LEASE MANAGEMENT

College name: A.V.P college of arts and science

College code: bruaj

TEAM ID: NM2025TMID25353

TEAM MEMBERS:

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Email: *ssathiyaseelan261@gmail.com*

Team Member2: VARISHMA.S

Email: *rajisrvm@gmail.com*

Team Member3: AMOGA.S

Email: *amogaamoga568@gmail.com*

1.INTRODUCTION

1.1 Project overview

The Lease Management System is a Salesforce-based solution created to simplify and manage leasing activities for real estate properties efficiently.

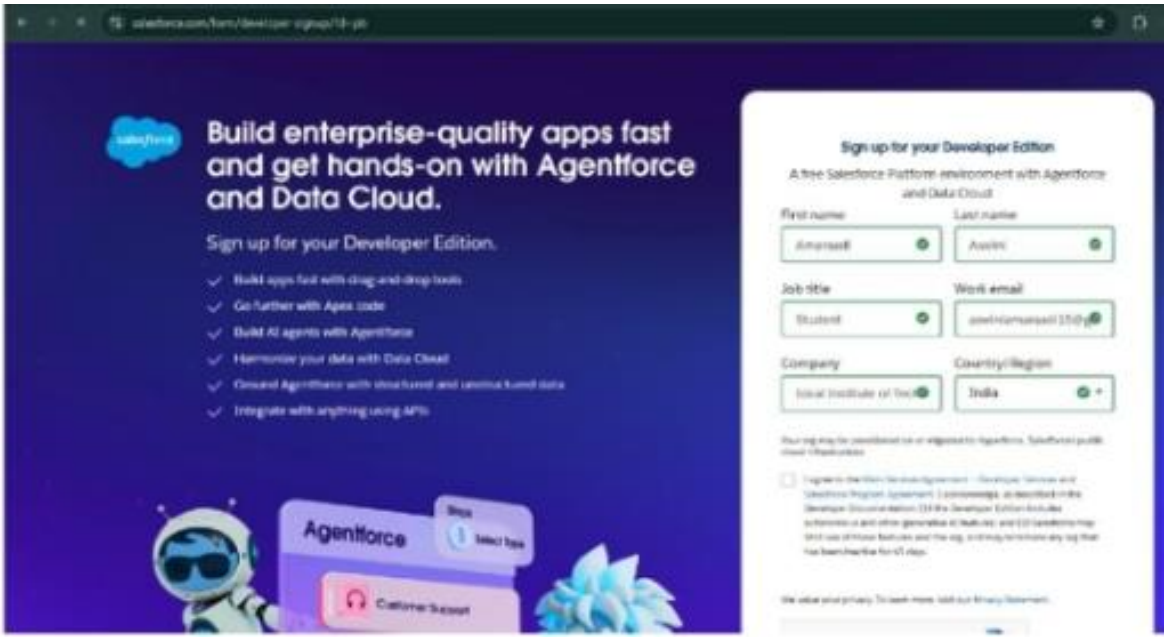
1.2 Purpose

The purpose of this project is to provide organizations with an efficient way to handle property, tenant, and lease-related operations. It minimizes manual efforts, enhances accuracy, and ensures proper compliance and effective communication.

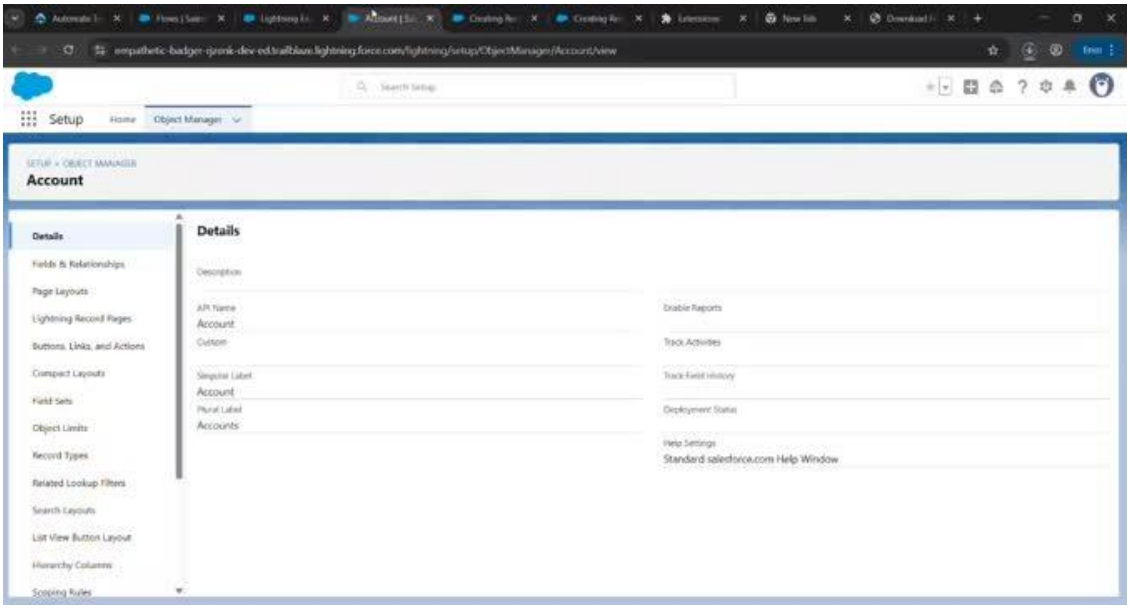
DEVELOPMENT PHASE

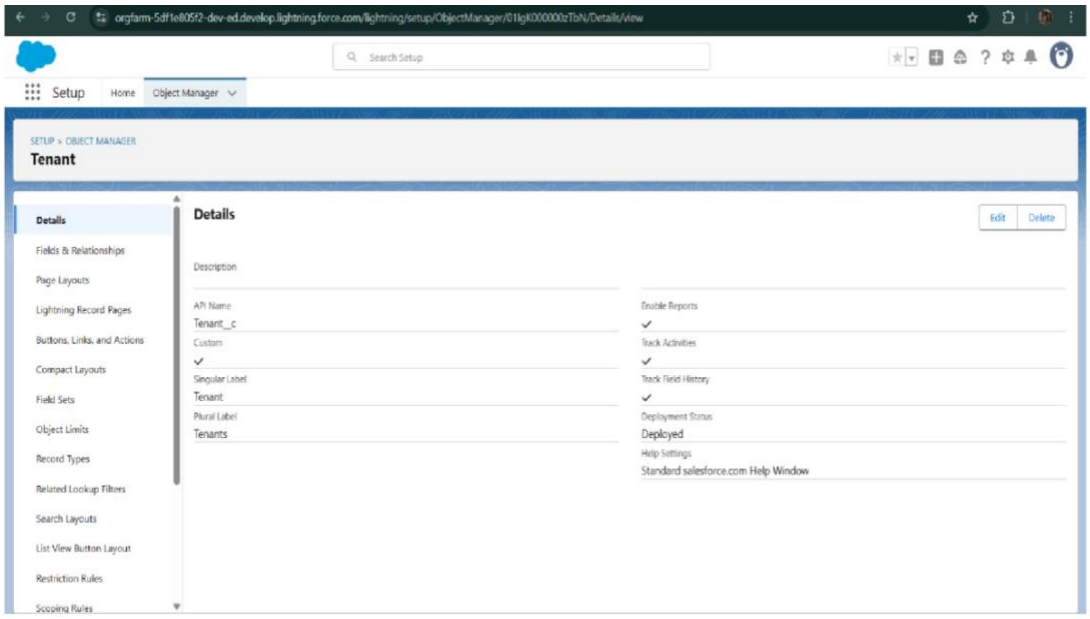
Creating Developer Account:

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



- Created objects: Property, Tenant, Lease, Payment




orgfarm-5df1e805f2-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01IgK000000zTbN/Details/view
Search Setup
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
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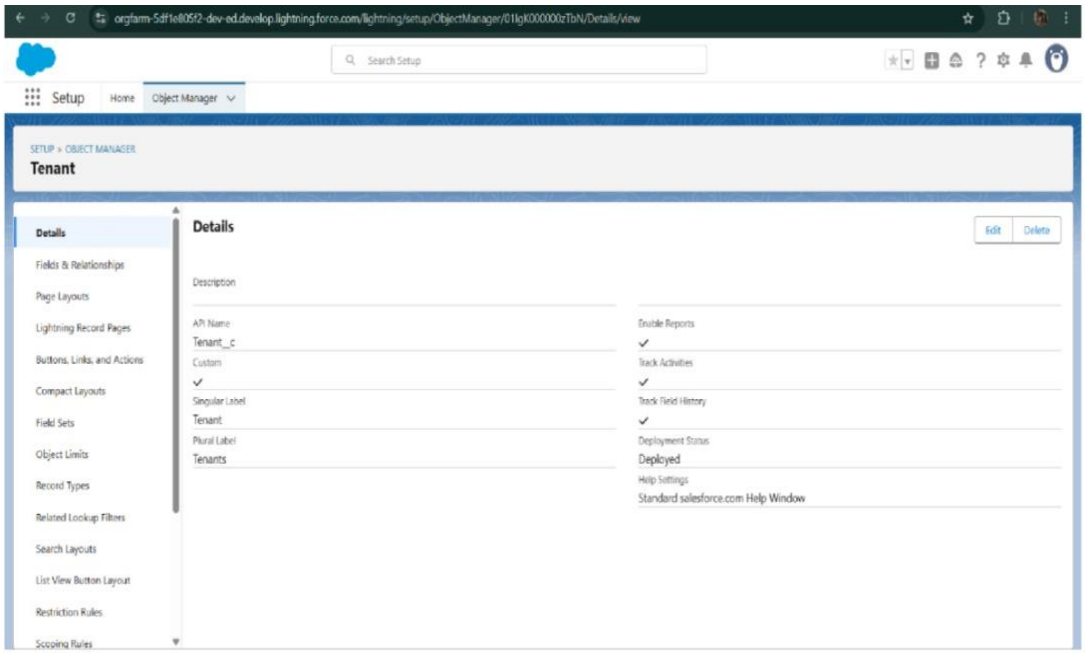
Plural Label
Tenants
Enable Reports
Track Activities
Track Field History
Deployment Status
Deployed
Help Settings
Standard salesforce.com Help Window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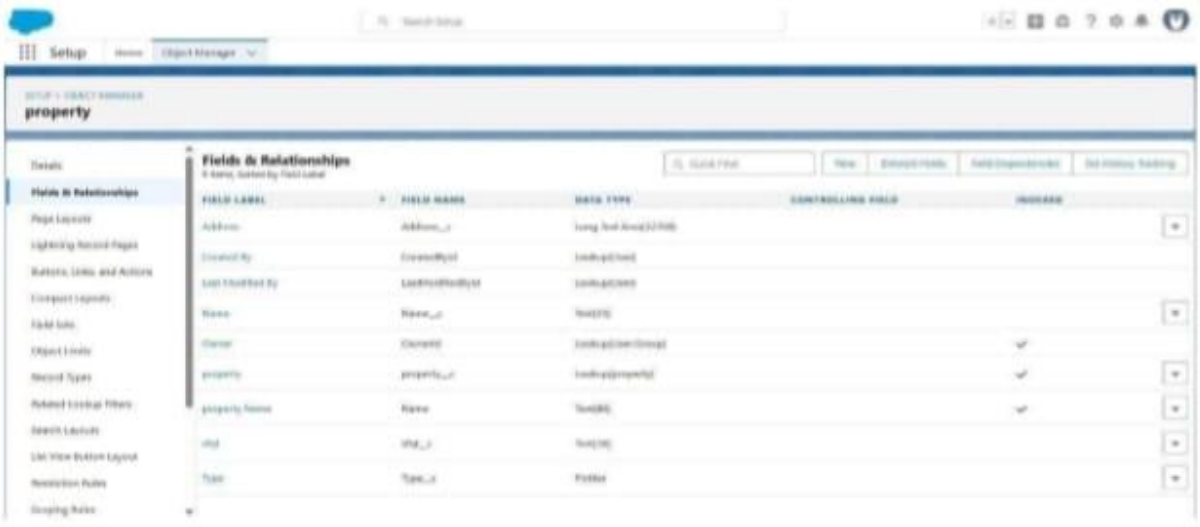
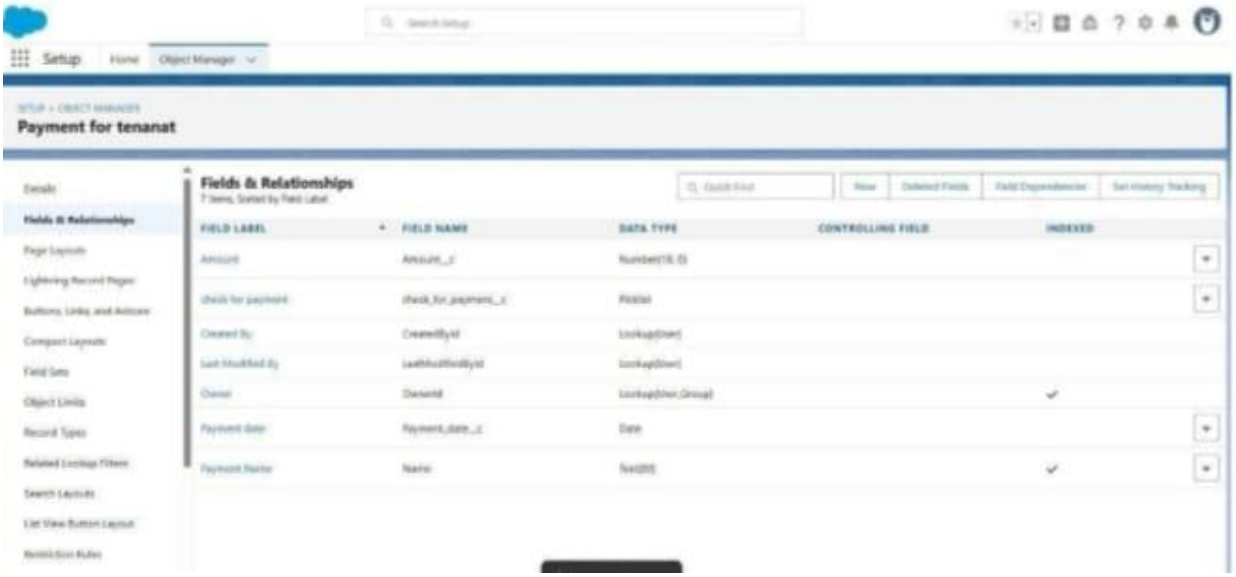
Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Tenant
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping 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

