LEASE MANAGEMENT

College Name: KG COLLGE OF ARTS AND SCIENCE

TEAM ID:NM2025TMID23825

COLLEGE CODE: BRU4Y

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TEAM MEMBER 3:NISHA S

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1.INTRODUCTION

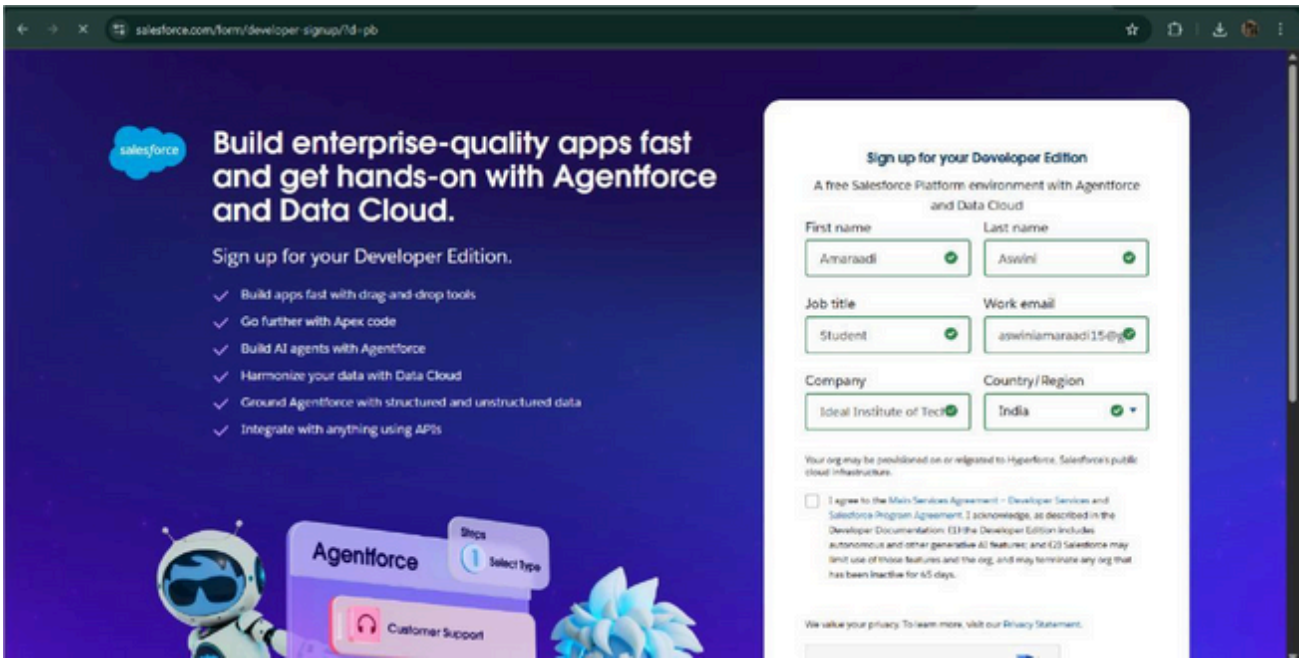
1.1 Project Overview

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.

