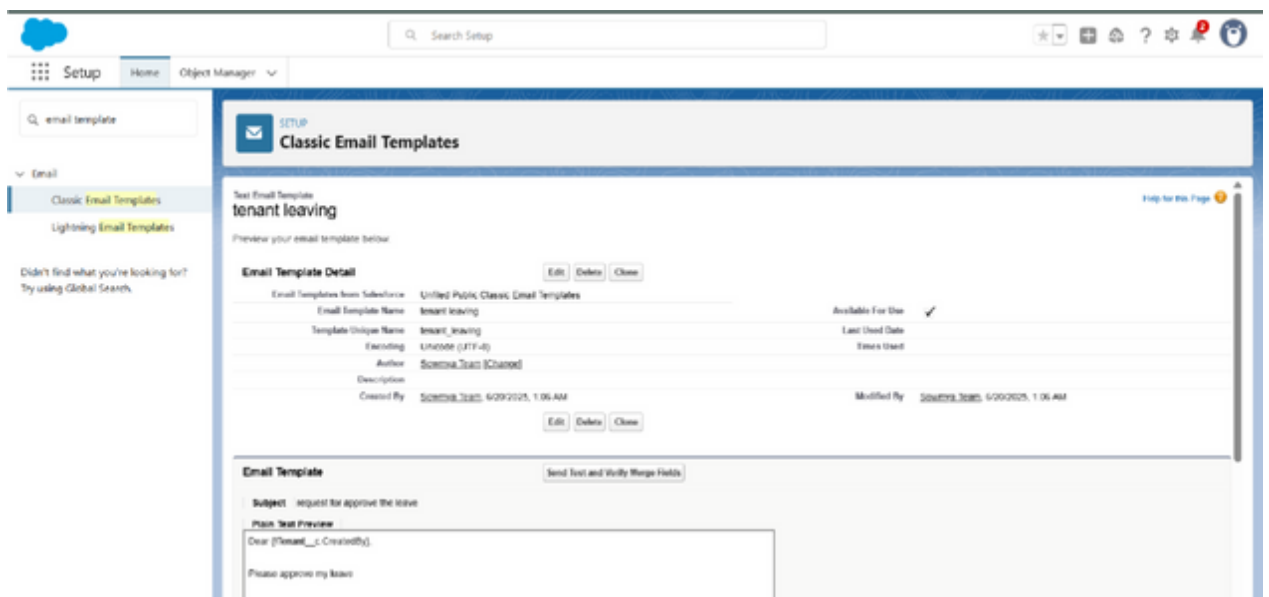
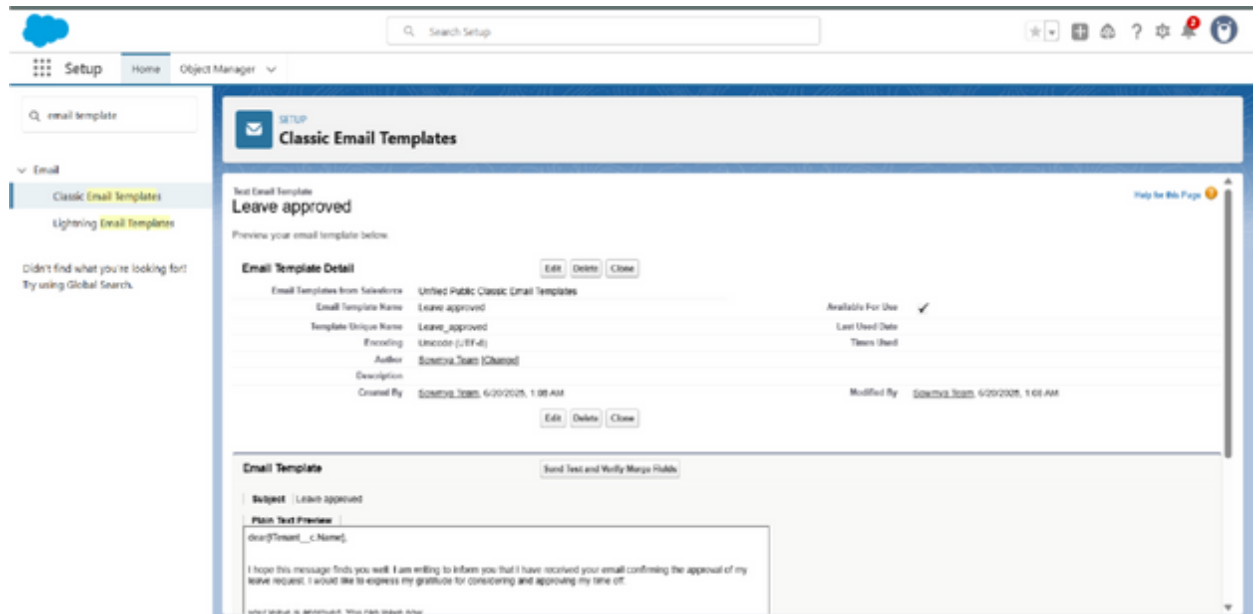
- Added Apex trigger to restrict multiple tenants per property




- Scheduled monthly reminder emails using Apex class









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





Search Setup



SetupHomeObject Manager

email template

Email

- Classic Email Templates
- Lightning Email Templates

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

SETUP

Classic Email Templates

Test Email Template

Leave rejected

Preview your email template below.

Email Template Detail

Email Templates from Salesforce

Unified Public Classic Email Templates

Email Template Name

Leave rejected

Available For Use

✓

Template Unique Name

Leave\_rejected

Last Used Date

Times Used

Encoding

Unicode (UTF-8)

Author

Scout24 Team (Changelog)

Description

Created By

Scout24 Team 6/29/2025, 1:11 AM

Modified By

Scout24 Team 6/29/2025, 1:11 AM

EditDeleteClone

EditDeleteClone

Email Template

Send Test and Merge Fields

Subject


Leave rejected

Plain Text Preview







Dear {{Tenant\_\_c.Name}},

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

your leave has rejected



Search Setup



SetupHomeObject Manager

email template

Email

- Classic Email Templates
- Lightning Email Templates

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

SETUP

Classic Email Templates

Test Email Template

Tenant Email

Preview your email template below.

Email Template Detail

Email Templates from Salesforce

Unified Public Classic Email Templates

Email Template Name

Tenant Email

Available For Use

✓

Template Unique Name

Tenant\_Email

Last Used Date

Times Used

Encoding

Unicode (UTF-8)

Author

Scout24 Team (Changelog)

Description

Created By

Scout24 Team 6/29/2025, 1:12 AM

Modified By

Scout24 Team 6/29/2025, 1:12 AM

EditDeleteClone

EditDeleteClone

Email Template

Send Test and Merge Fields

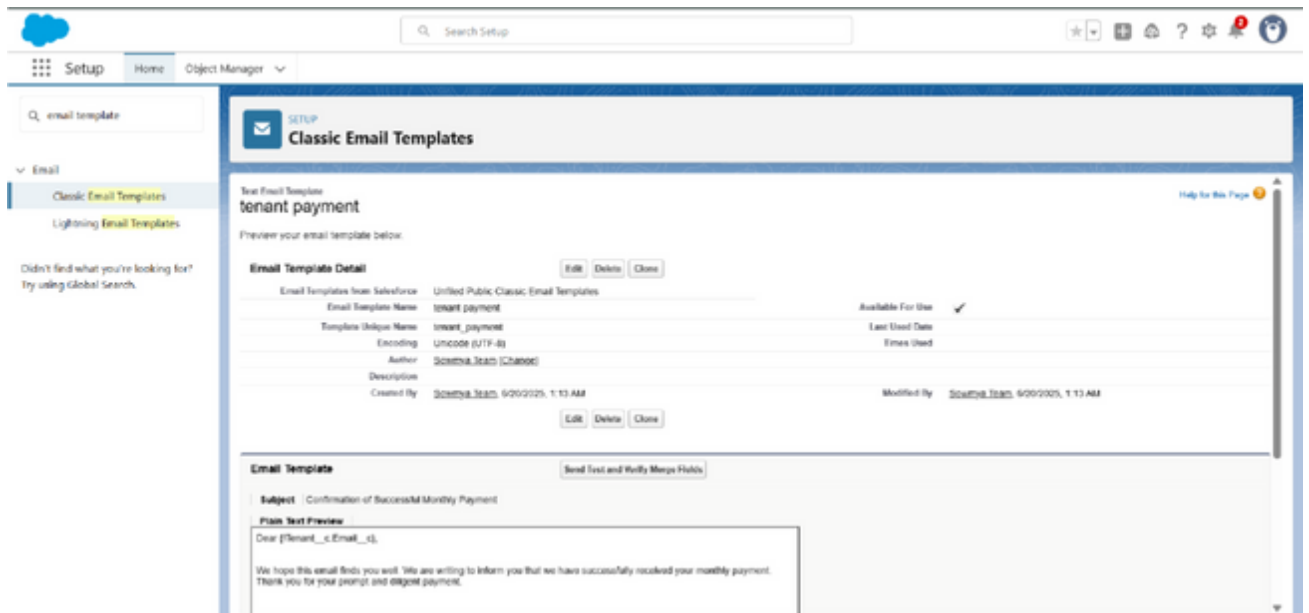
Subject

Urgent: Monthly Rent Payment Reminder

Plain Text Preview

Dear {{Tenant\_\_c.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.