- Configured fields and relationships




Setup
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Details
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Page Layouts
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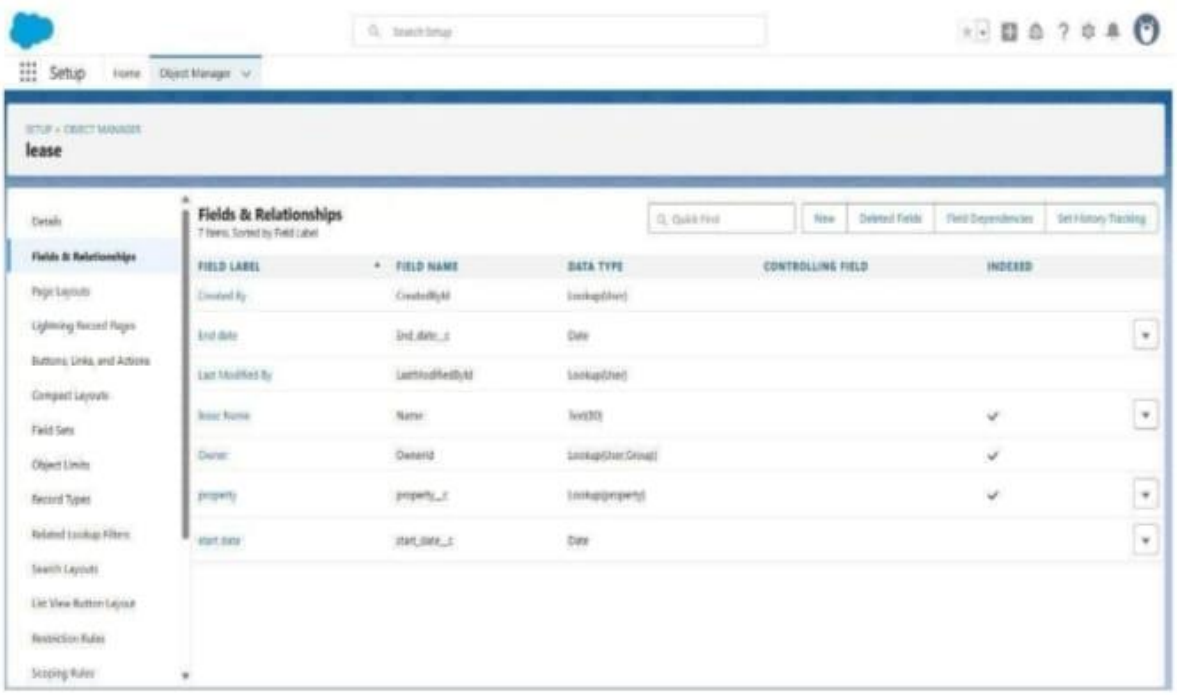
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Fields & Relationships
7 Items, Sorted by Field Label
New
Deleted Fields
Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
INDEXED
Amount
Amount__c
Number(16, 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(80)


Setup
Home
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
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
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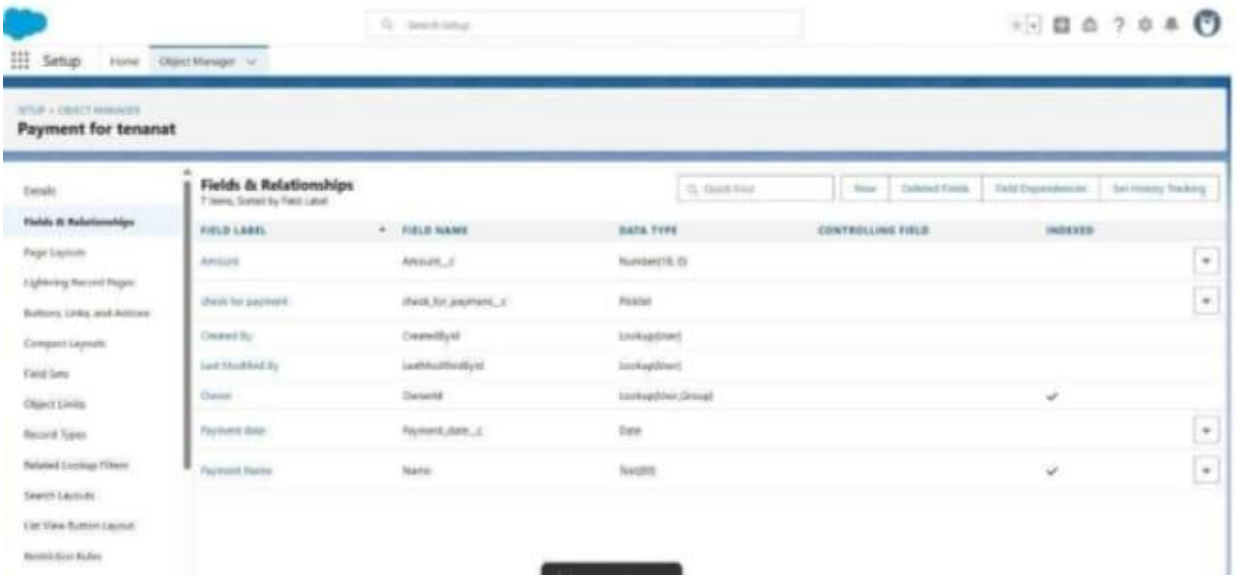
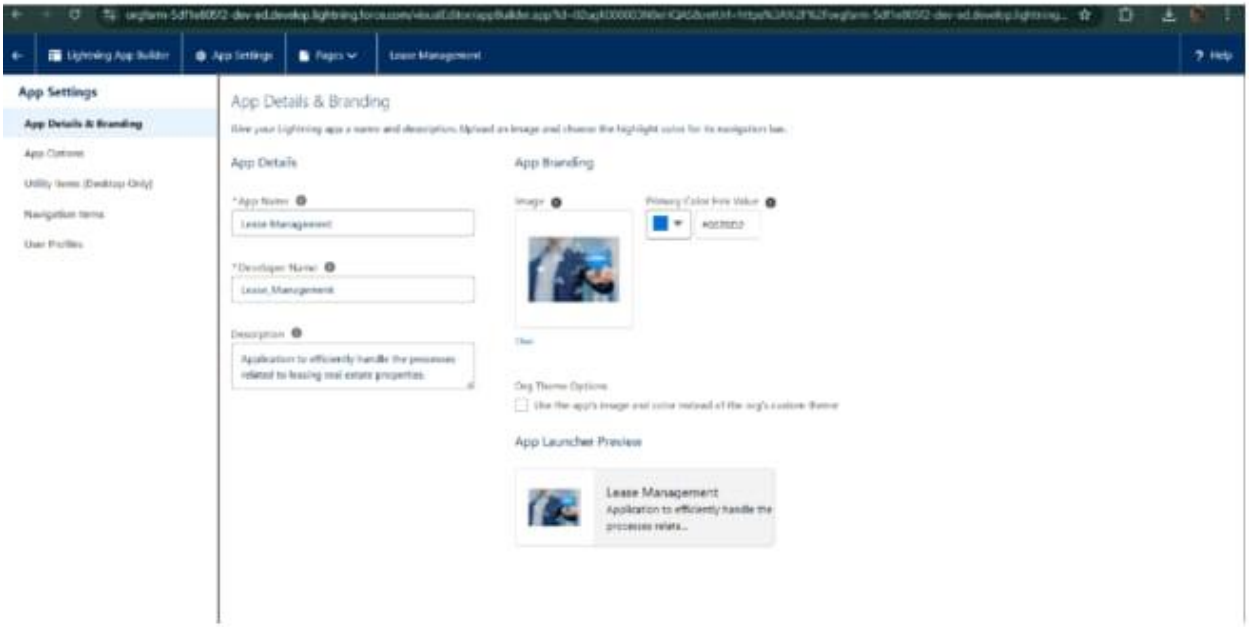
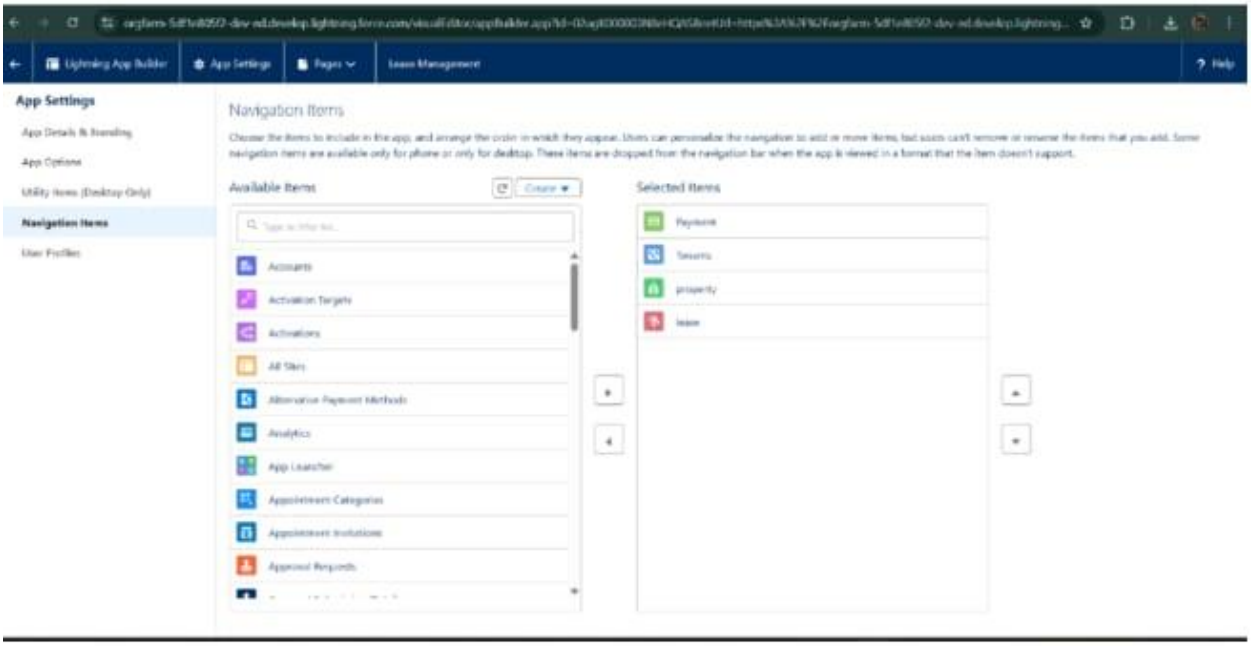
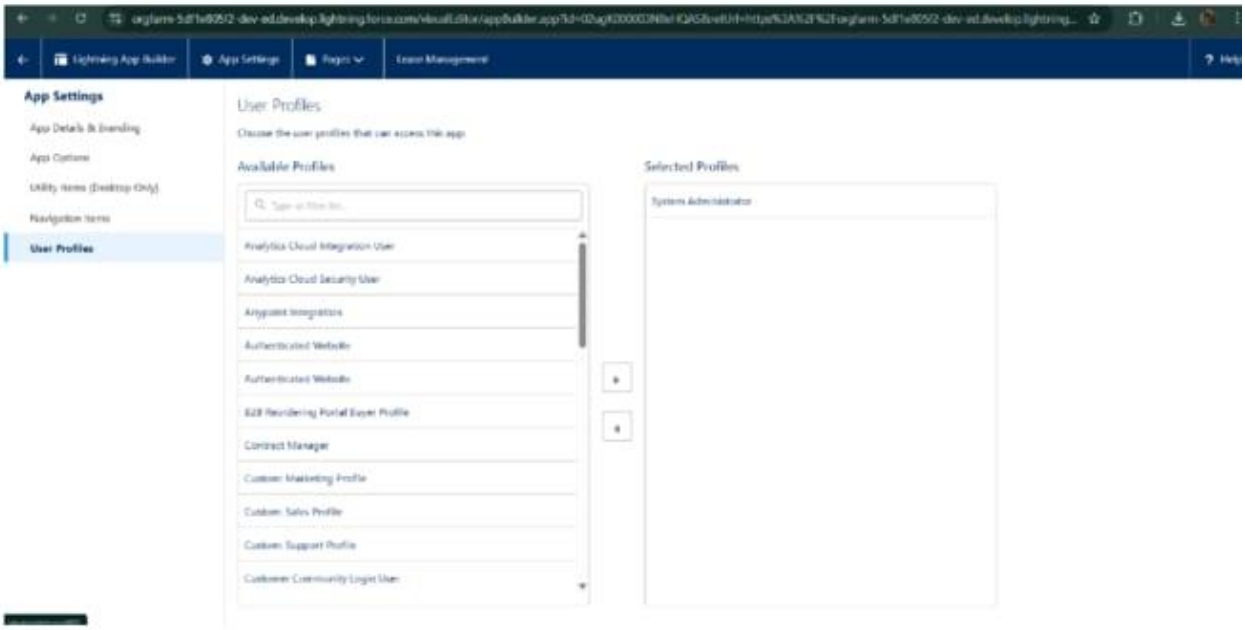
Owner
OwnerId
Lookup(User,Group)
property
property__c
Lookup(property)
start date
start_date__c
Date

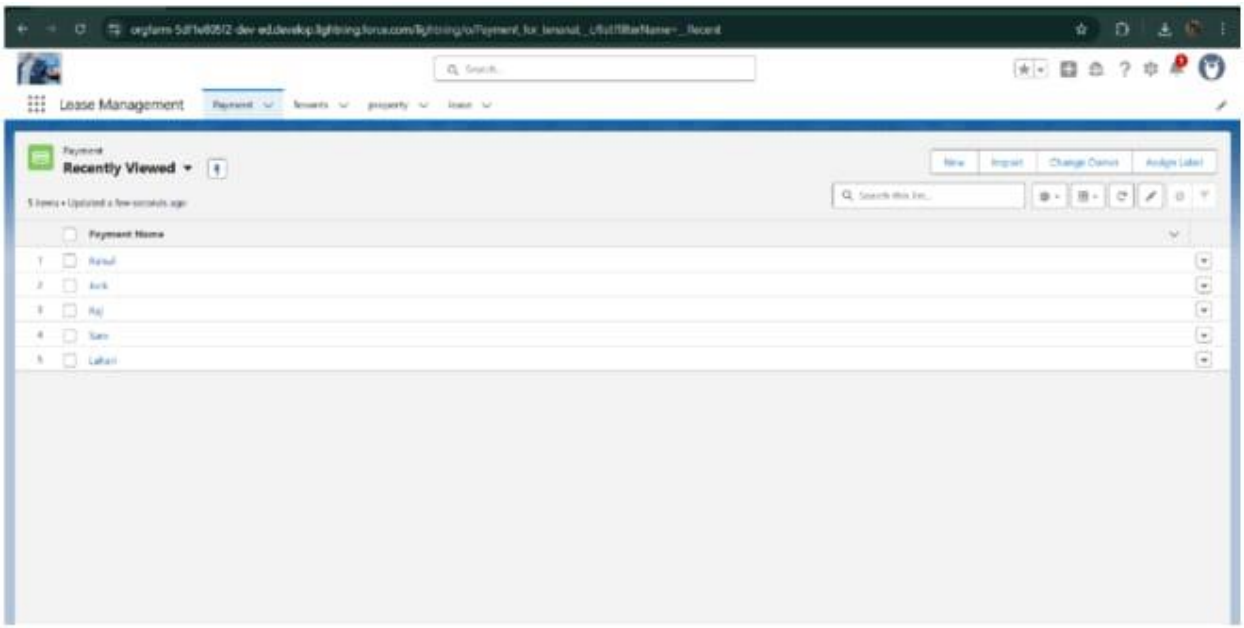


- Developed Lightning App with relevant tabs

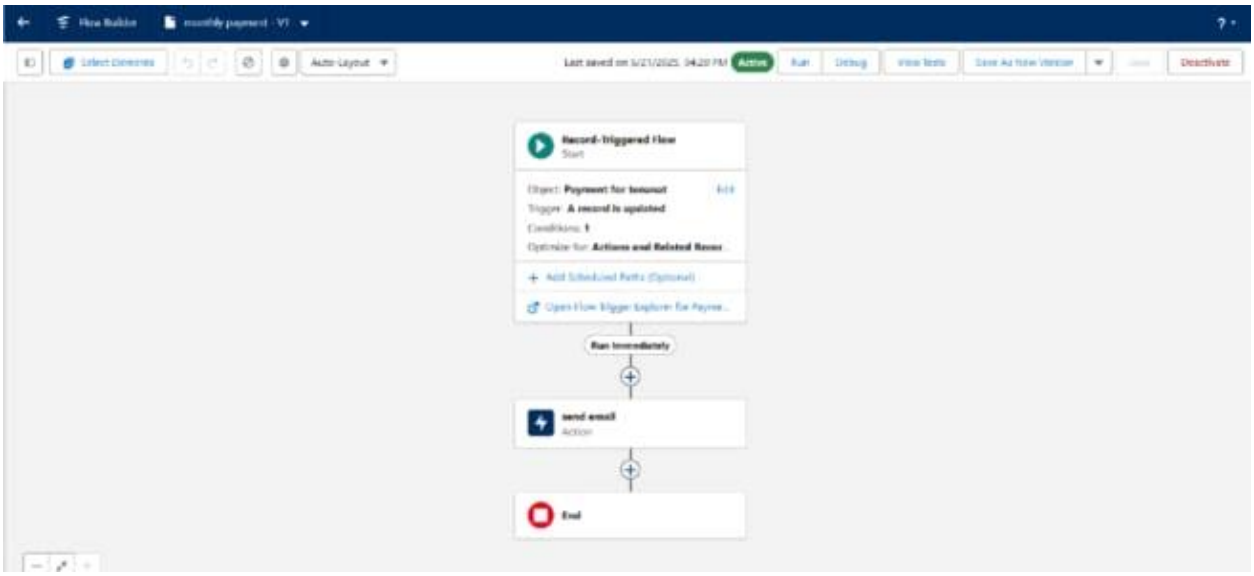



Lightning App Builder
App Settings
Pages
Lease Management
Help
App Settings
App Details & Branding
App Options
Utility Items (Desktop Only)
Navigation Items
User Profiles
Navigation Items
Available Items
Selected Items
Accounts
Activation Targets
Activations
All Tabs
Analytics
App Launcher
Payment
Tenants
property
lease