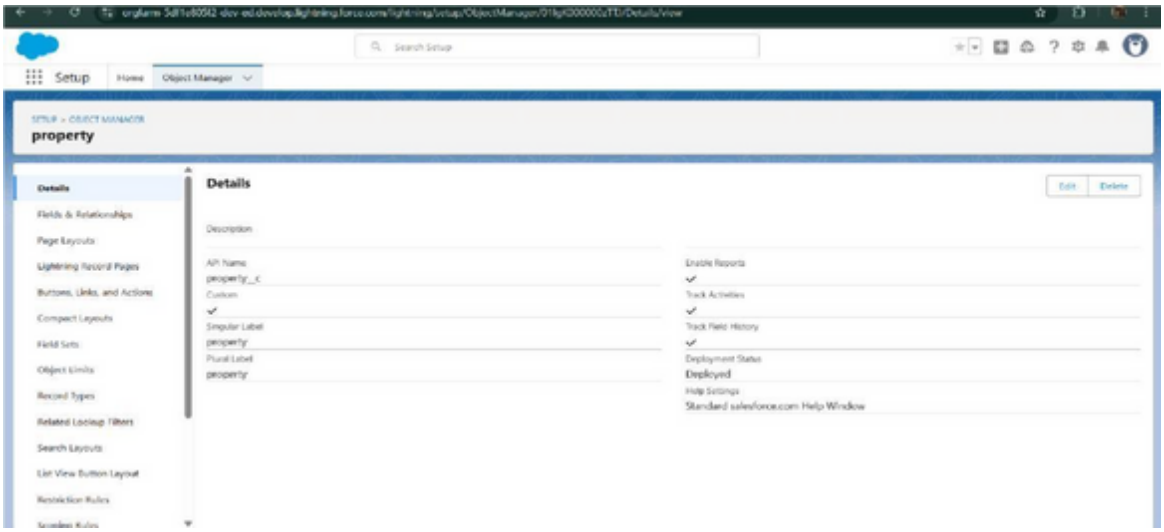
1.2 Purpose

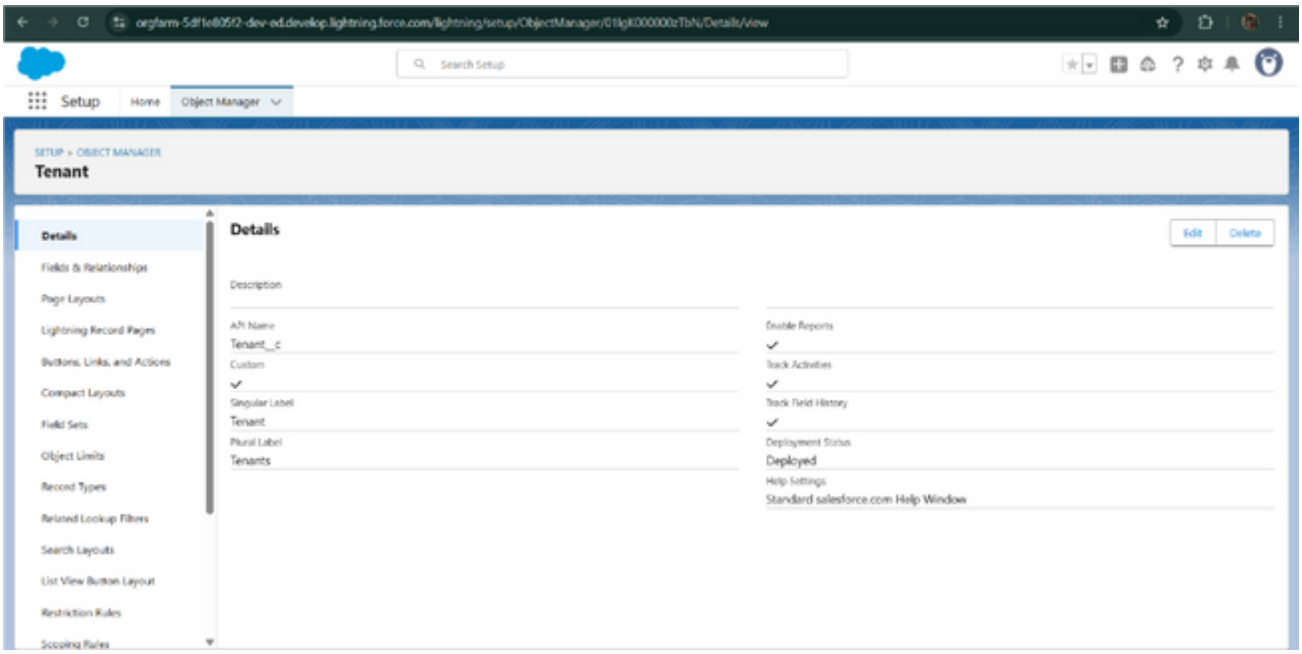
The main objective of the project is to enable organizations to efficiently manage properties, tenants, and lease-related activities. It reduces manual intervention, improves accuracy, and ensures better compliance and communication.

DEVELOPMENT PHASE



- Created objects: Property, Tenant, Lease, Payment

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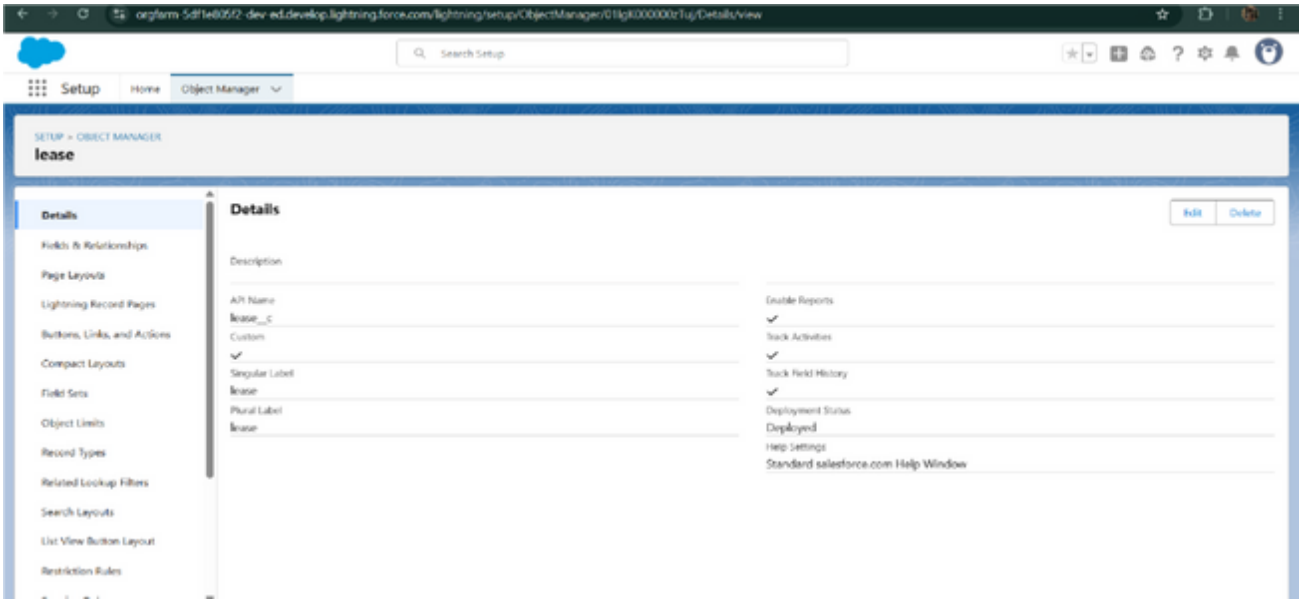
Home
Object Manager
SETUP > OBJECT MANAGER
Tenant
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Details
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