The screenshot shows the Salesforce Setup interface for Classic Email Templates. The left sidebar contains a search bar with "email template" and a navigation menu with "Email" expanded, showing "Classic Email Templates" and "Lightning Email Templates". The main content area is titled "Classic Email Templates" and shows a preview of a template named "tenant payment".

**Email Template Detail**

Field	Value	Field	Value
Email Template Name	tenant payment	Available For Use	<input checked="" type="checkbox"/>
Template Unique Name	tenant_payment	Last Used Date	
Encoding	Unicode (UTF-8)	Times Used	
Author	Scottna.Teach (Chatter)		
Description			
Created By	Scottna.Teach, 6/26/2025, 1:13 AM	Modified By	Scottna.Teach, 6/26/2025, 1:13 AM

**Email Template**

**Subject:** Confirmation of Successful Monthly Payment

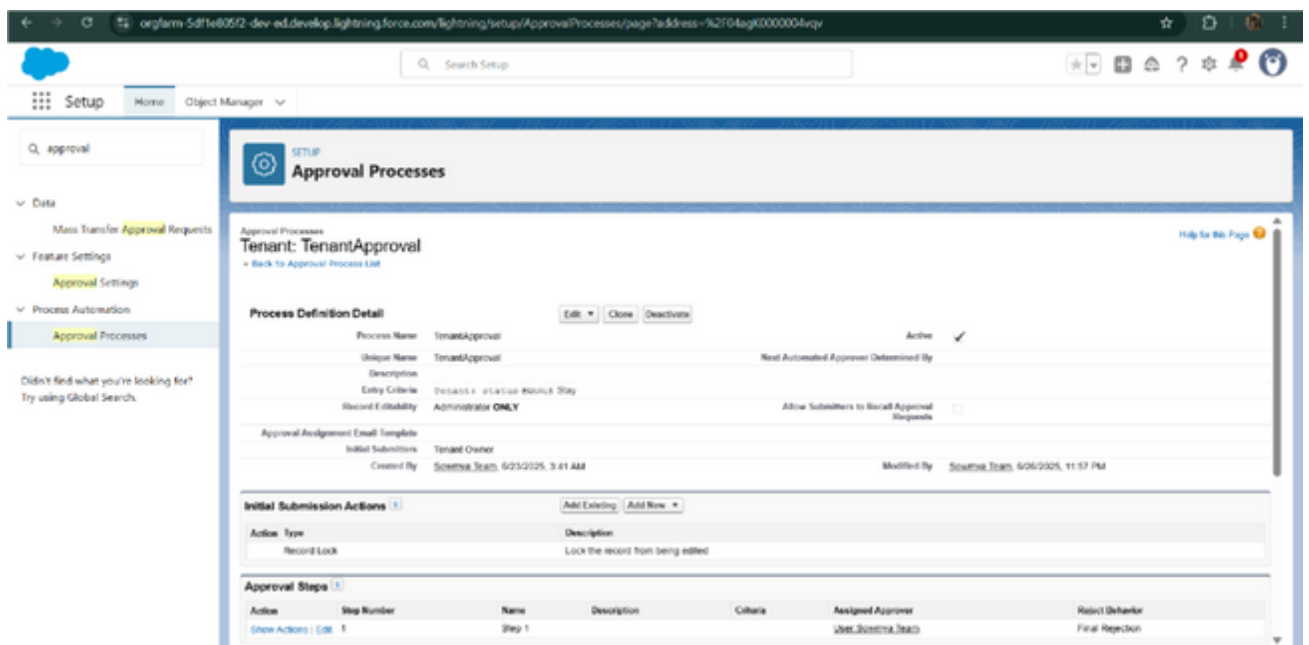
**Plain Text Preview:**

Dear [Tenant\_\_c.Email\_\_c],

We hope this email finds you well. We are writing to inform you that we have successfully received your monthly payment. Thank you for your prompt and diligent payment.

- Approval Process creation

For Tenant Leaving:



The screenshot shows the Salesforce Setup interface for Approval Processes. The left sidebar contains a search bar with "approval" and a navigation menu with "Data" expanded, showing "Mass Transfer Approval Requests", "Feature Settings" (with "Approval Settings" expanded), and "Process Automation" (with "Approval Processes" expanded). The main content area is titled "Approval Processes" and shows details for a process named "TenantApproval".

**Process Definition Detail**

Field	Value	Field	Value
Process Name	TenantApproval	Active	<input checked="" type="checkbox"/>
Unique Name	TenantApproval	Next Automated Approver Determined By	
Description			
Entry Criteria	THANST__c.STATUS__c EQUALS Stay	Allow Submitters to Recall Approval Requests	<input type="checkbox"/>
Record Eligibility	Administrator ONLY		
Approval Assignment Email Template	Tenant Owner		
Initial Submitters	Tenant Owner	Modified By	Scottna.Teach, 6/26/2025, 11:57 PM
Created By	Scottna.Teach, 6/26/2025, 3:41 AM		

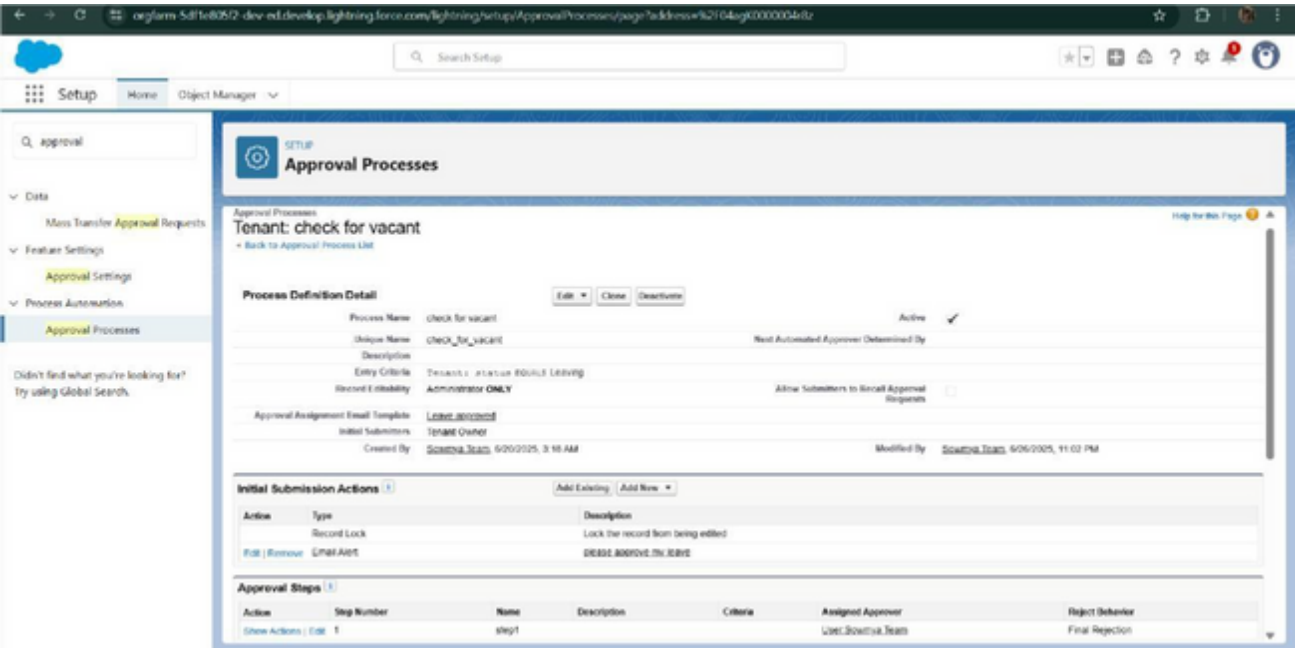
**Initial Submission Actions**

Action Type	Description
Record Lock	Lock the record from being edited

**Approval Steps**

Action	Step Number	Name	Description	Criteria	Assigned Approver	Reject Behavior
1	1	Step 1			User:Scottna.Teach	Final Rejection