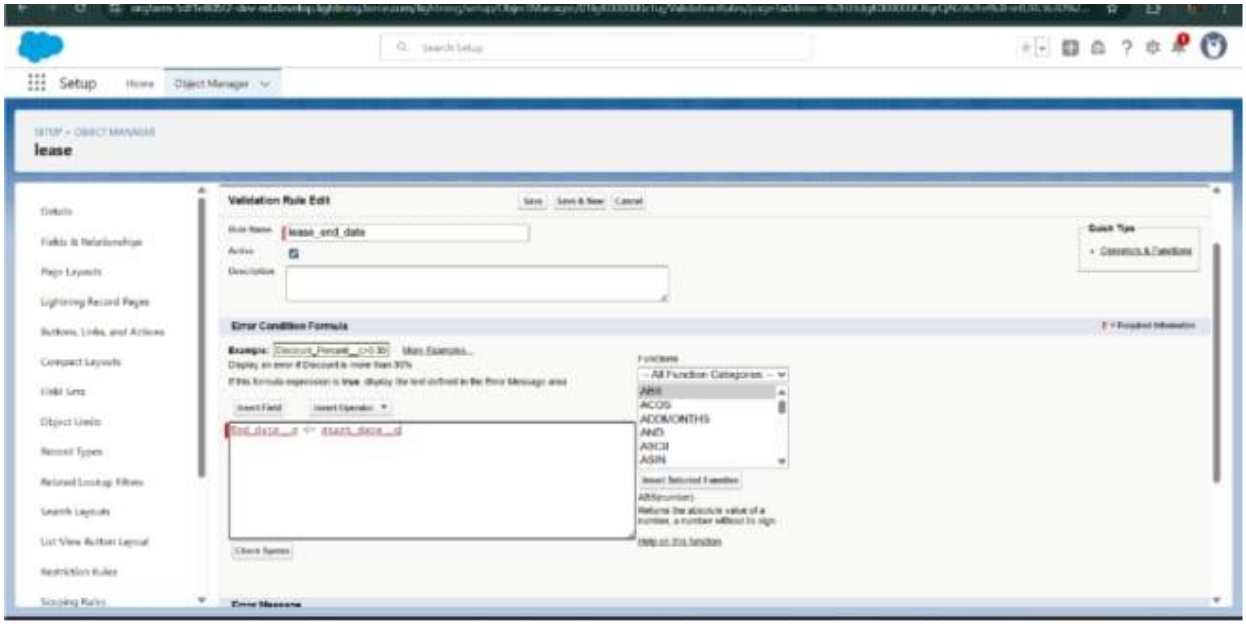

Lightning App Builder
App Settings
Pages
Lease Management
App Settings
App Details & Branding
App Options
Utility Items (Desktop Only)
Navigation Items
User Profiles
User Profiles
Available Profiles
Selected Profiles
System Administrator
Analytics Cloud Integration User
Analytics Cloud Security User
Anypoint Integration
Authenticated Website
Authenticated Website
B2B Reordering Portal Buyer Profile
Contract Manager
Customer Community Login User

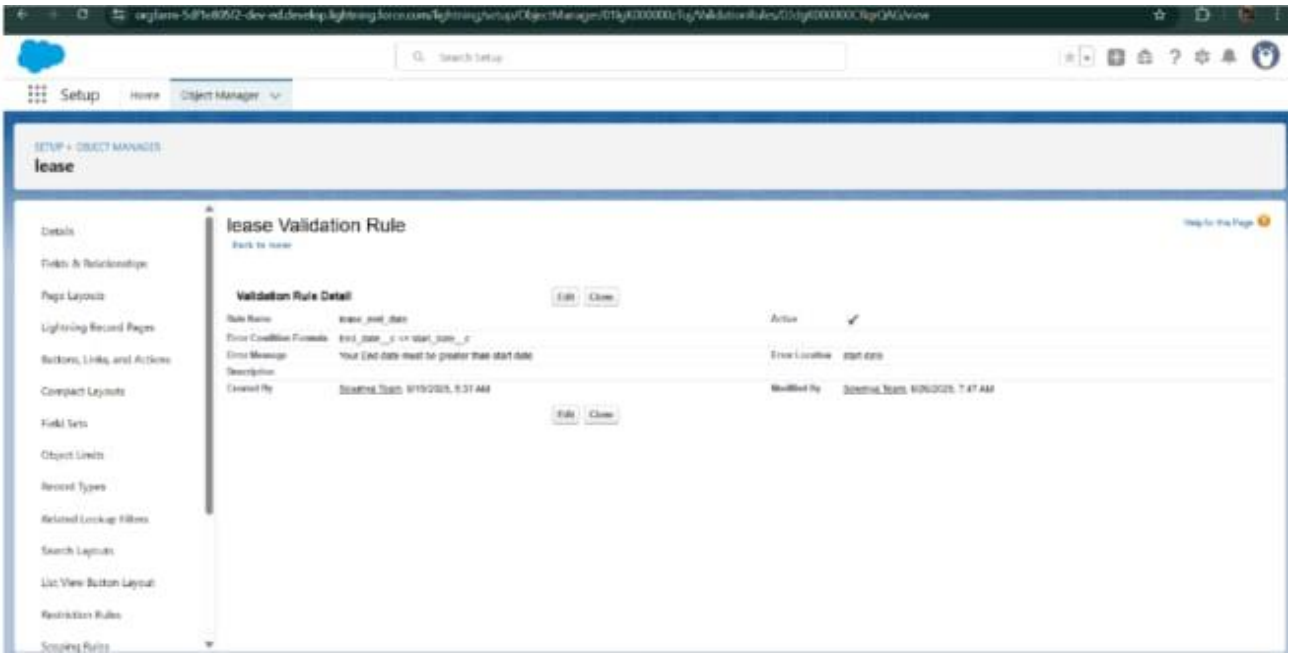


- Implemented Flows for monthly rent and payment success

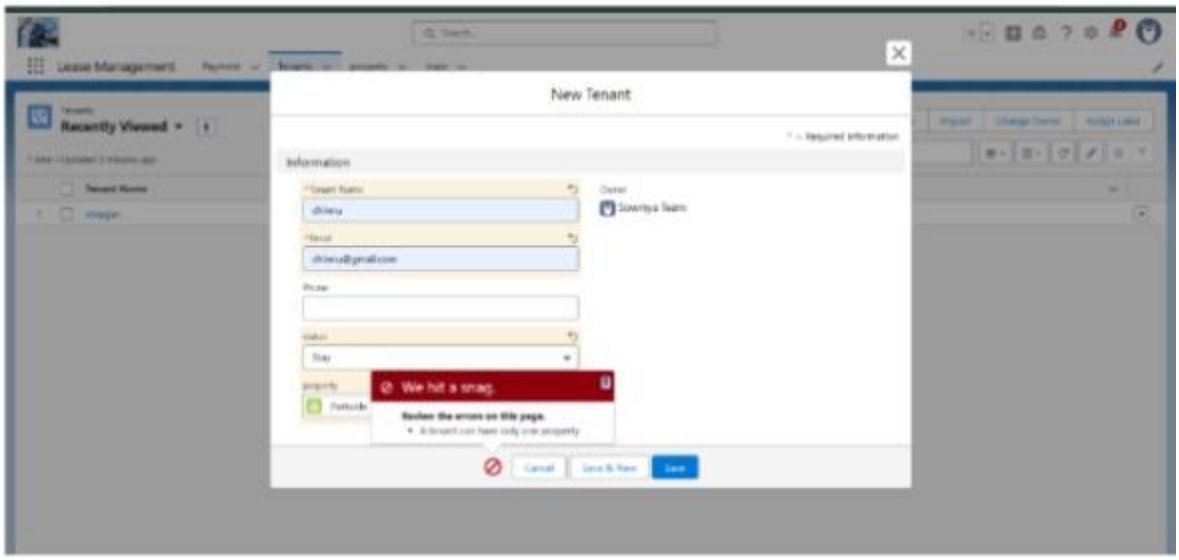


- To create a validation rule to a Lease Object

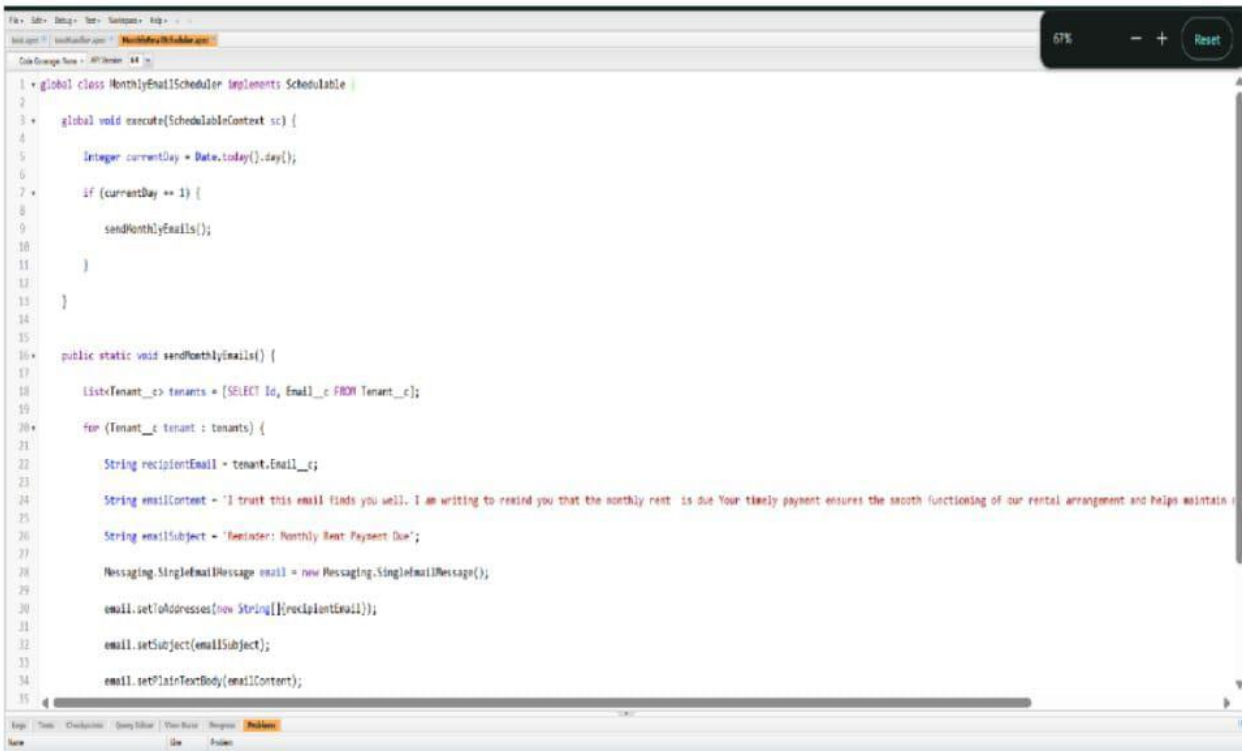




- Added Apex trigger to restrict multiple tenants per property

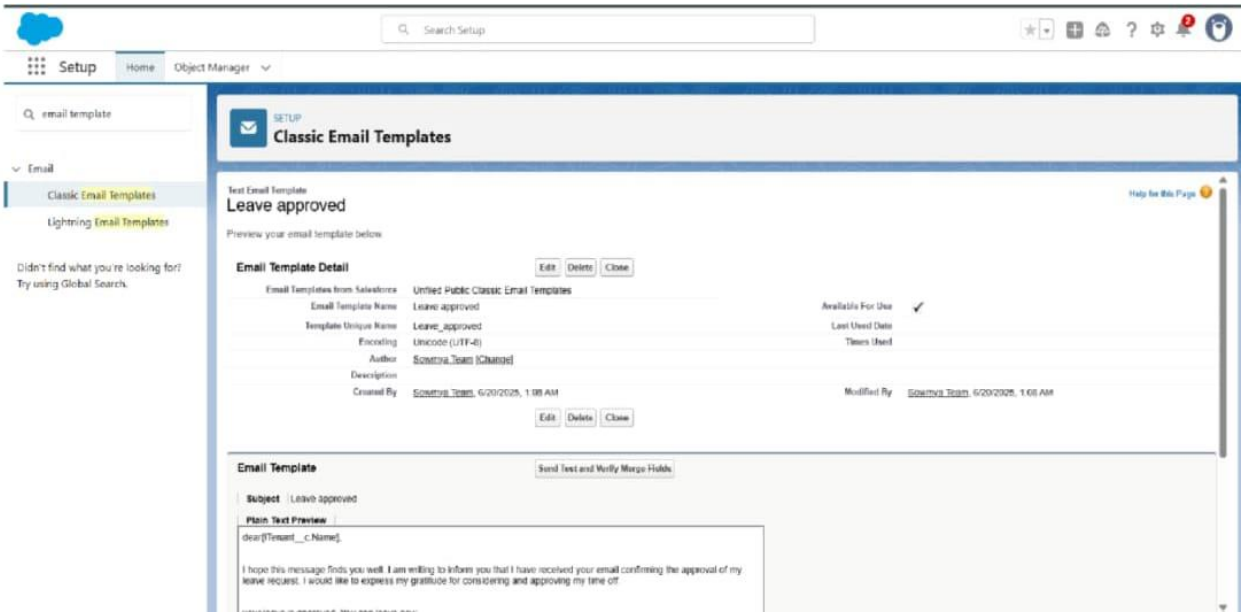


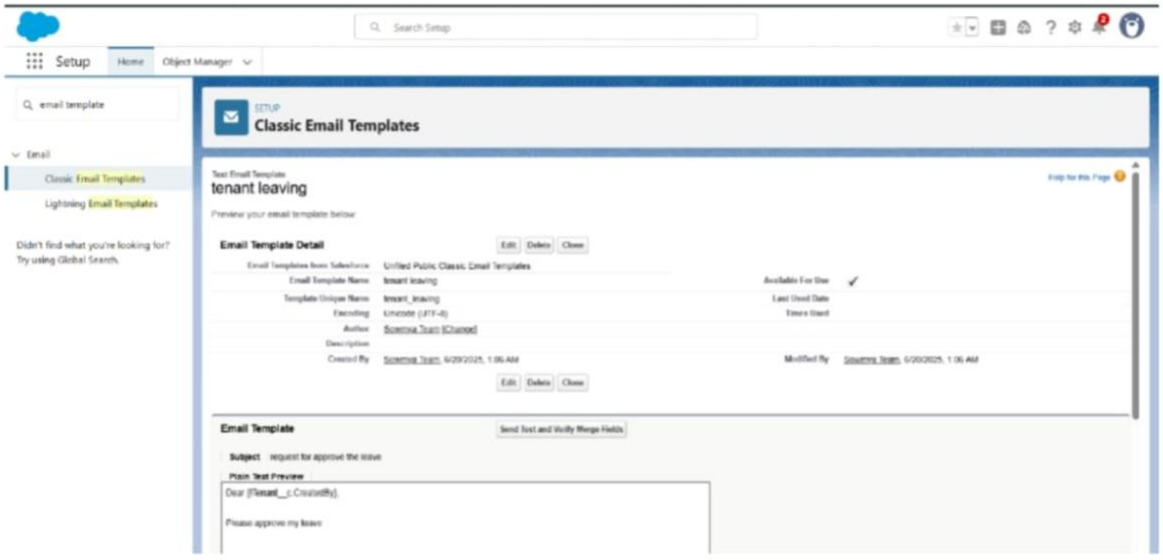
- Scheduled monthly reminder emails using Apex class