Setup
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Page Layouts
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Buttons, Links, and Actions
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Record Types
Related Lookup Filters
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Restriction Rules
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Plural Label
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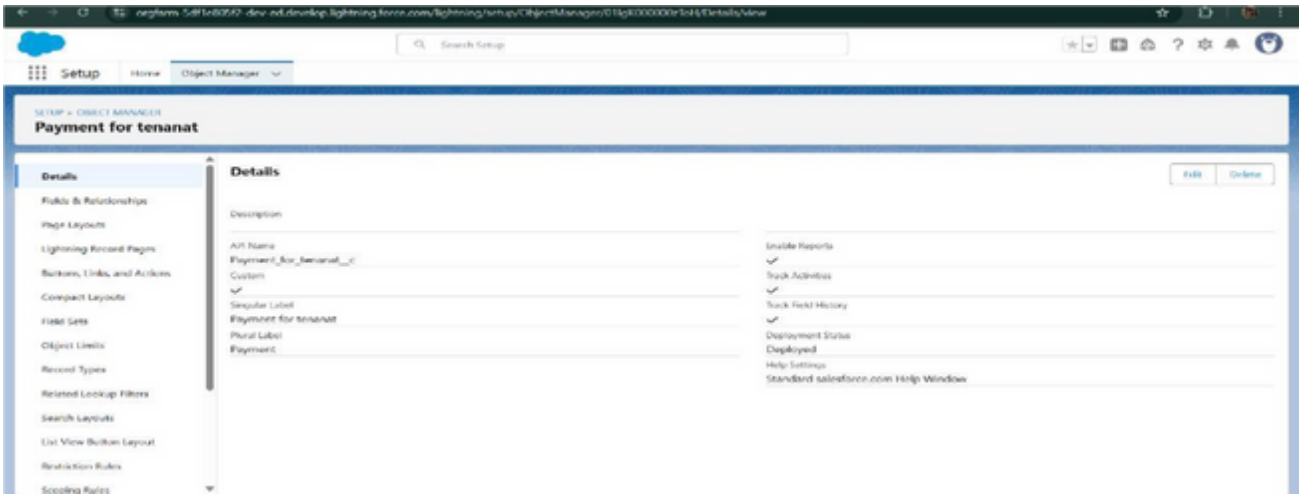
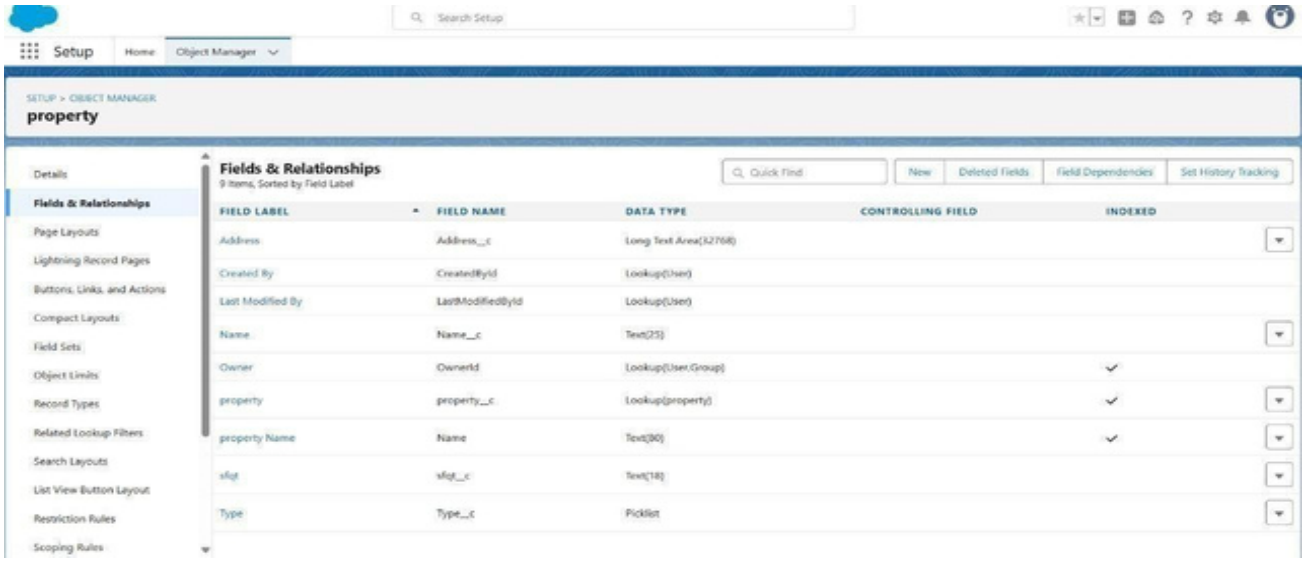
Enable Reports
Track Activities
Track Field History
Deployment Status
Deployed
Help Settings
Standard salesforce.com Help Window