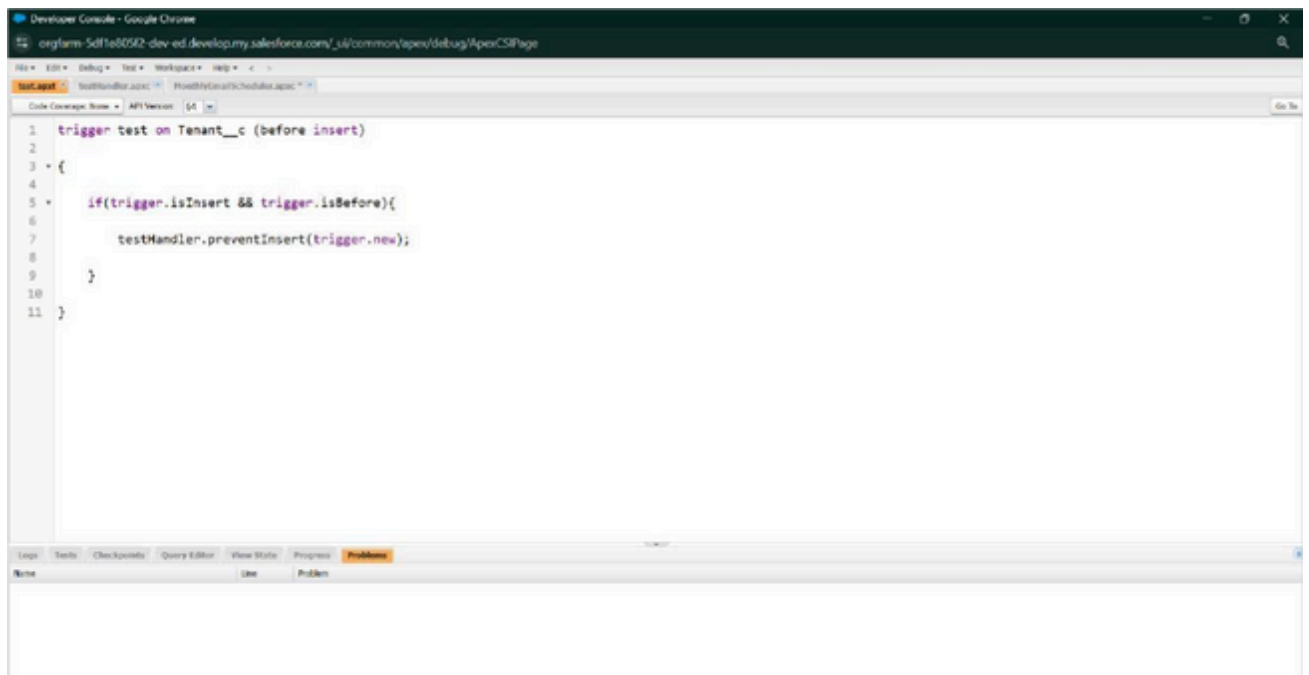
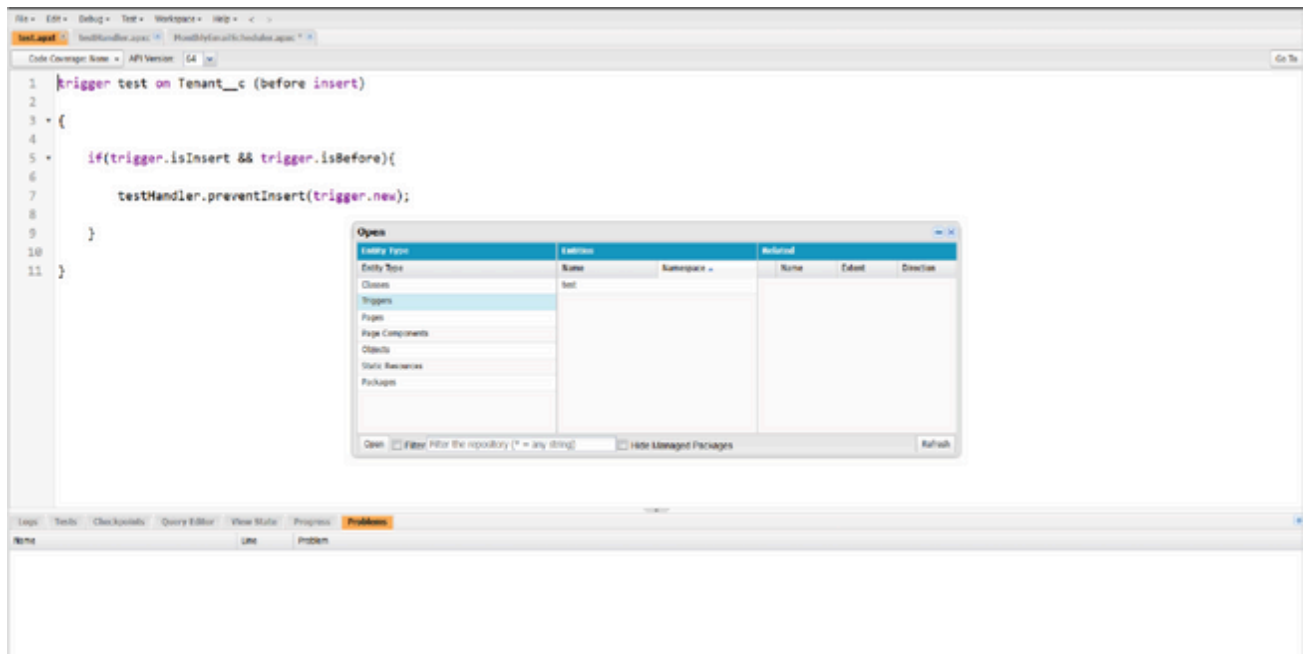
For Check for Vacant:



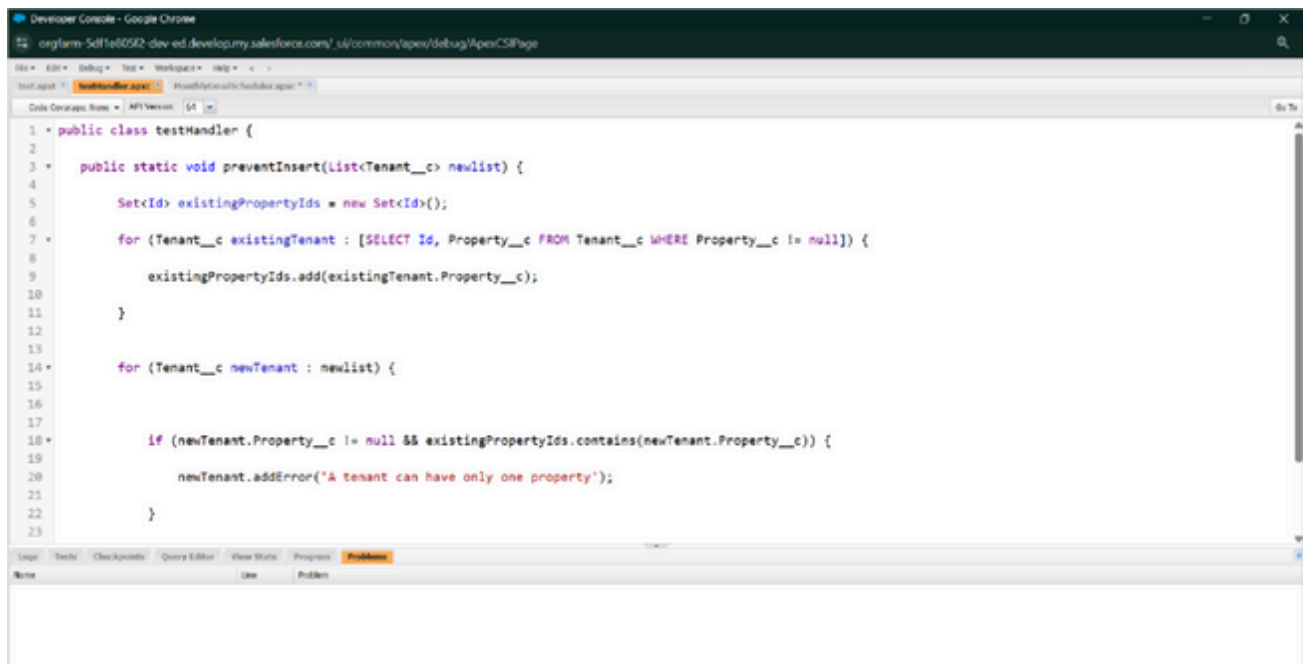
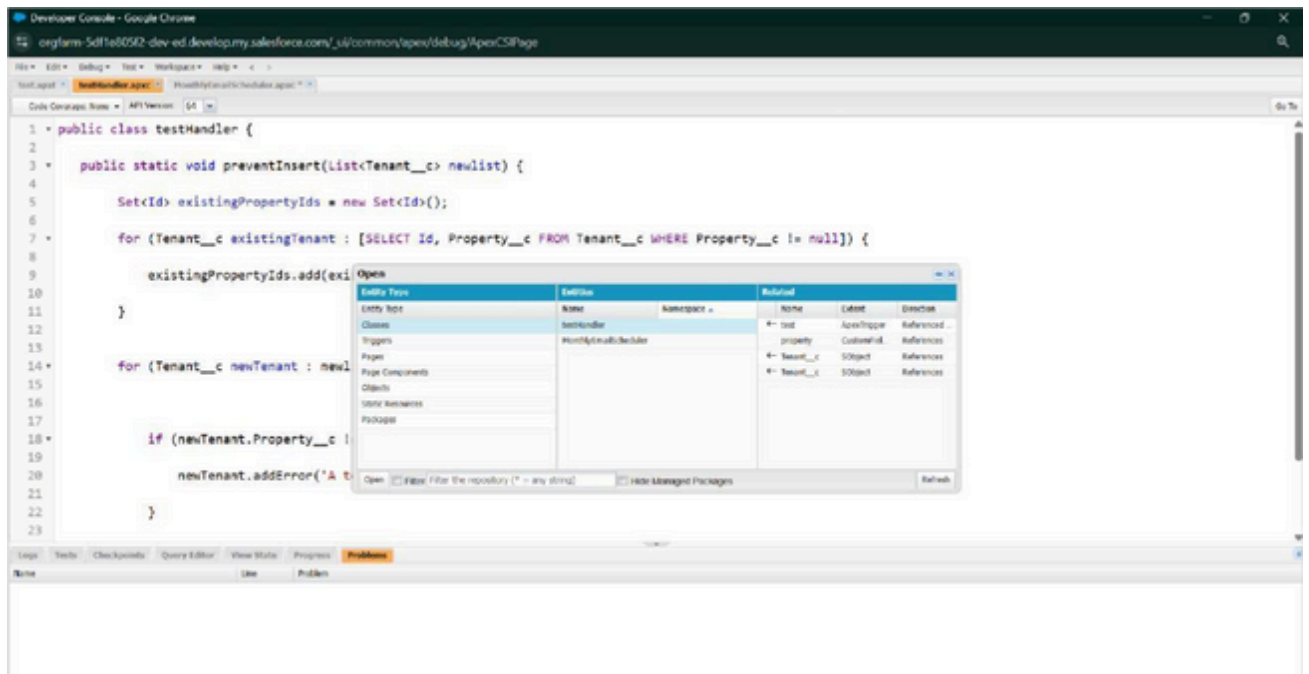
- Apex Trigger

Create an Apex Trigger





Create an Apex Handler class



- FLOWS

org/iam-5d11e805f2-dev-ed.develop.lightning.force.com/builder\_platform/interaction/flowbuilder.app?flowId=301gK00000AcezaQAB

Flow Builder | monthly payment - V1

Last saved on 6/21/2025, 04:20 PM | Active | Run | Debug | View Tests | Save As New Version | Save | Deactivate

Select Elements | Auto-Layout

**Record-Triggered Flow**  
Start

Object: **Payment for tenant** | Edit

Trigger: **A record is updated**

Conditions: 1

Optimize for: **Actions and Related Records**

+ Add Scheduled Paths (Optional)

Open Flow Trigger Explorer for Payme...

Run Immediately

send email  
Action

End

**Configure Start**

Field: check for payment | Operator: Equals | Value: Paid

+ Add Condition

**When to Run the Flow for Updated Records:**

☒ Every time a record is updated and meets the condition requirements

☐ Only when a record is updated to meet the condition requirements

**Optimize Flow**

Optimize the Flow for:

**Fast Field Updates**  
Update fields on the record that triggers the flow to run. This high-performance flow runs **before the record is saved** to the database.

**Actions and Related Records**  
Update any record and perform actions, like send an email. This more flexible flow runs **after the record is saved** to the database.

Is this flow making an external callout or connecting to an external system?  
An asynchronous path is required for flows that involve external systems.  
Add Asynchronous Path: ☐

org/iam-5d11e805f2-dev-ed.develop.lightning.force.com/builder\_platform/interaction/flowbuilder.app?flowId=301gK00000AcezaQAB

Flow Builder | monthly payment - V1

Last saved on 6/21/2025, 04:20 PM | Active | Run | Debug | View Tests | Save As New Version | Save | Deactivate

Select Elements | Auto-Layout

**Record-Triggered Flow**  
Start

Object: **Payment for tenant** | Edit

Trigger: **A record is updated**

Conditions: 1

Optimize for: **Actions and Related Records**

+ Add Scheduled Paths (Optional)

Open Flow Trigger Explorer for Payme...

Run Immediately

send email  
Action

End

**Configure Start**

**Select Object**  
Select the object whose records trigger the flow when they're created, updated, or deleted.

\* Object: Payment for tenant

**Configure Trigger**

**Trigger the Flow When:**

☐ A record is created

☒ A record is updated

☐ A record is created or updated

☐ A record is deleted

**Set Entry Conditions**  
Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.

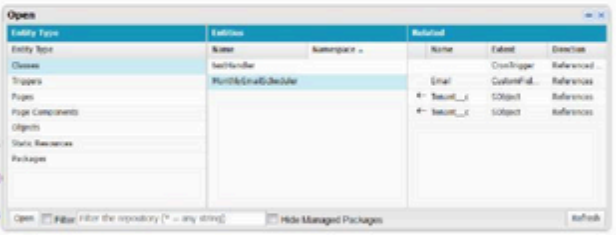
If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the **Only when a record is updated to meet the condition requirements** option for When to Run the Flow for Updated Records.

**Condition Requirements**  
All Conditions Are Met (AND)

Field | Operator | Value

- Schedule class:

Create an Apex Class



## Schedule Apex class

Apex Class

## Apex Classes

Apex Class: MonthlyEmailScheduler

Apex Class Detail

Name	MonthlyEmailScheduler	Status	Active
Namespace Prefix		Code Coverage	0% (0/15)
Created By	Sowmya Team	Last Modified By	Sowmya Team
	6/23/2025, 2:46 AM		6/23/2025, 2:47 AM

Class Body

```
1 global class MonthlyEmailScheduler implements Schedulable {
2     global void execute(SchedulableContext sc) {
3         Integer currentDay = Date.today().day();
4         if (currentDay == 1) {
5             sendMonthlyEmails();
6         }
7     }
8     public static void sendMonthlyEmails() {
9         List<Tenant__c> tenants = [SELECT Id, Email__c FROM Tenant__c];
10        for (Tenant__c tenant : tenants) {
```

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

Lease Management

Tenant: Aswini

Related Details

\* Required Information

Tenant Name: Aswini

Owner: Sowmya Team

\* Email: aswinimaraad15@gmail.com

Phone: (909) 223-5547

Status: Leaving

Property: 6a

Created By: Sowmya Team, 6/26/2025, 6:05 AM

Last Modified By: Sowmya Team, 6/26/2025, 11:06 PM

Activity

Filters: All time • All activities

Upcoming & Overview

No activities to show.