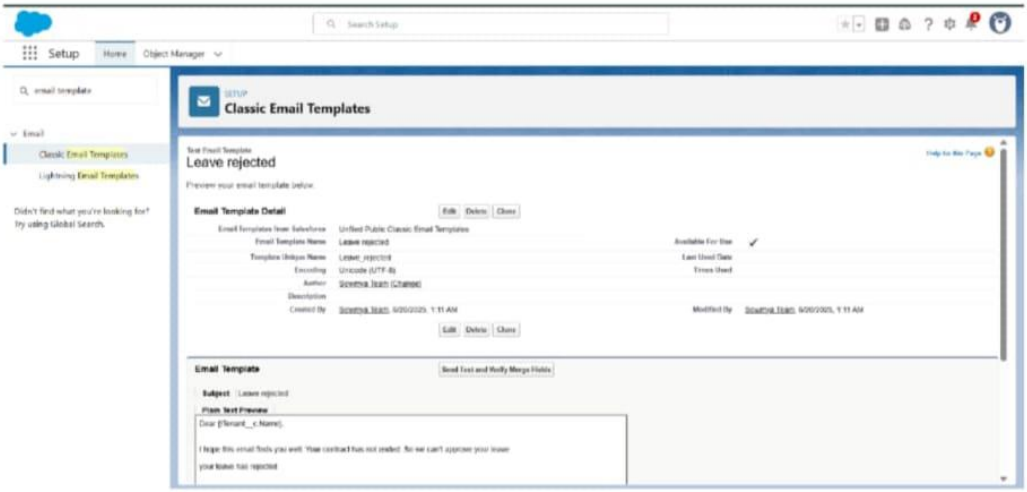


```
global class MonthlyEmailScheduler implements Schedulable {

    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

            String emailSubject = 'Reminder: Monthly Rent Payment Due';

            Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();

            email.setToAddresses(new String[]{recipientEmail});

            email.setSubject(emailSubject);

            email.setPlainTextBody(emailContent);
```

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






Setup
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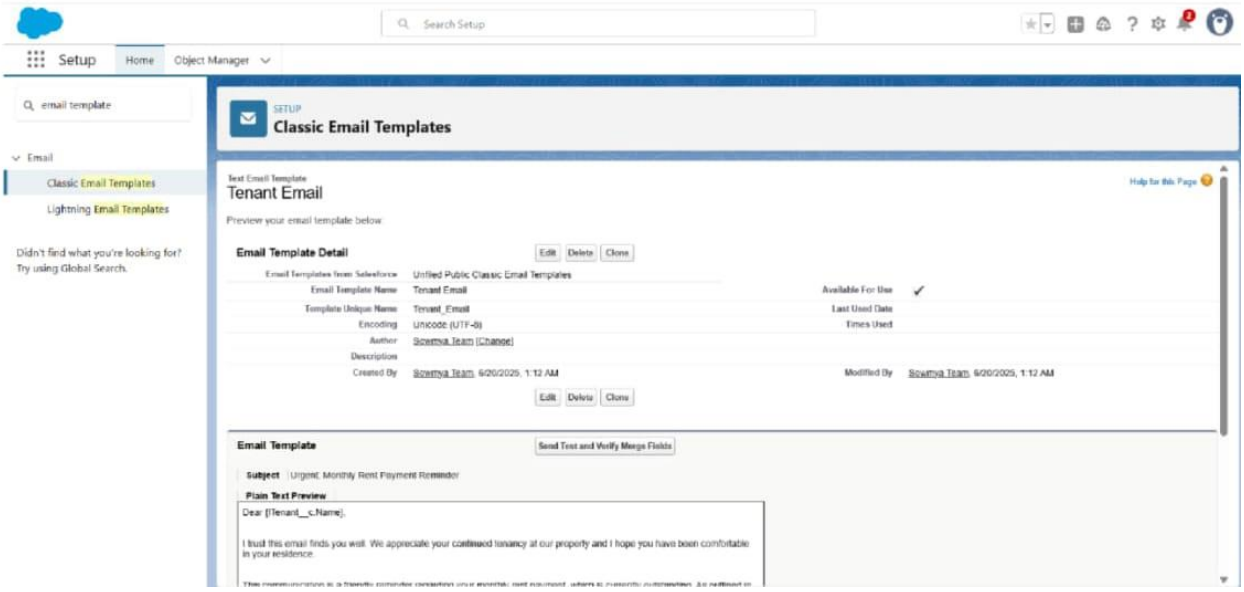
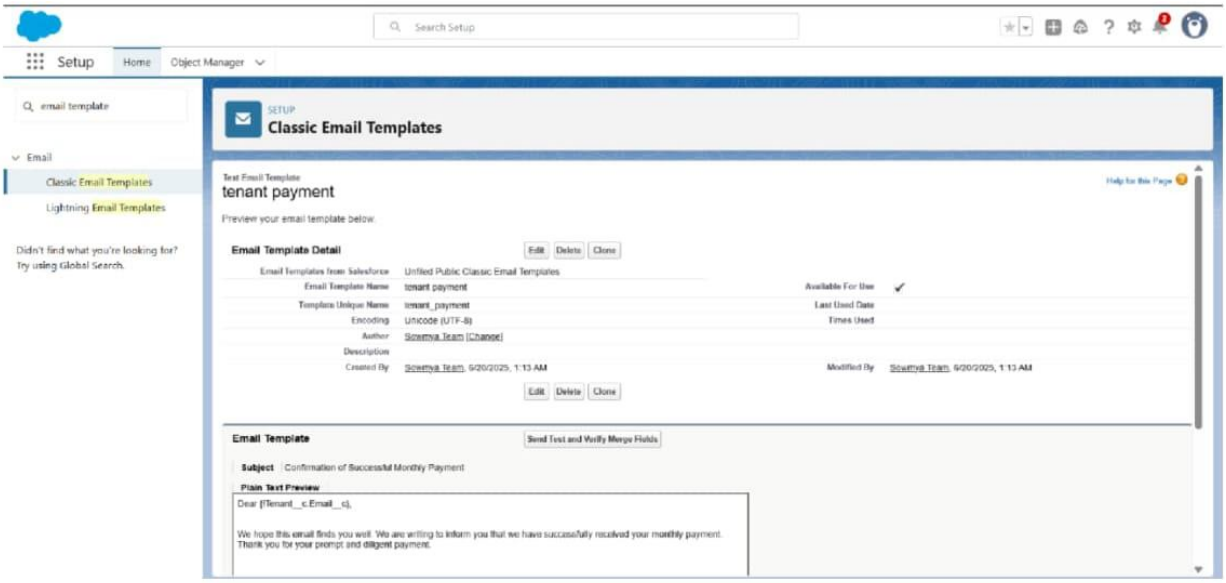
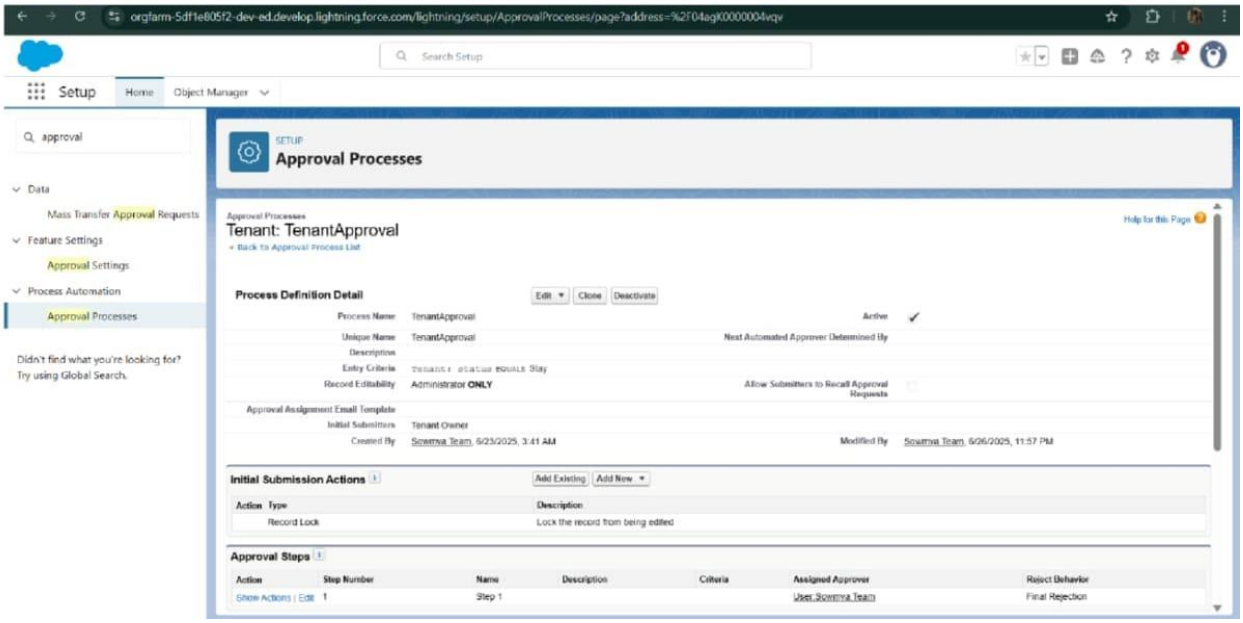
email template
Email
Classic Email Templates
Lightning Email Templates
Didn't find what you're looking for?
Try using Global Search.
SETUP
Classic Email Templates
Text Email Template
Leave rejected
Preview your email template below.
Email Template Detail
Edit
Delete
Clone
Email Template
Send Test and Verify Merge Fields
Subject
Leave rejected
Plain Text Preview


Search Setup
Setup
Home
Object 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
Text Email Template
Tenant Email
Help for this Page
Preview your email template below.
Email Template Detail
Edit
Delete
Clone
Email Template Name
Tenant Email
Template Unique Name
Tenant_Email
Encoding
Unicode (UTF-8)
Author
Sowmya Team [Change]
Description
Created By
Sowmya Team, 6/20/2025, 1:12 AM
Available For Use
Last Used Date
Times Used
Modified By
Sowmya Team, 6/20/2025, 1:12 AM
Email Template
Send Test and Verify 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.

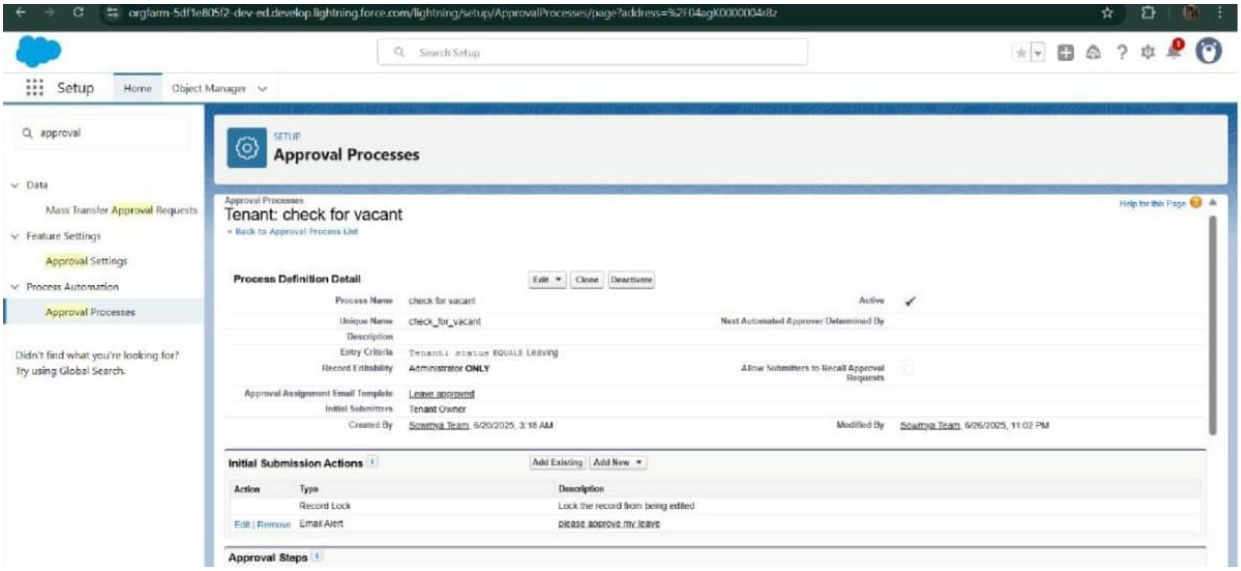


- Approval process creation

For Tenant Leaving:

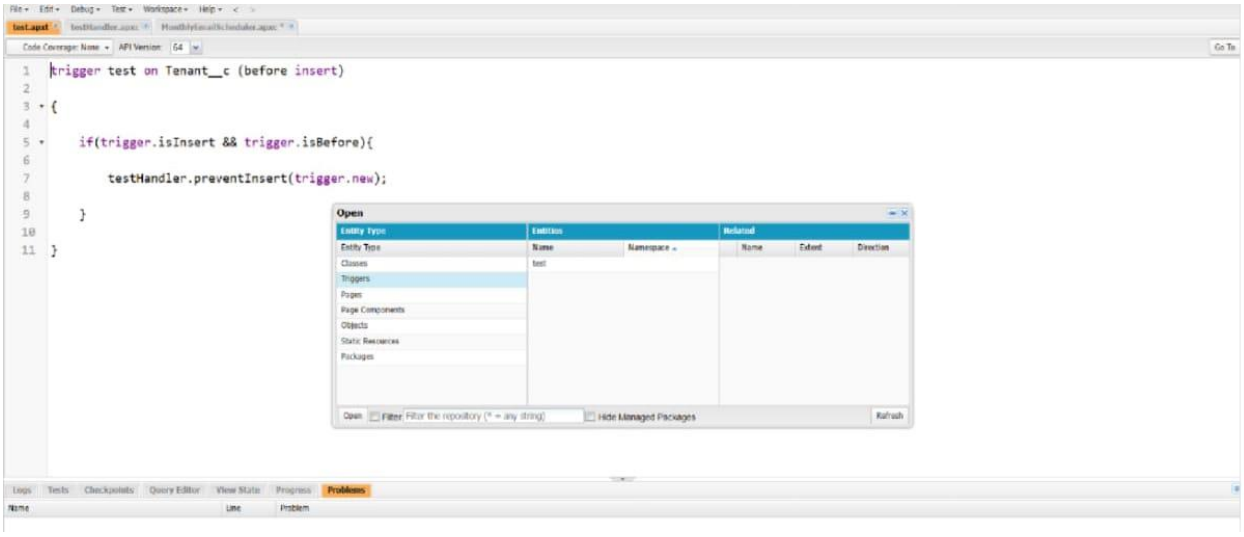


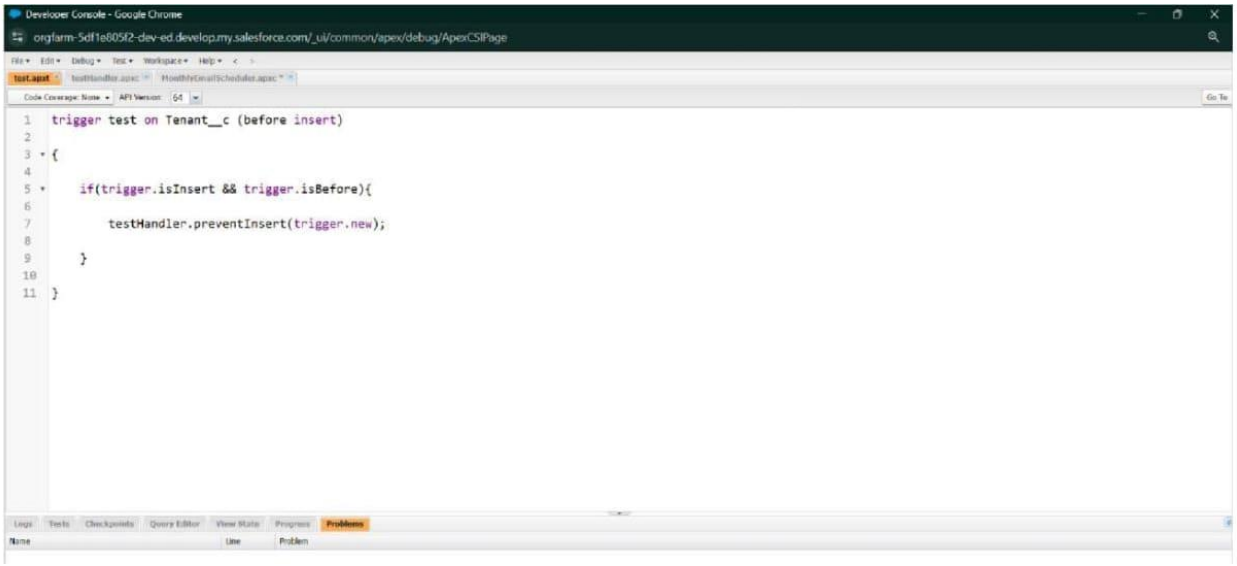
For Check for Vacant:



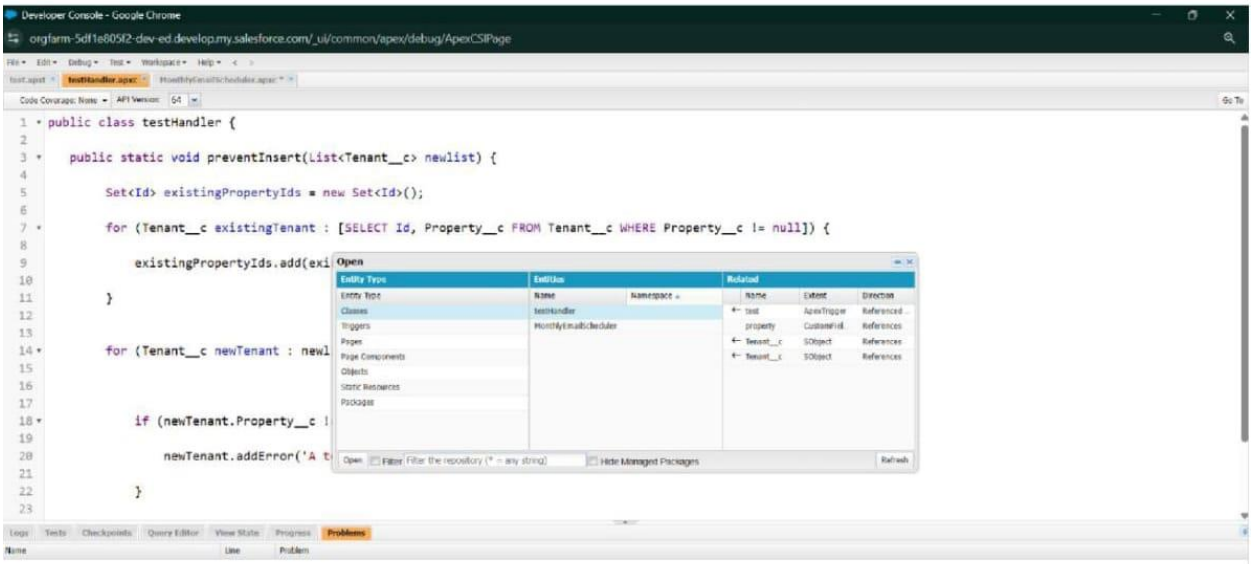
- Apex Tigger

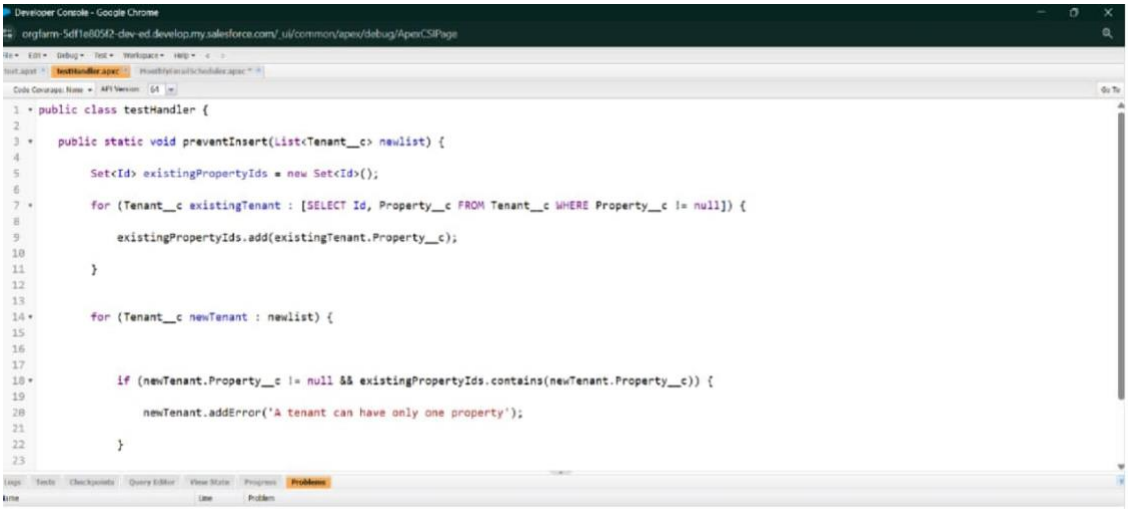
Create an Apex Tigger



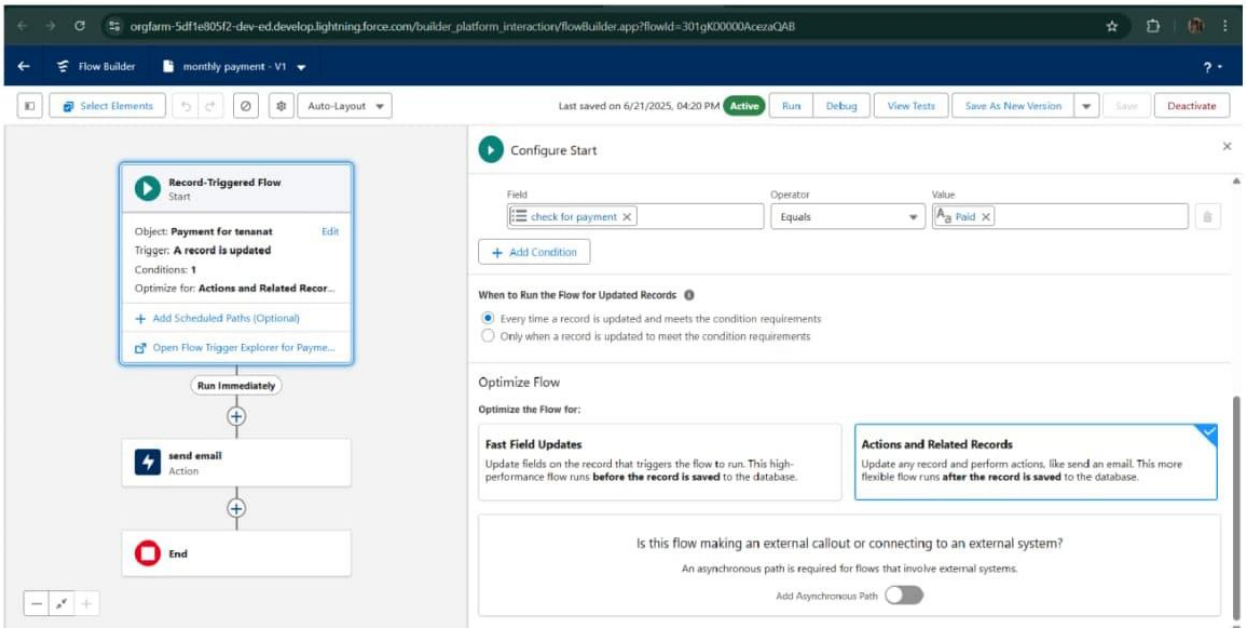


Create an Apex Handler class




Developer Console - Google Chrome
orgfarm-5df1e805f2-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
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');
}

- FLOWS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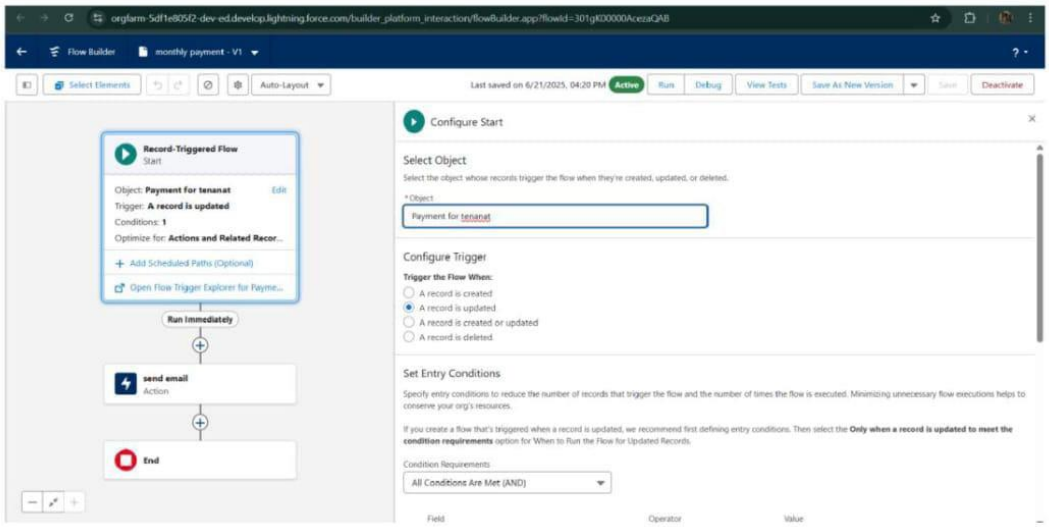
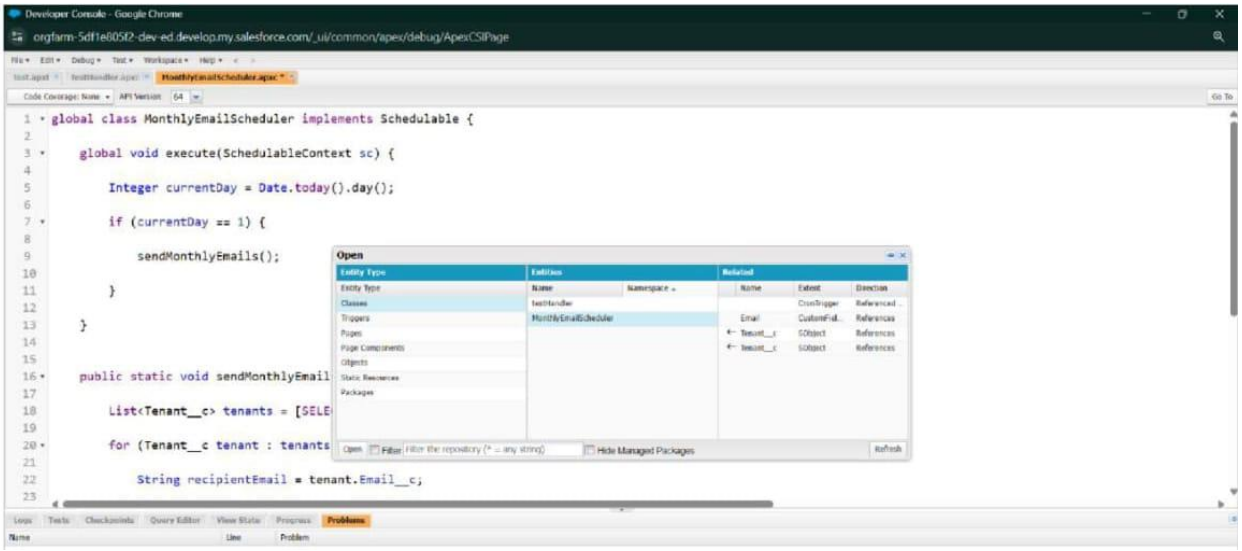
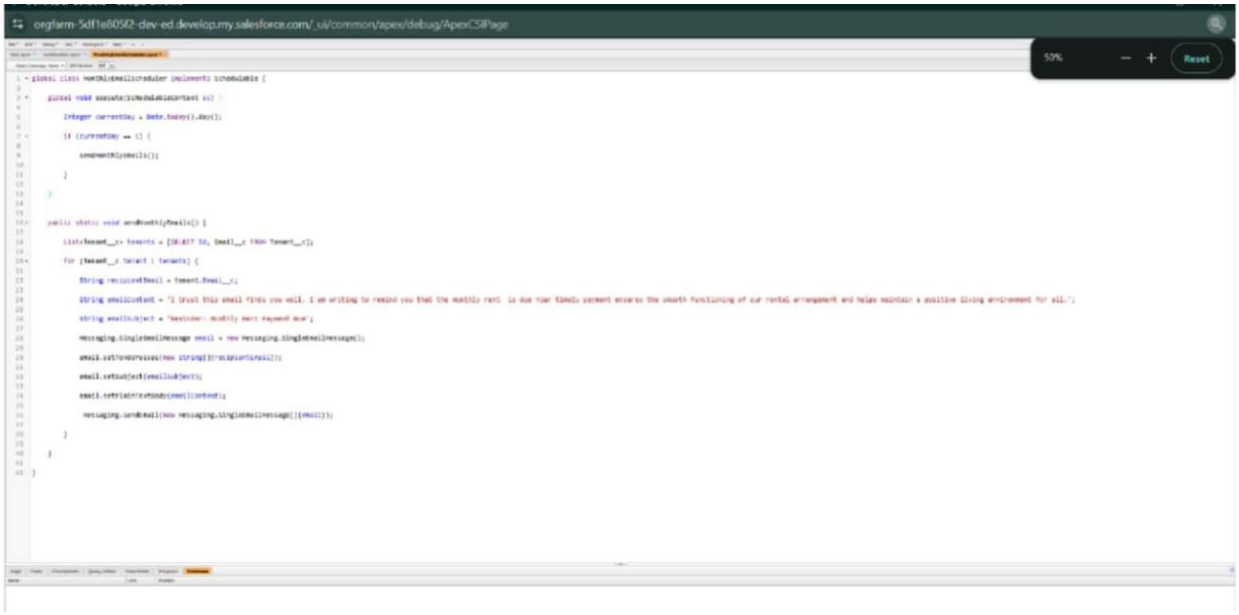
Flow Builder
monthly payment - V1
Select Elements
Auto-Layout
Last saved on 6/21/2025, 04:20 PM
Active
Run
Debug
View Tests
Save As New Version
Save
Deactivate
Record-Triggered Flow
Start
Object: Payment for tenanat
Edit
Trigger: A record is updated
Conditions: 1
Optimize for: Actions and Related Recor...
Add Scheduled Paths (Optional)
Open Flow Trigger Explorer for Payme...
Run Immediately
send email
Action
End
Configure Start
Field
Operator
Value
check for payment
Equals
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