- Configured fields and relationships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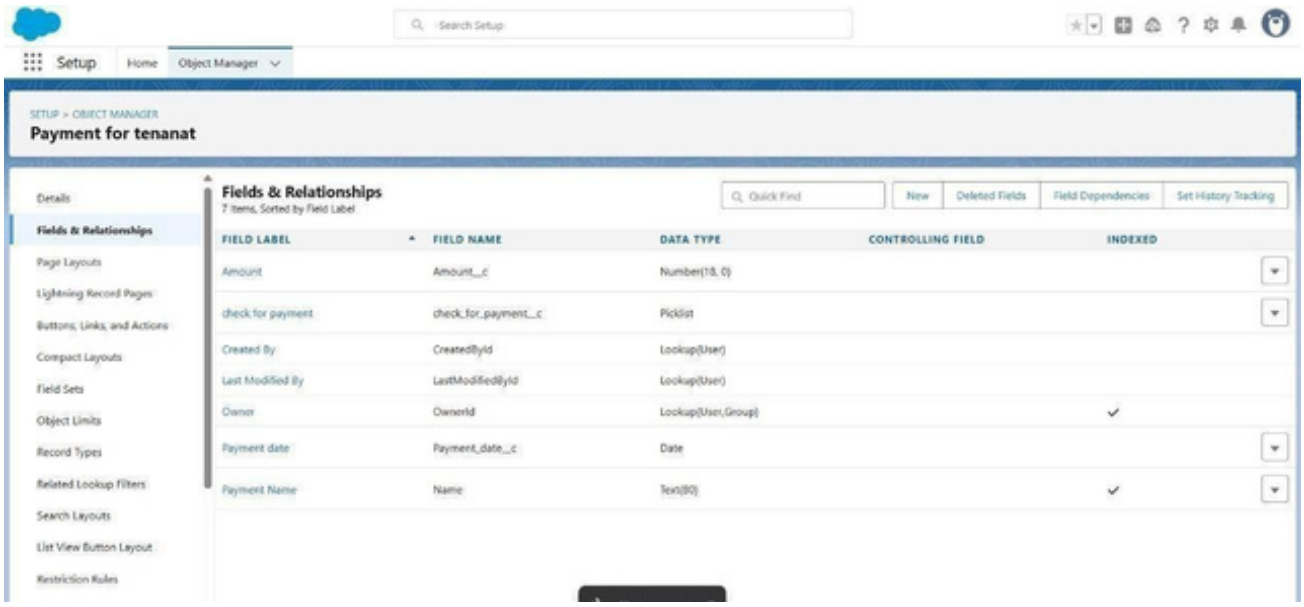
SETUP > OBJECT MANAGER
property
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Fields & Relationships
9 Items, 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(25)
Owner
OwnerId
Lookup(User,Group)
property
property__c
Lookup(property)
property Name
Name
Text(80)
xfgt
xfgt__c
Text(18)
Type
Type__c
Picklist