Get started by sending an email, scheduling a task, and more.

No past activity. Past meetings and tasks marked as done show up here.

Submit for Approval

org/iam-Sd11e805f2-dev-ed.develop.lightning.force.com/lightning/r/Tenant\_\_c/a01gk000008Ah-dGQAT/view

Lease Management Payment Tenants property lease

Tenant Aswini

Tenant was submitted for approval.

New Contact Edit New Opportunity

Related Details

\* Tenant Name: Aswini

\* Email: aswinimaraad15@gmail.com

Phone: (905) 223-5567

Status: Leaving

Property: Imran

Owner: Sowmya Team

Created By: Sowmya Team, 6/26/2025, 6:05 AM

Last Modified By: Sowmya Team, 6/26/2025, 11:06 PM

Activity

Filters: All time • All activities • All types

Refresh Expand All View All

Upcoming & Overdue

No activities to show. Get started by sending an email, scheduling a task, and more.

No past activity. Past meetings and tasks marked as done show up here.

Cancel Save

32°C Cloudy

org/iam-Sd11e805f2-dev-ed.develop.lightning.force.com/lightning/r/ProcessInstanceStep/01gk000000CYNHQAQ/view

Lease Management Payment Tenants property lease Aswini Approval

Process Instance Step Tenant Approval Approved

Submitter	Date Submitted	Actual Approver	Assigned To
Sowmya Team	Jun 27, 2025	Sowmya Team	Sowmya Team

Details

Approval Details

Tenant Name: Aswini

Owner: Sowmya Team

Property: Imran

Notifications

Approval request for the tenant is approved Aswini a few seconds ago

Approval request for the tenant is rejected Aswini an hour ago

Approval request for the tenant is approved Aswini an hour ago

Approval request for the tenant is approved Aswini an hour ago

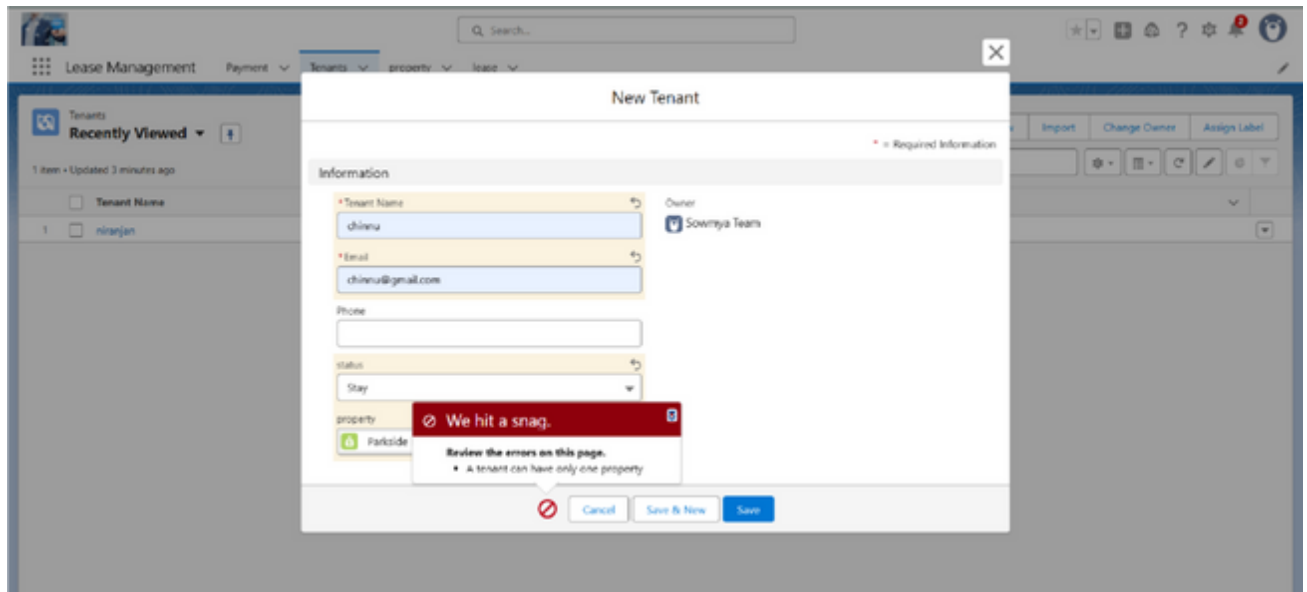
Approval request for the tenant is approved Aswini an hour ago