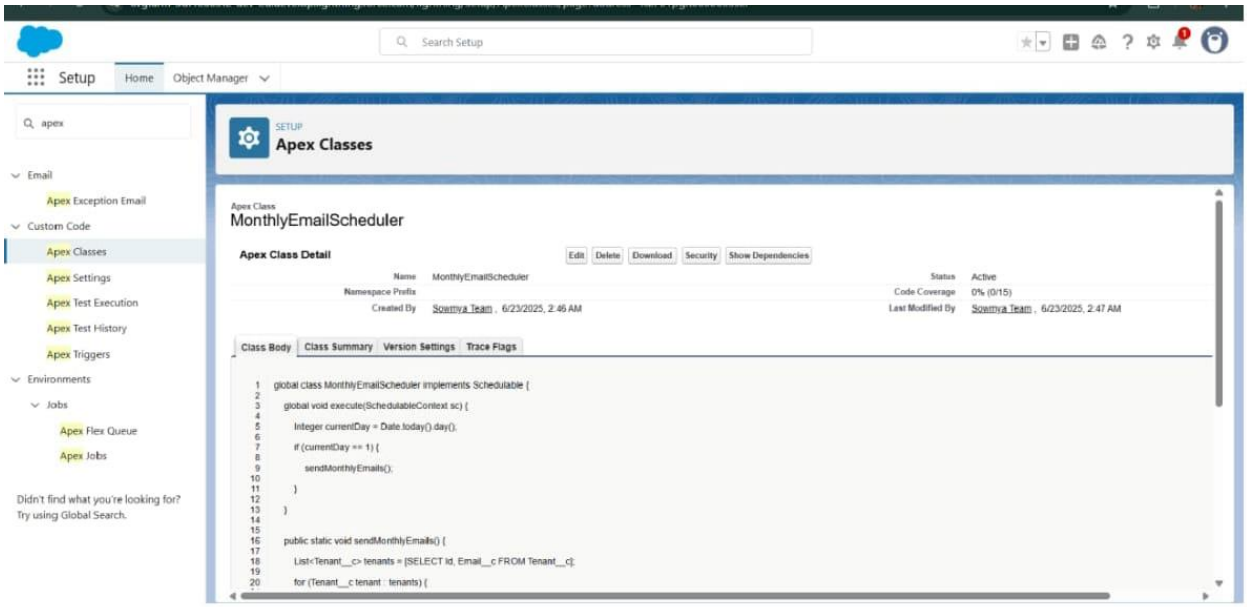
- Schedule class:

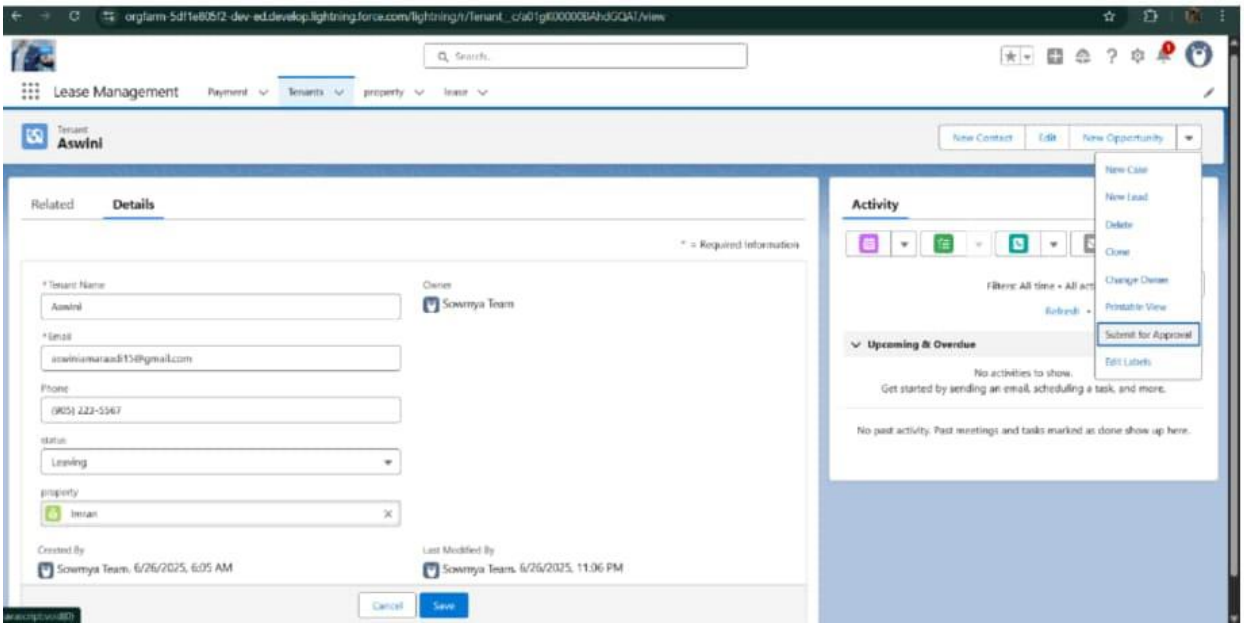
` Create an Apex Class

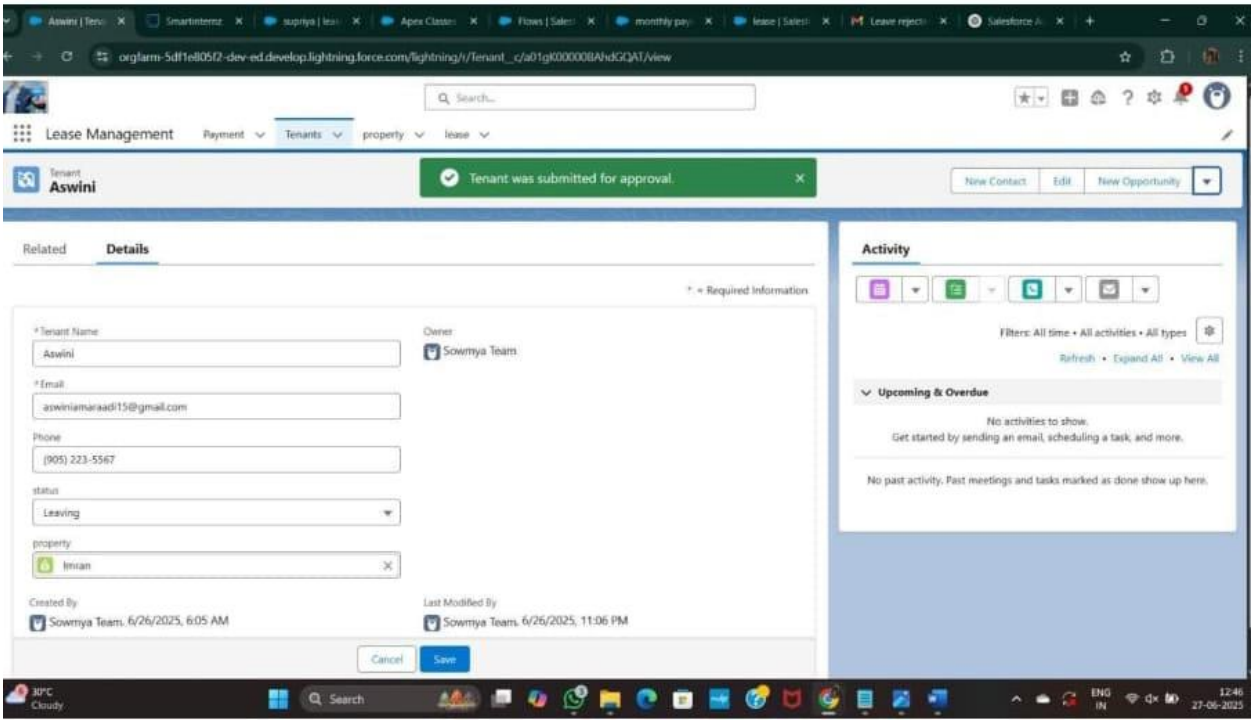


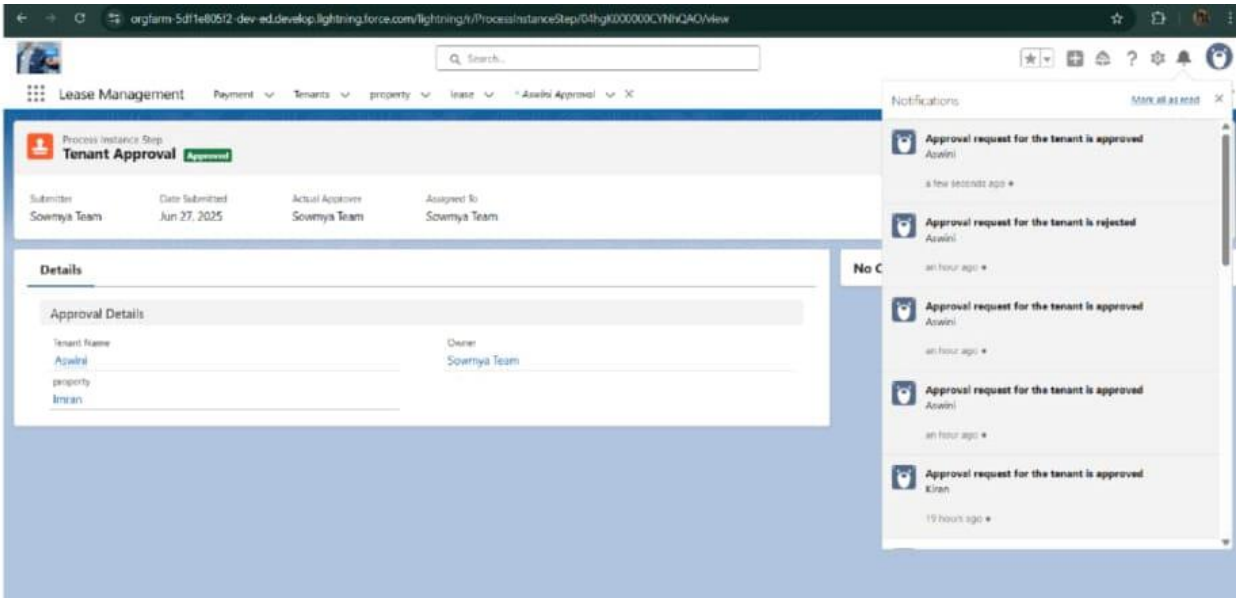


Schedule Apex class




Lease Management
Payment
Tenants
property
lease
Tenant
Aswini
New Contact
Edit
New Opportunity
New Case
New Lead
Delete
Clone
Change Owner
Printable View
Submit for Approval
Edit Labels
Related
Details
* = Required Information
*Tenant Name
Aswini
Owner
Sowmya Team
*Email
aswiniamaraadi15@gmail.com
Phone
(905) 222-5567
status
Leaving
property
Imran
Created By
Sowmya Team, 6/26/2025, 6:05 AM
Last Modified By
Sowmya Team, 6/26/2025, 11:06 PM
Cancel
Save
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.

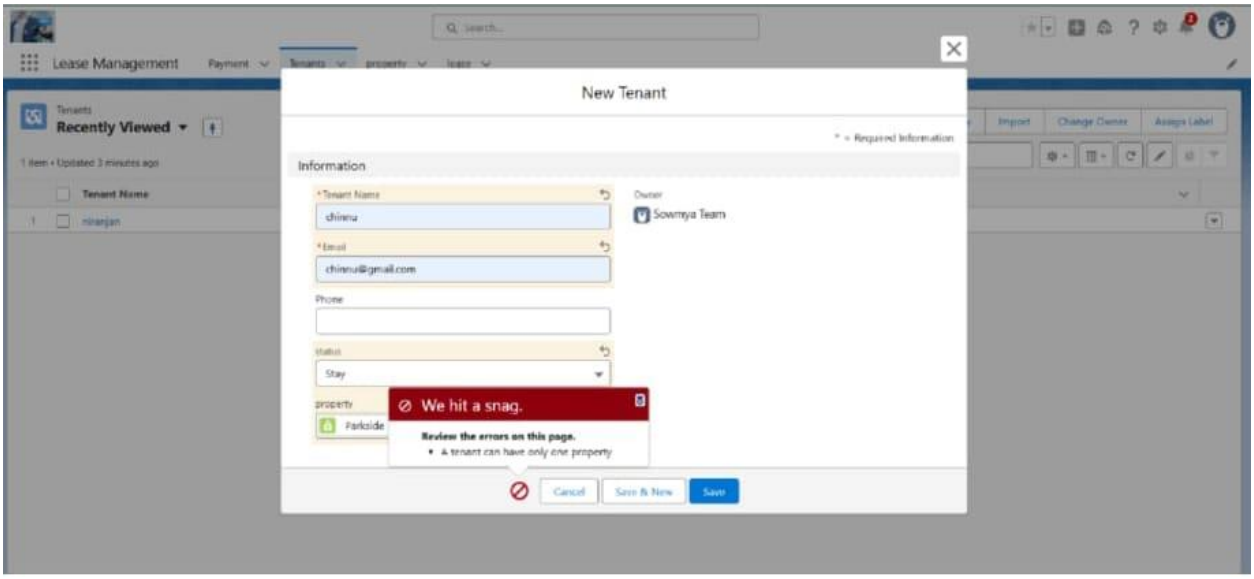

Lease Management
Payment
Tenants
property
lease
Tenant
Aswini
Tenant was submitted for approval.
New Contact
Edit
New Opportunity
Related
Details
* = Required Information
*Tenant Name
Aswini
Owner
Sowmya Team
*Email
aswiniamaraadi15@gmail.com
Phone
(905) 223-5567
status
Leaving
property
Imran
Created By
Sowmya Team, 6/26/2025, 6:05 AM
Last Modified By
Sowmya Team, 6/26/2025, 11:06 PM
Cancel
Save
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.
30°C
Cloudy
Search
ENG
IN
12:46
27-06-2025