Search Setup
Setup
Home
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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
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check for payment
check_for_payment__c
Picklist
Created By
CreatedById
Lookup(User)
Last Modified By
LastModifiedById
Lookup(User)
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OwnerId
Lookup(User,Group)
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Payment_date__c
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Payment Name
Name
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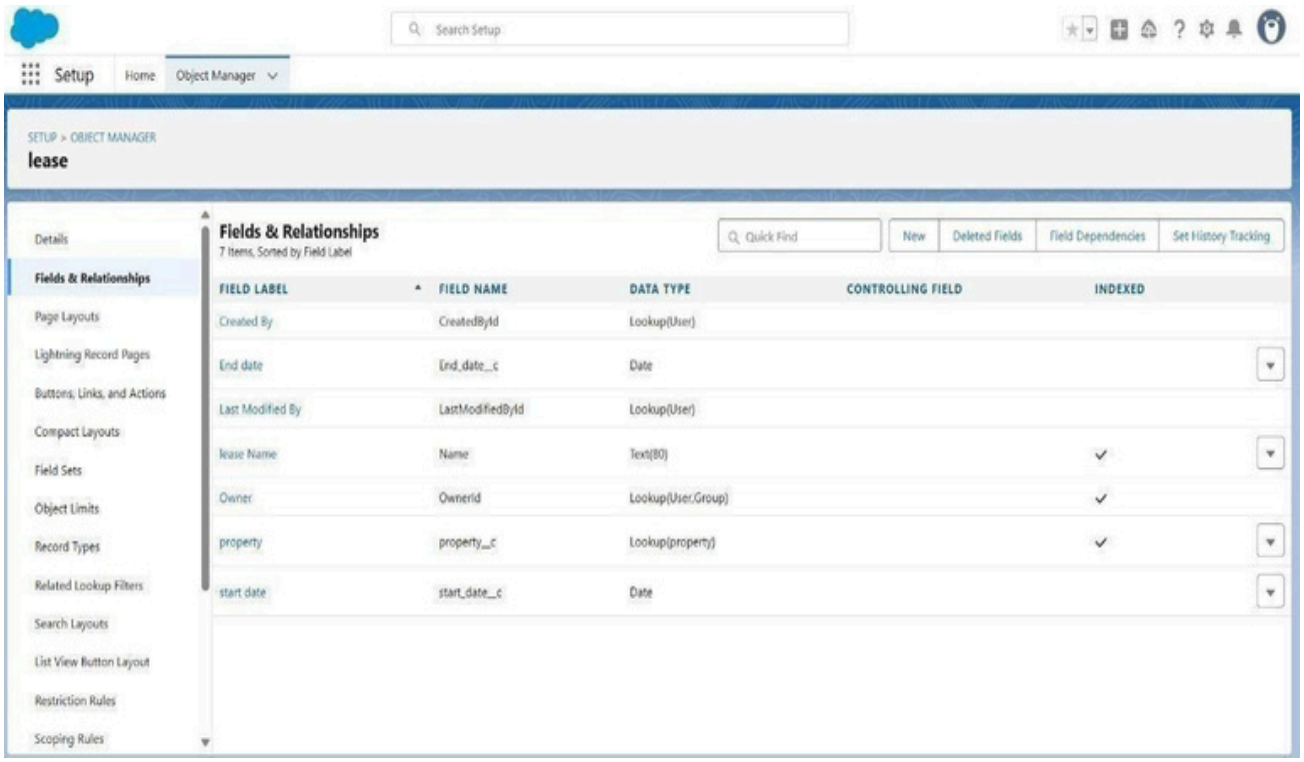
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SETUP > OBJECT MANAGER
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Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
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Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
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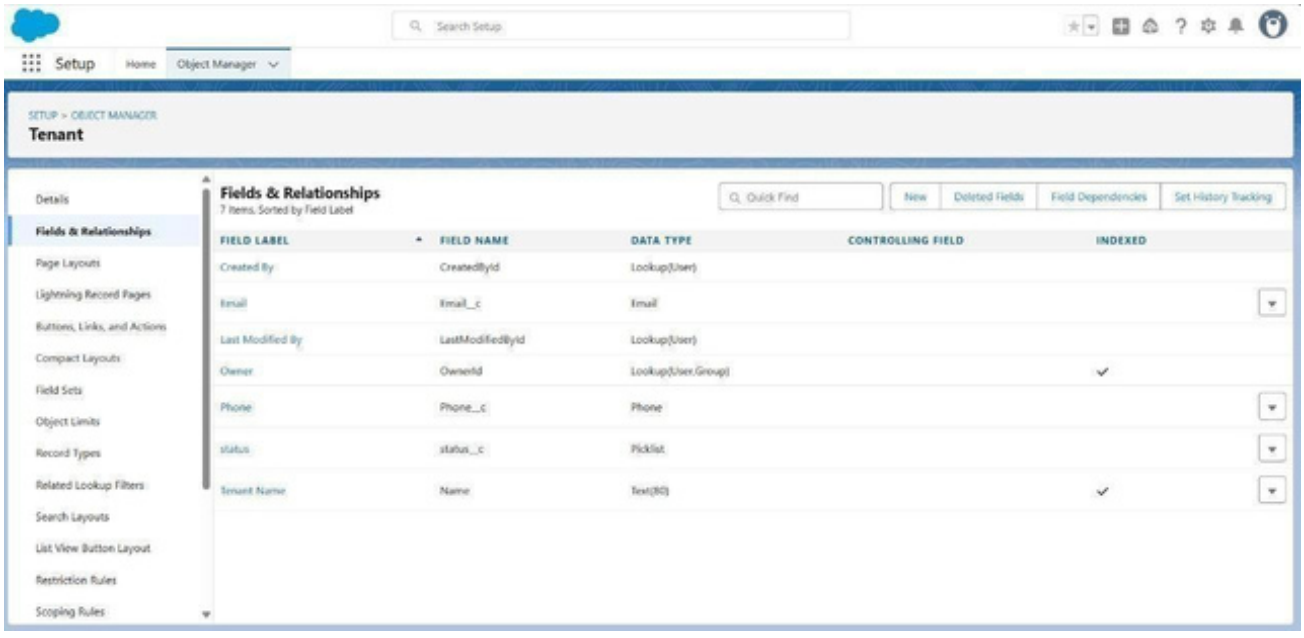
Scoping Rules
Fields & Relationships
7 Items, Sorted by Field Label
Quick Find
New
Deleted Fields
Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
INDEXED
Created By
CreatedById
Lookup(User)
End date
End_date__c
Date
Last Modified By
LastModifiedById
Lookup(User)
lease Name
Name
Text(80)
Owner
OwnerId
Lookup(User,Group)
property
property__c
Lookup(property)
start date
start_date__c
Date