Approval request for the tenant is approved Imran 15 hours ago

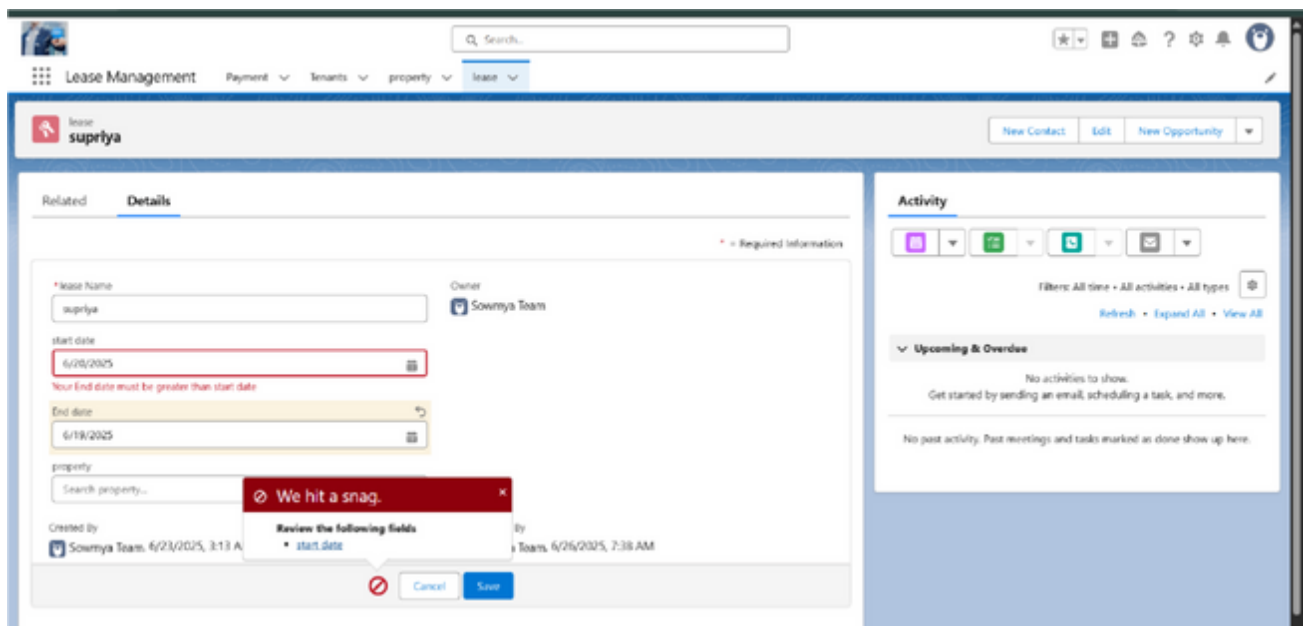
# FUNCTIONAL AND PERFORMANCE TESTING

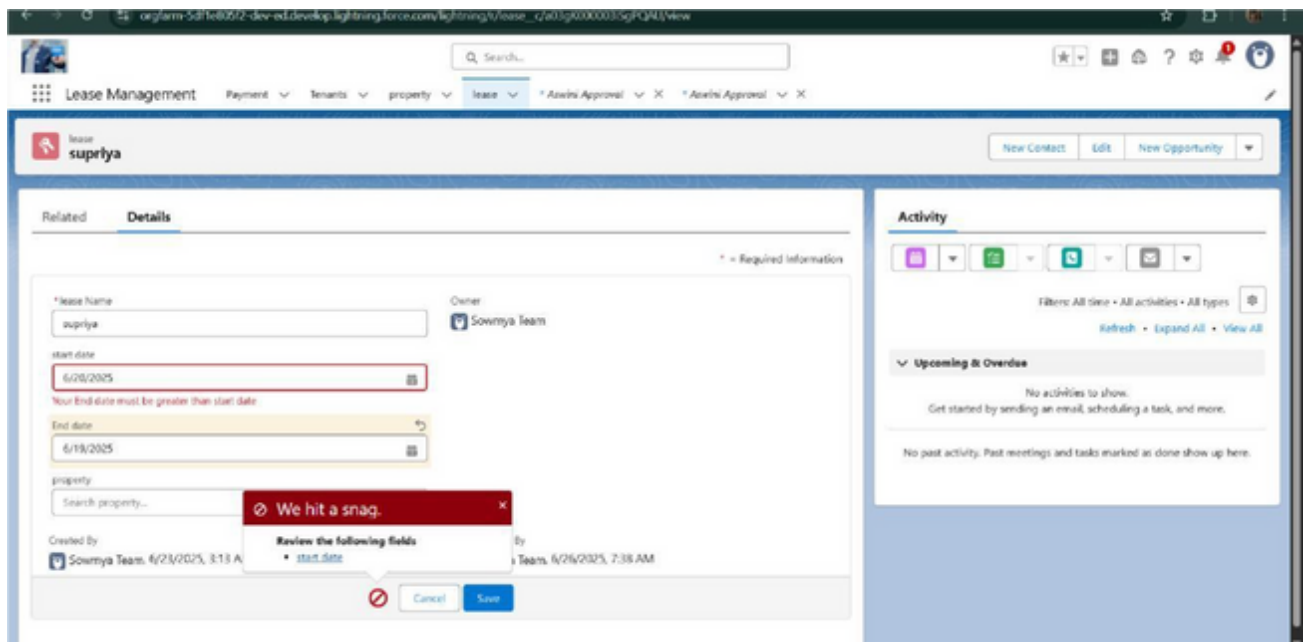
## Performance Testing

- Trigger validation by entering duplicate tenant-property records

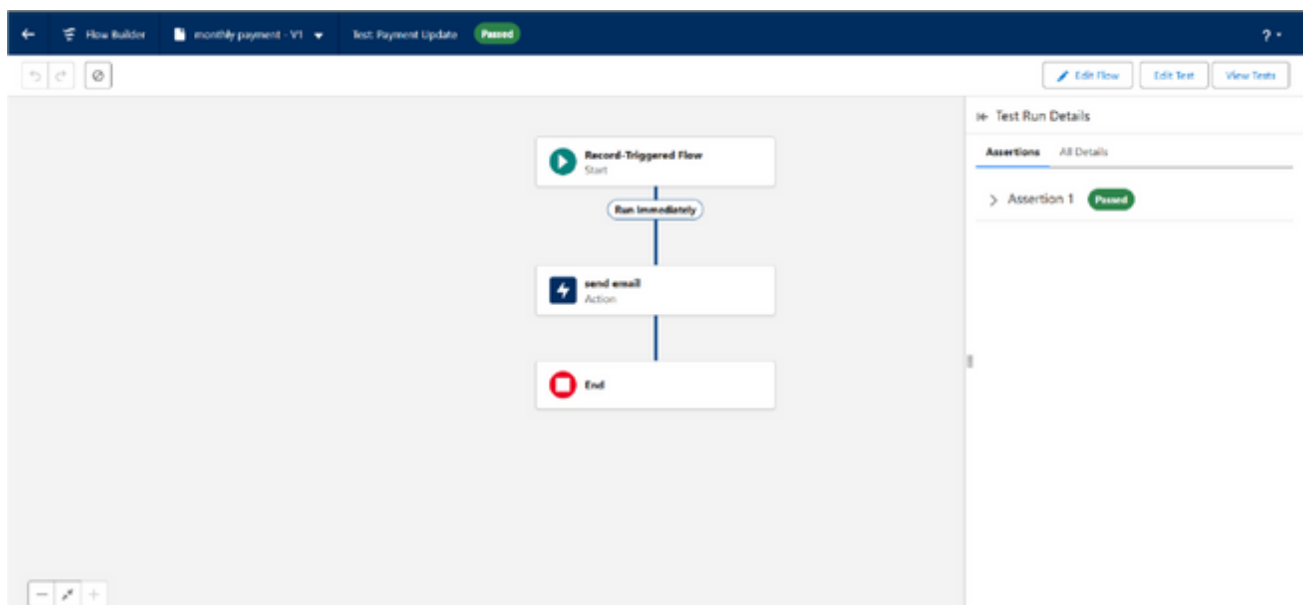


- Validation Rule checking





- Test flows on payment update



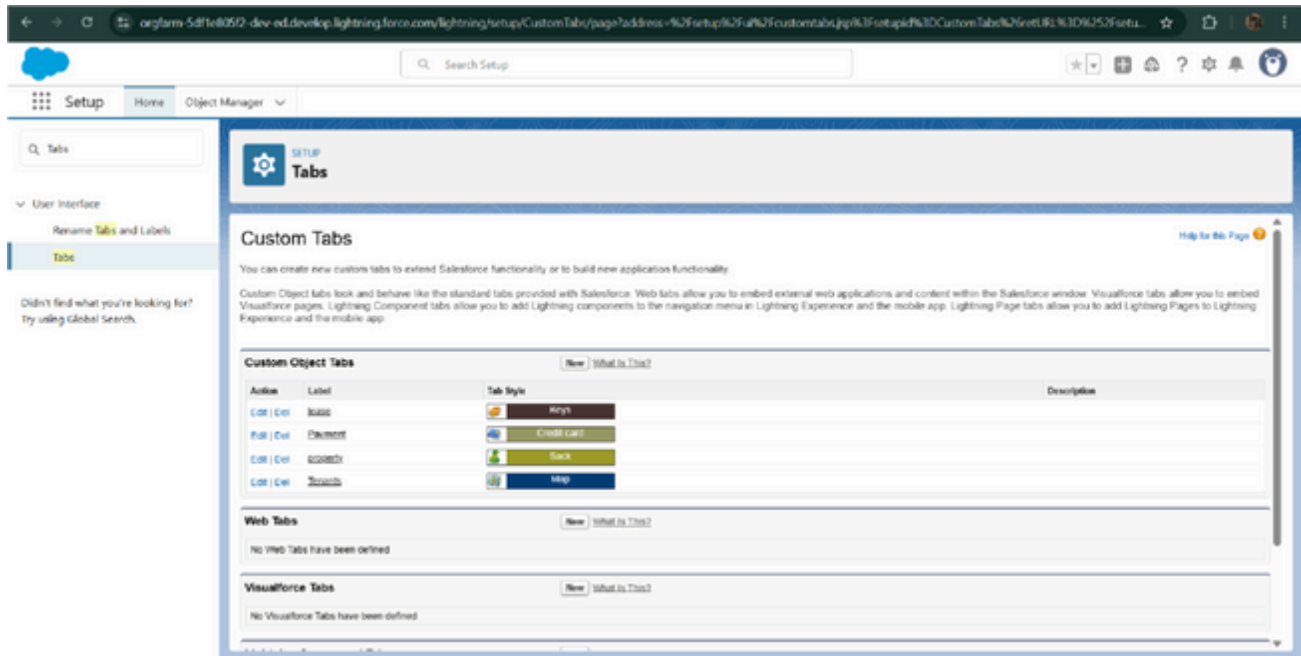
- Approval process validated through email alerts and status updates