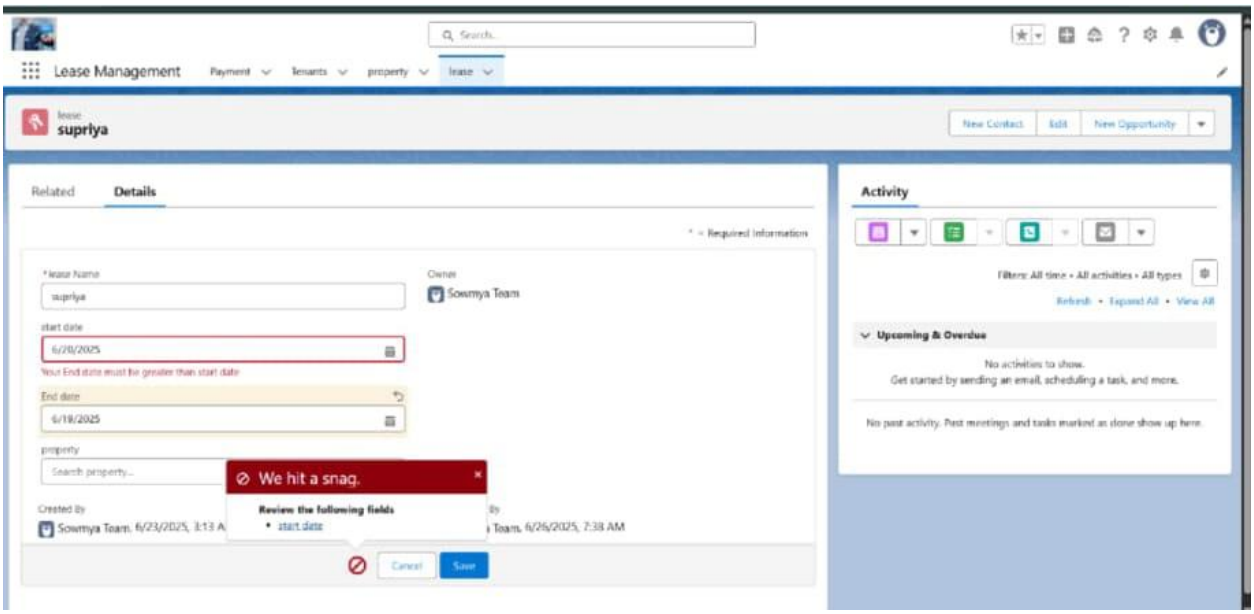
FUNCTIONAL AND PERFORMANCE TESTING

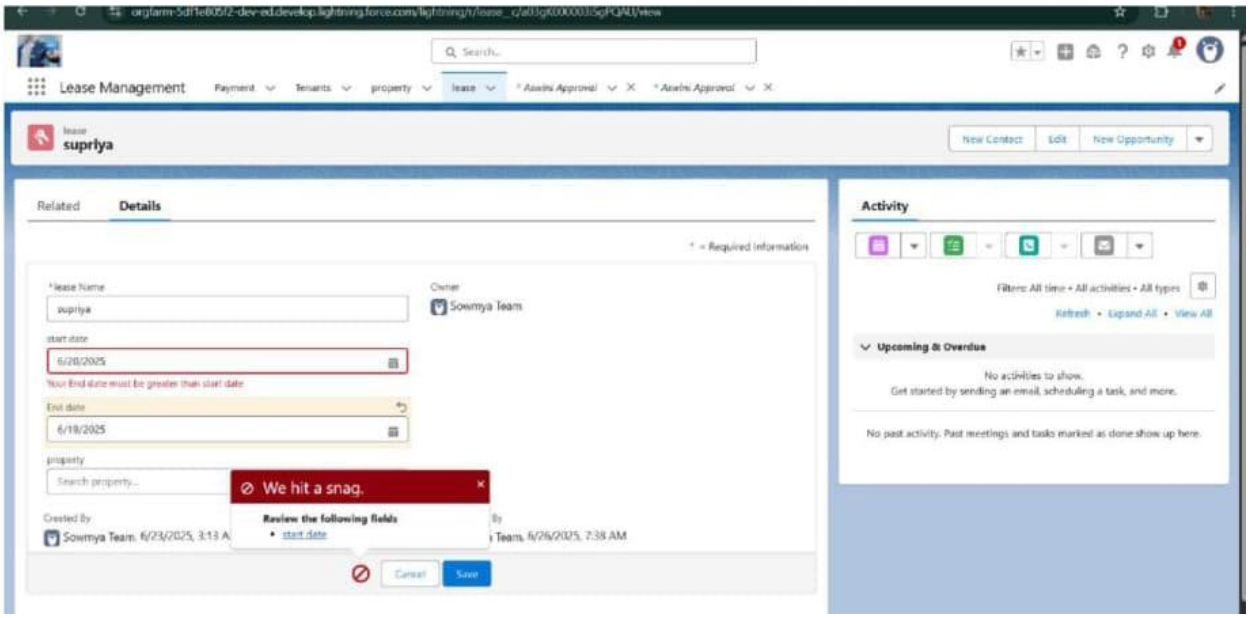
Performance Testing

- Trigger validation by entering duplicate tenant-property records

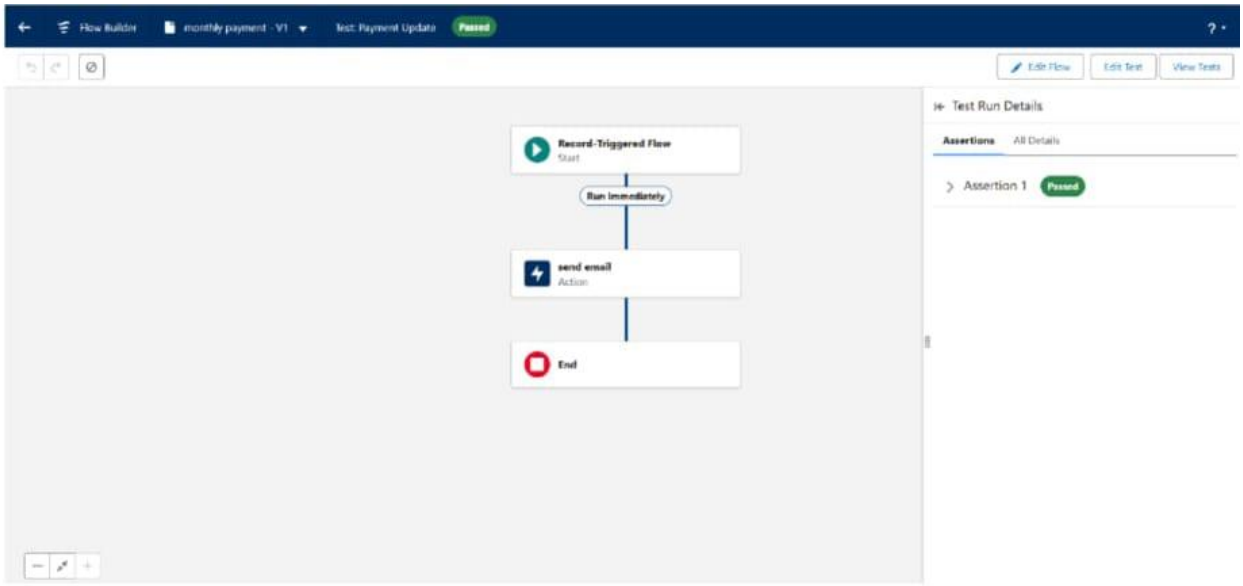


- Validation rule Checking

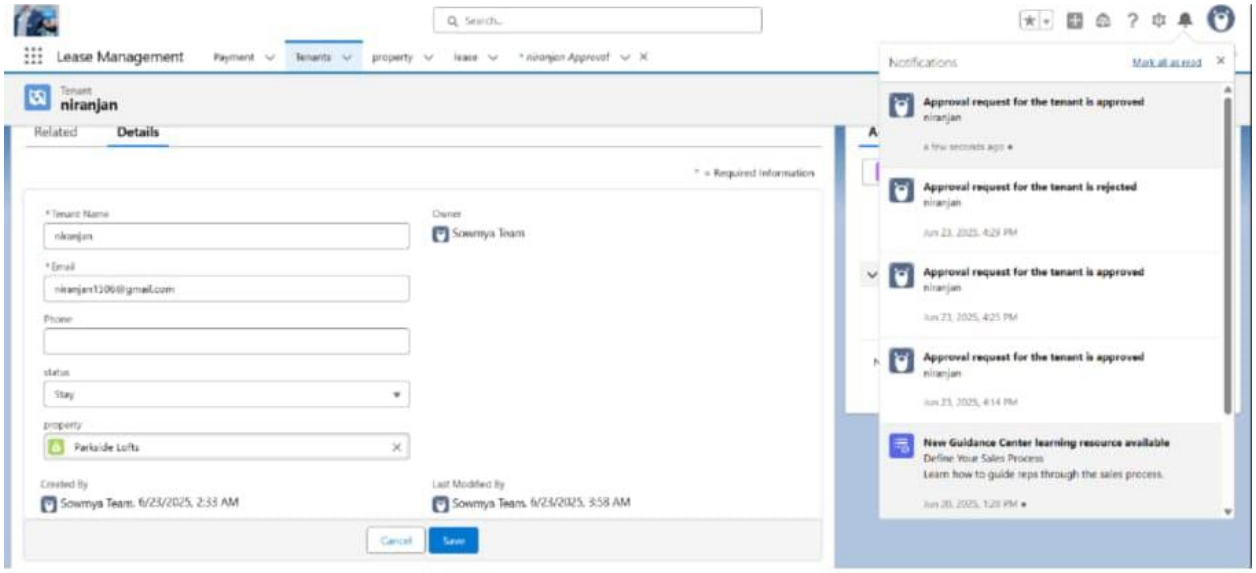


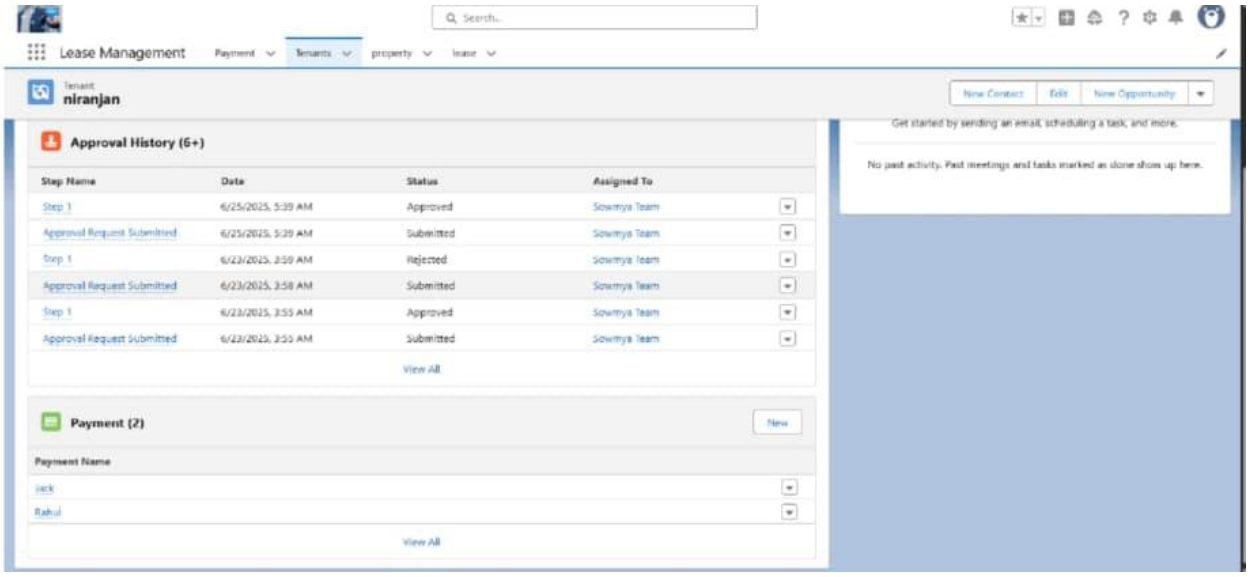


- Test flows on payment update



- Approval process validated through email alerts and status updates

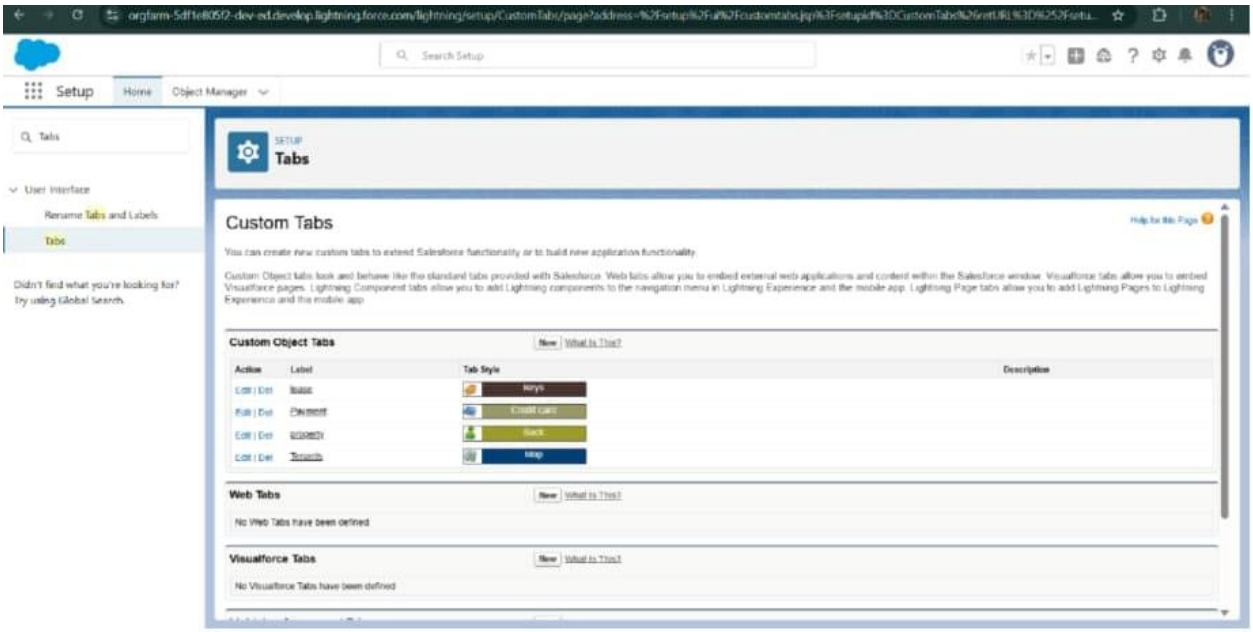

Lease Management
Payment
Tenants
property
lease
niranjan Approval
Tenant
niranjan
Related
Details
* = Required Information
*Tenant Name
niranjan
Owner
Sowmya Team
*Email
niranjan1306@gmail.com
Phone
status
Stay
property
Parkside Lofts
Created By
Sowmya Team, 6/23/2025, 2:33 AM
Last Modified By
Sowmya Team, 6/23/2025, 3:58 AM
Cancel
Save
Notifications
Mark all as read
Approval request for the tenant is approved
niranjan
a few seconds ago
Approval request for the tenant is rejected
niranjan
Jun 23, 2025, 4:29 PM
Approval request for the tenant is approved
niranjan
Jun 23, 2025, 4:25 PM
Approval request for the tenant is approved
niranjan
Jun 23, 2025, 4:14 PM
New Guidance Center learning resource available
Define Your Sales Process
Learn how to guide reps through the sales process.
Jun 20, 2025, 1:20 PM


Lease Management
Payment
Tenants
property
lease
Tenant
niranjan
New Contact
Edit
New Opportunity
Approval History (6+)
Step Name
Date
Status
Assigned To
Step 1
6/25/2025, 5:39 AM
Approved
Sowmya Team
Approval Request Submitted
6/25/2025, 5:39 AM
Submitted
Sowmya Team
Step 1
6/23/2025, 3:59 AM
Rejected
Sowmya Team
Approval Request Submitted
6/23/2025, 3:58 AM
Submitted
Sowmya Team
Step 1
6/23/2025, 3:55 AM
Approved
Sowmya Team
Approval Request Submitted
6/23/2025, 3:55 AM
Submitted
Sowmya Team
View All
Payment (2)
New
Payment Name
Jack
Rahul
View All
Get started by sending an email, scheduling a task, and more.
No past activity. Past meetings and tasks marked as done show up here.