Search Setup
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
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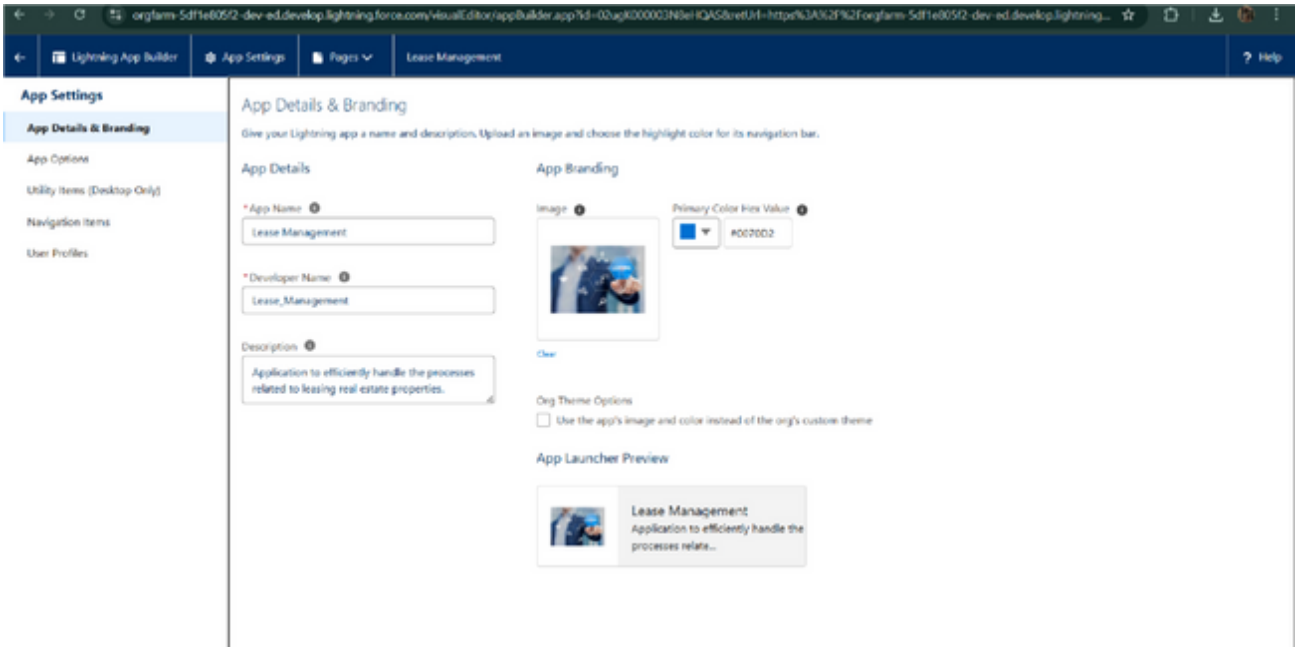
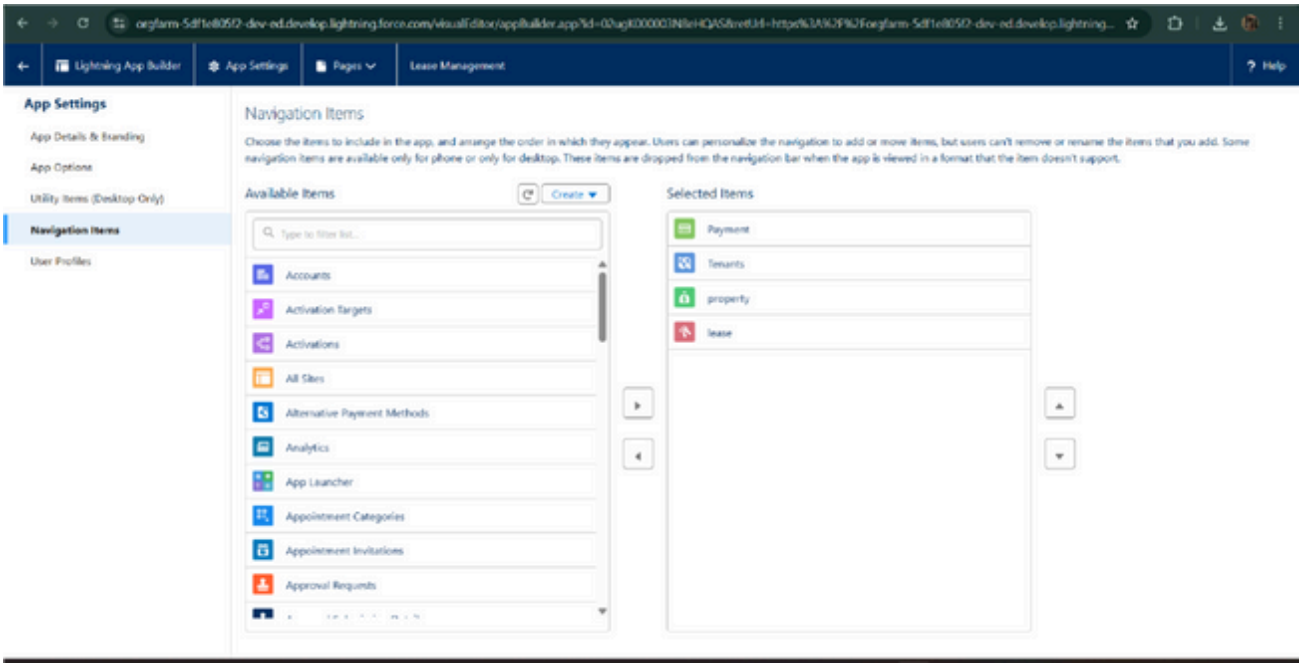
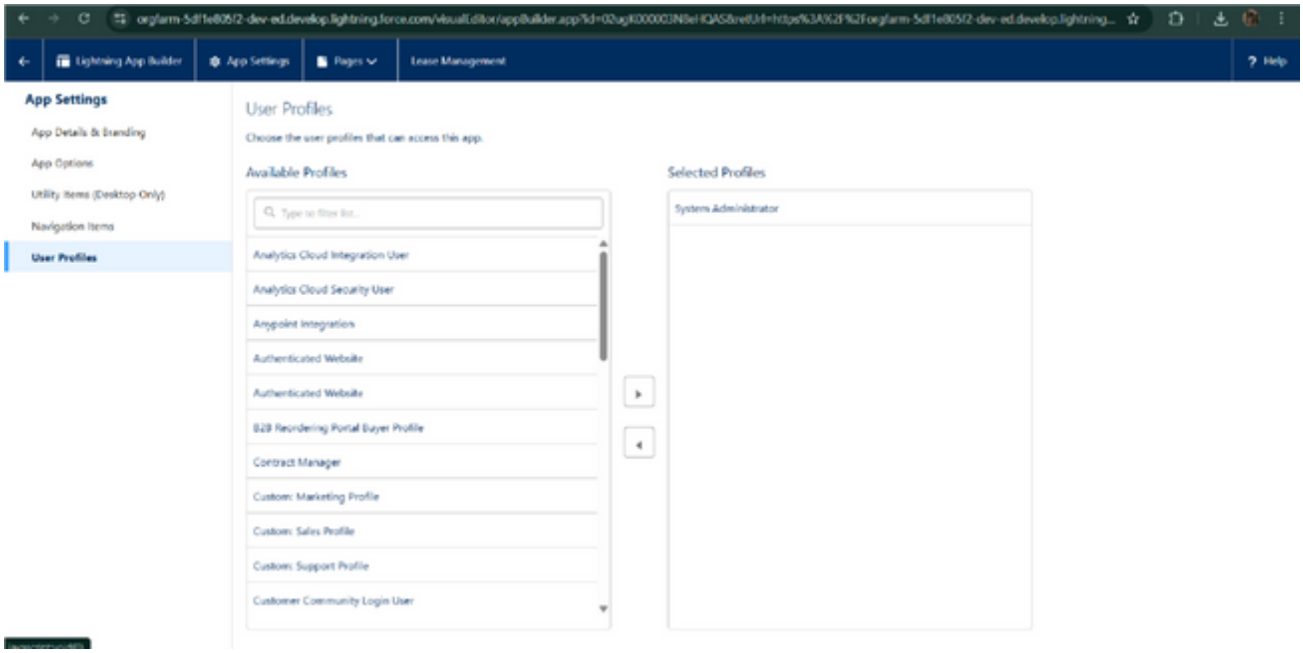
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Fields & Relationships
7 Items, Sorted by Field Label
Quick Find
New
Deleted Fields
Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
INDEXED
Created By
CreatedById
Lookup(User)
Email
Email__c
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