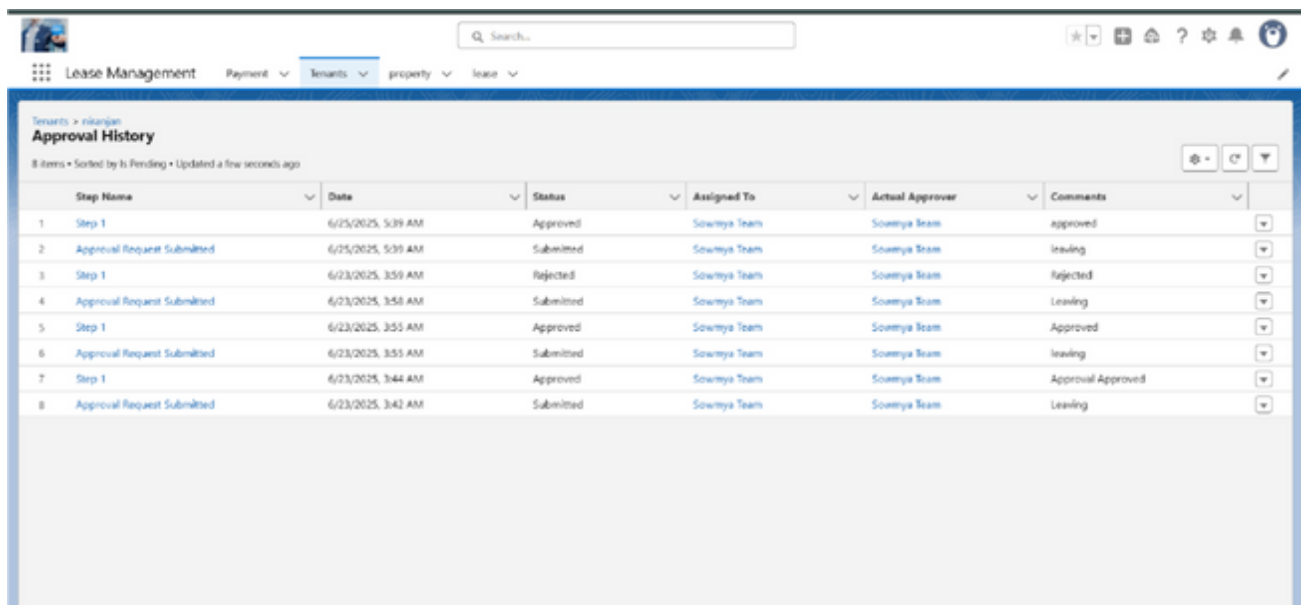


# Output Screenshots

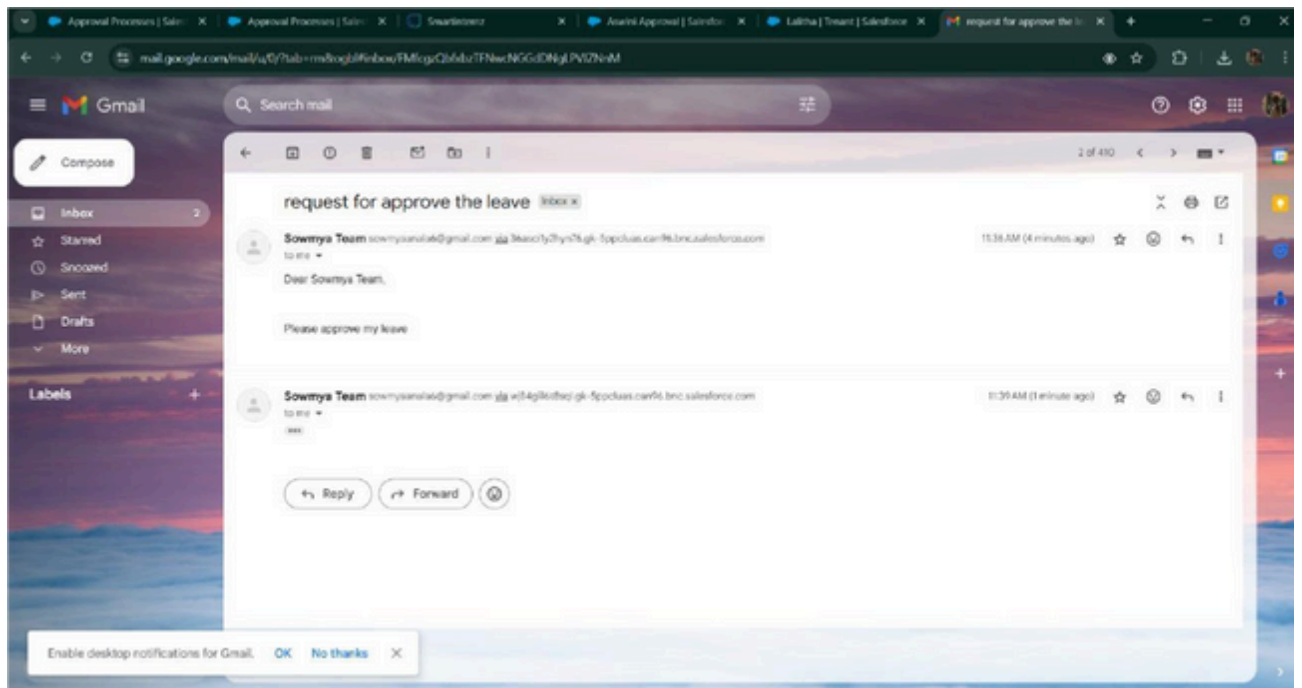
- Tabs for Property, Tenant, Lease, Payment