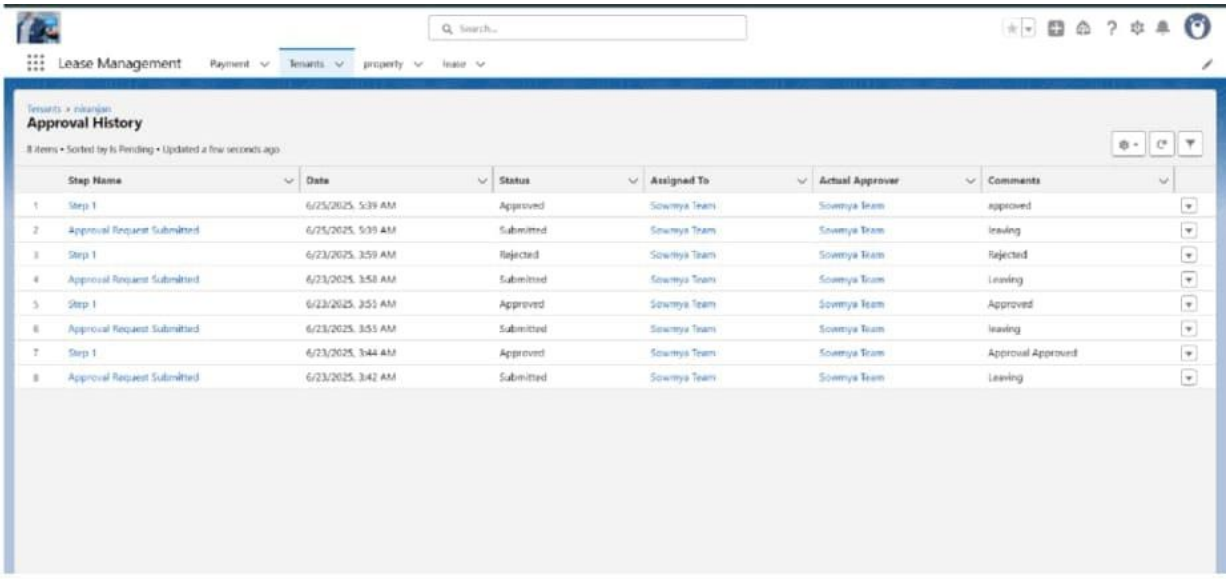
RESULTS

Output Screenshots

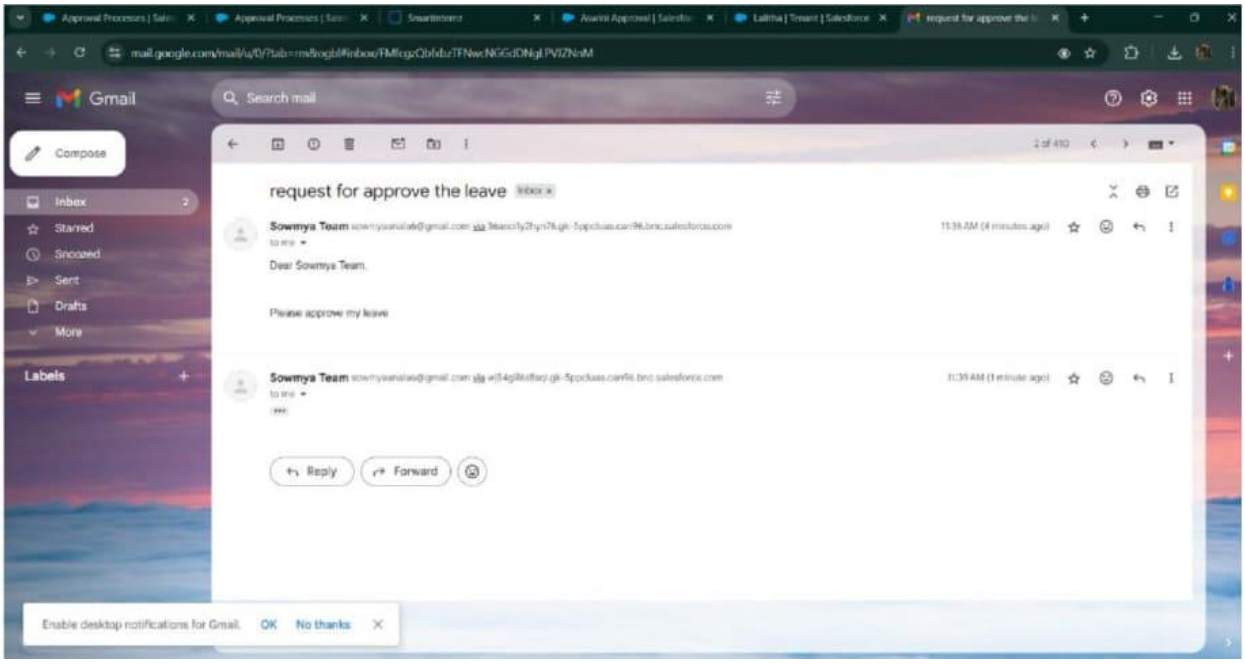
● Tabs for Property, Tenant, Lease, Payment



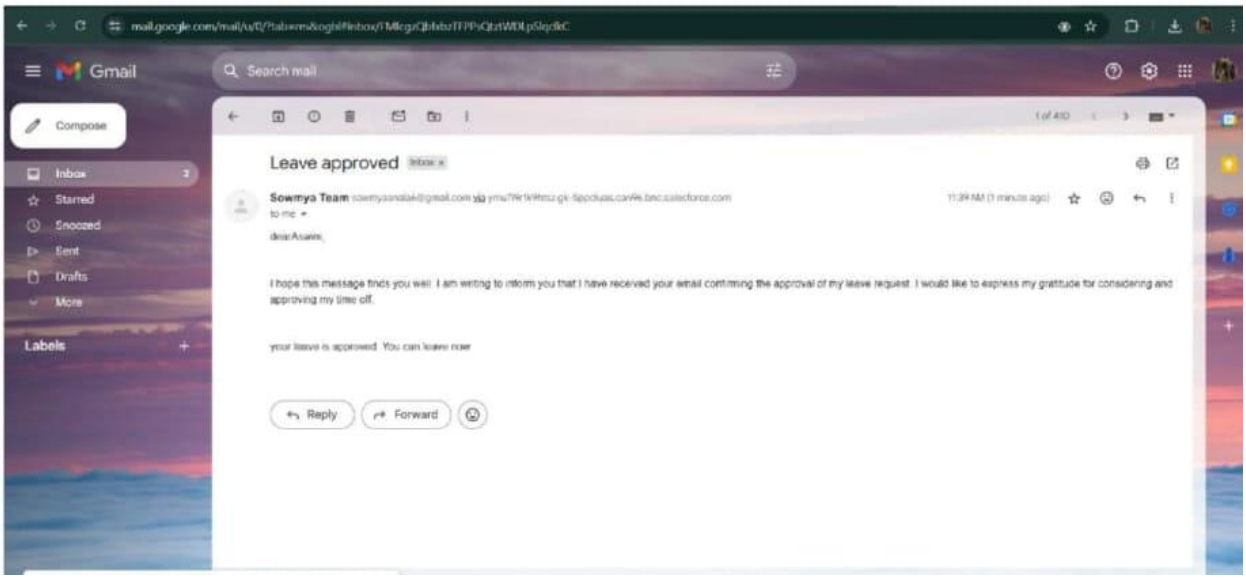
- Email alerts



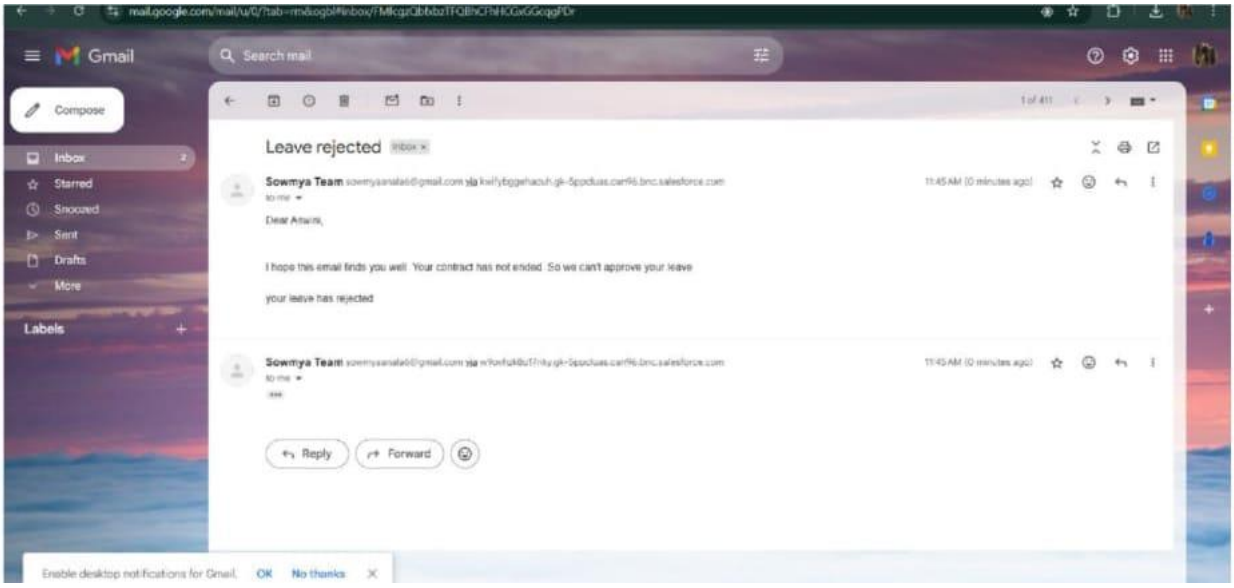
- Request for approve the leave



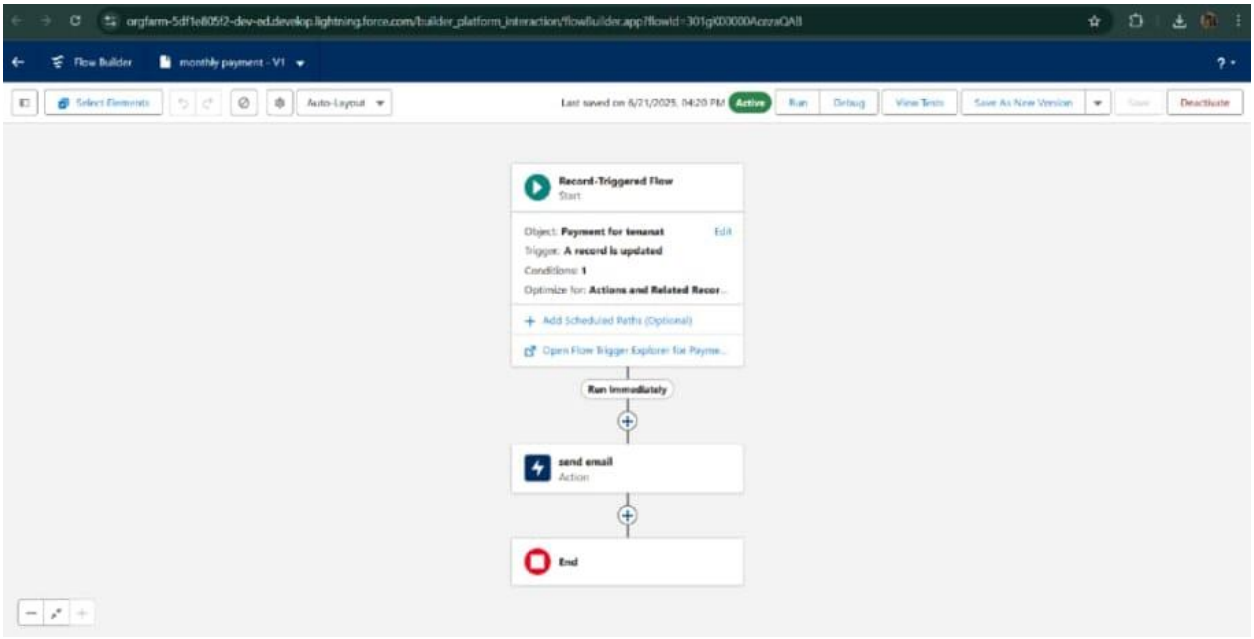
- Leave approval



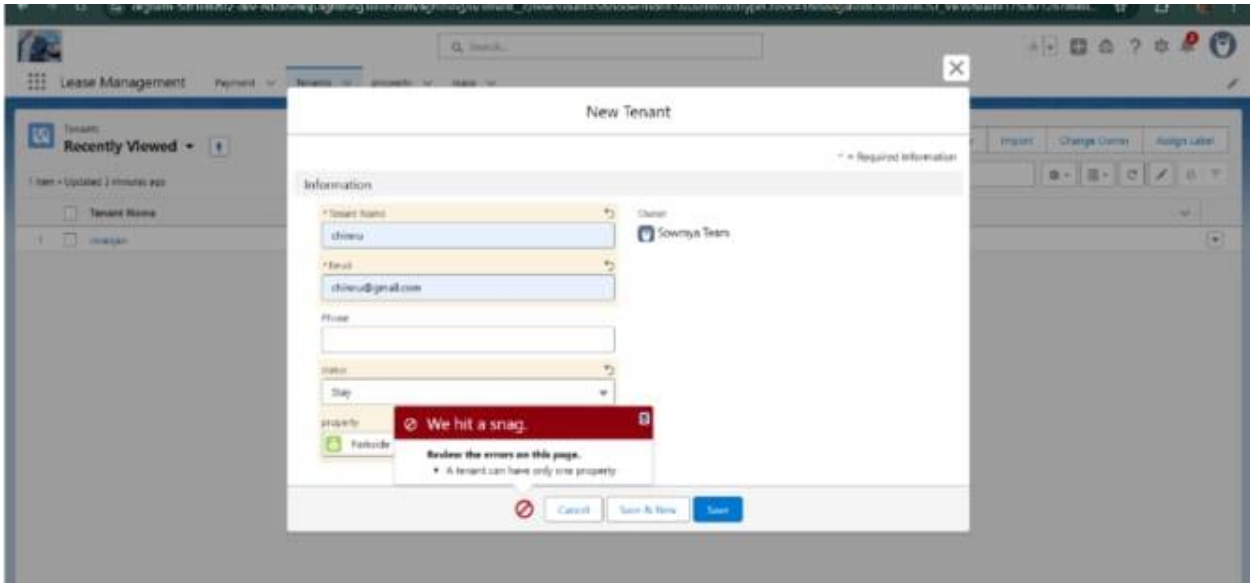
- Leave rejected



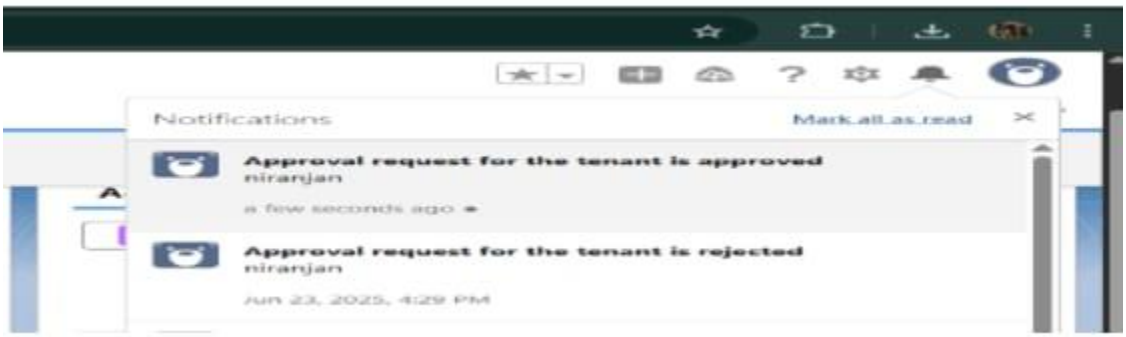
- Flow runs



- Trigger error message



● 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

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, Propertyc 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});

}

 }

}
```