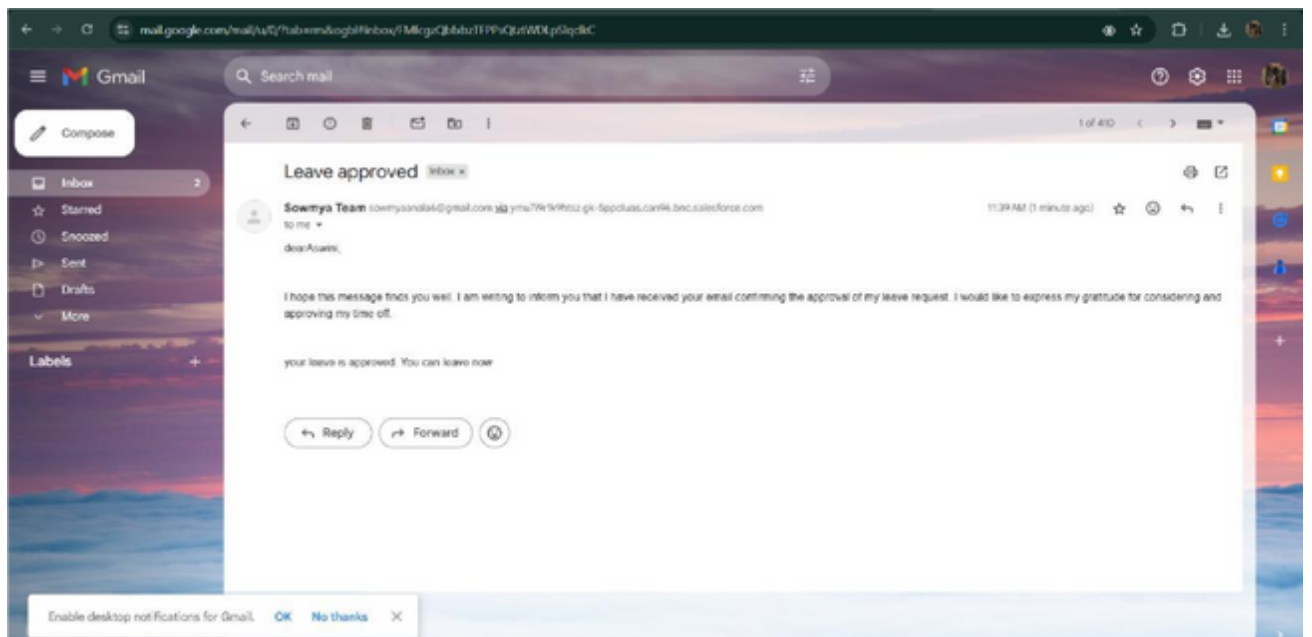
- Email alerts



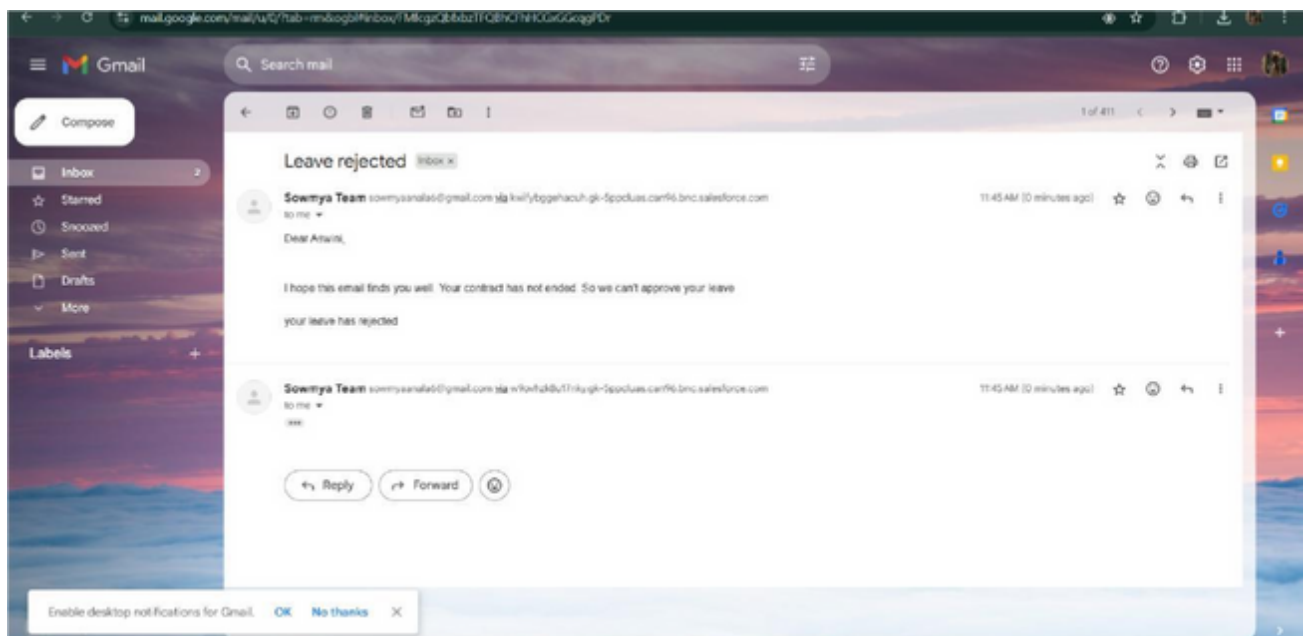
- Request for approve the leave



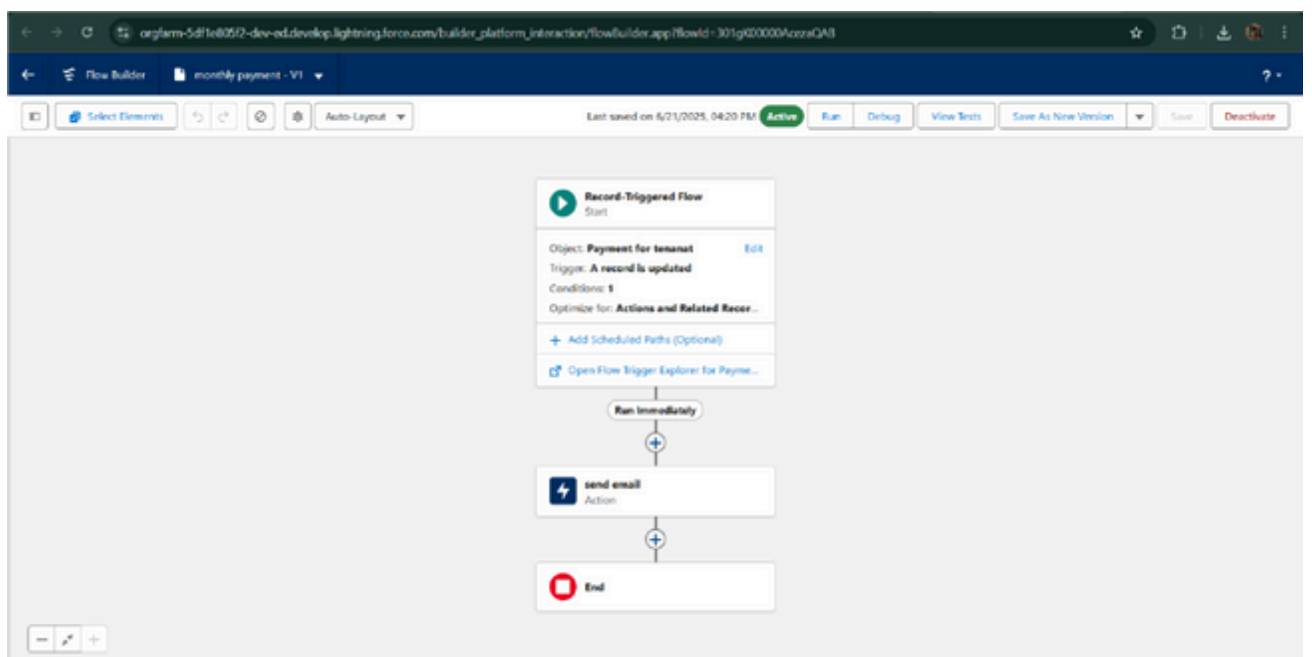
- Leave approved



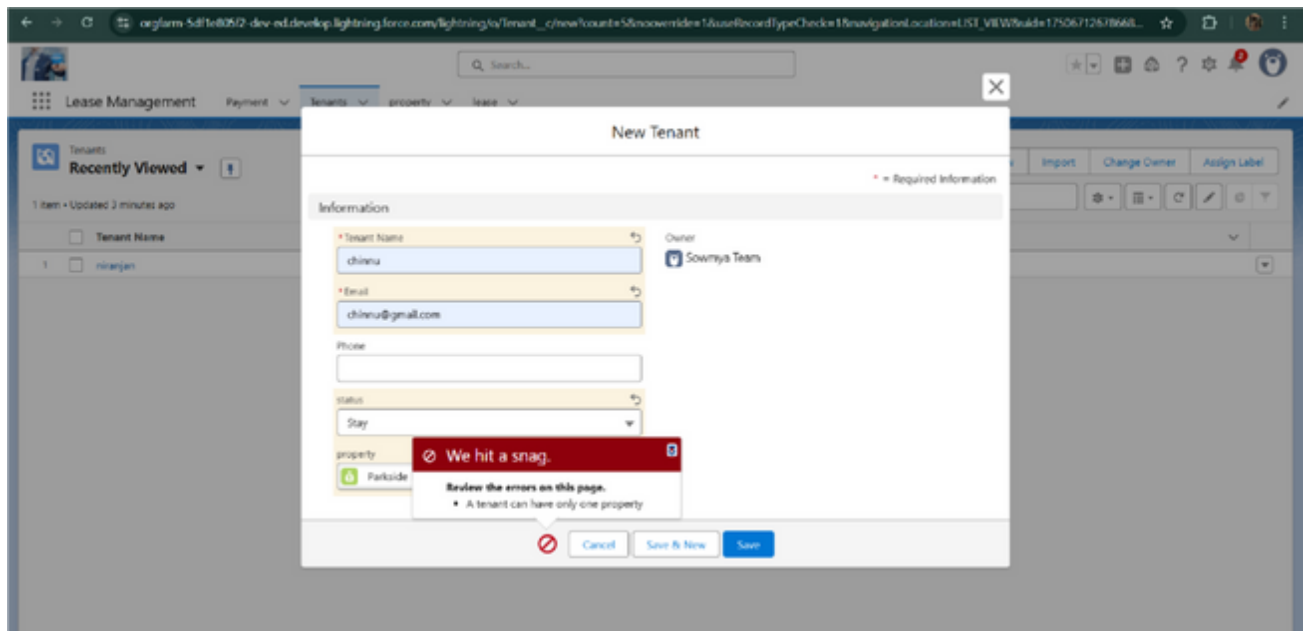
- Leave rejected



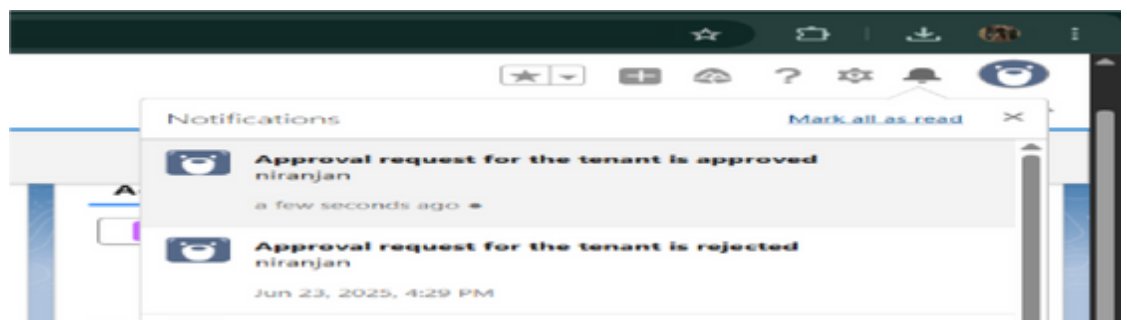
- Flow runs



- Trigger error messages



- Approval process notifications



## 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<

Tenant\_\_c> newList)

{ Set<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');

}

}

}

}

**MonthlyEmailScheduler.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}); } }
```

## 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.