Lightning App Builder
App Settings
Pages
Lease Management
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
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
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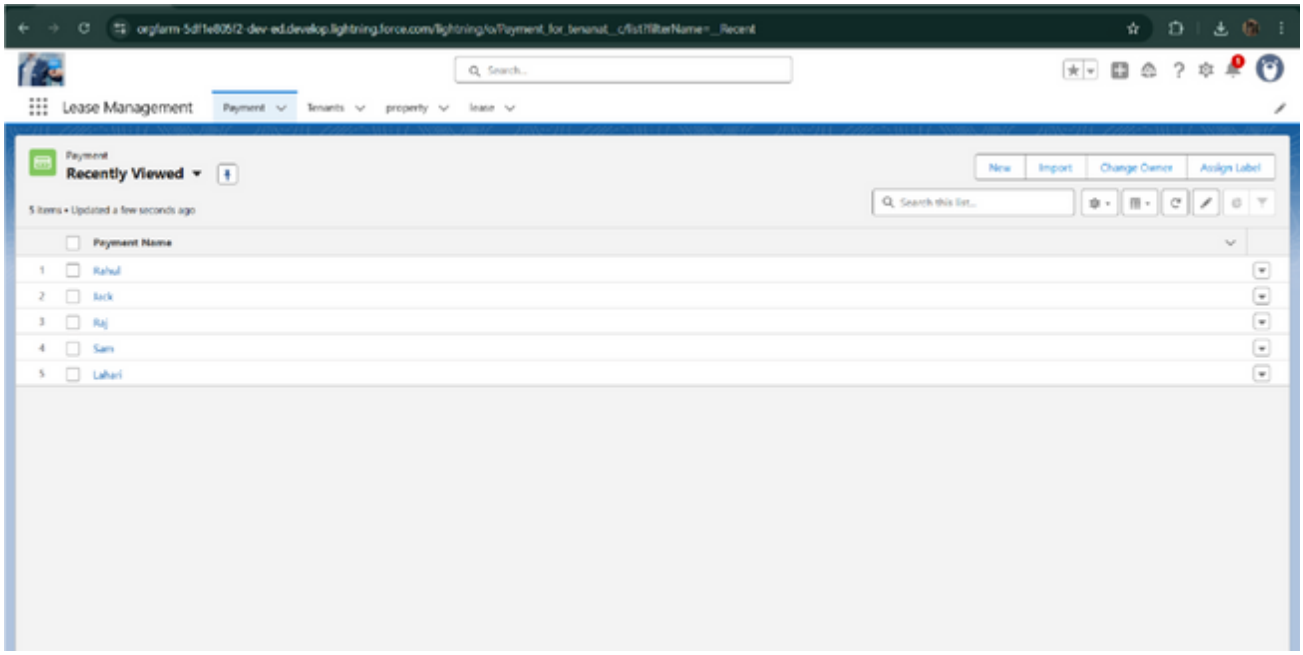
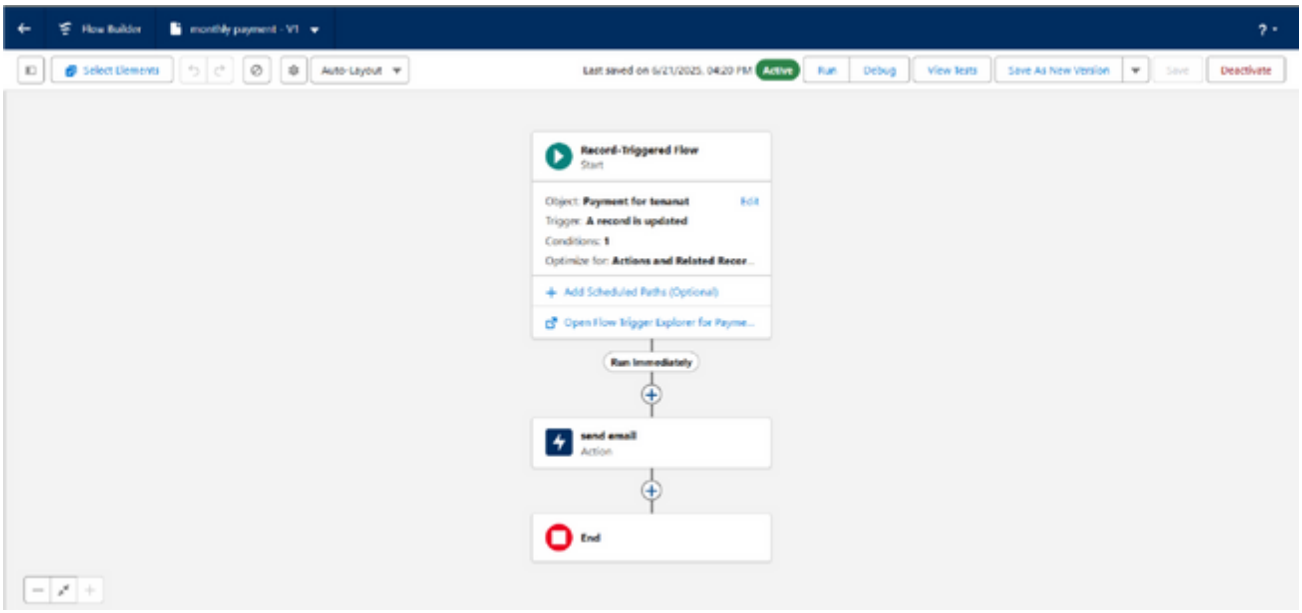
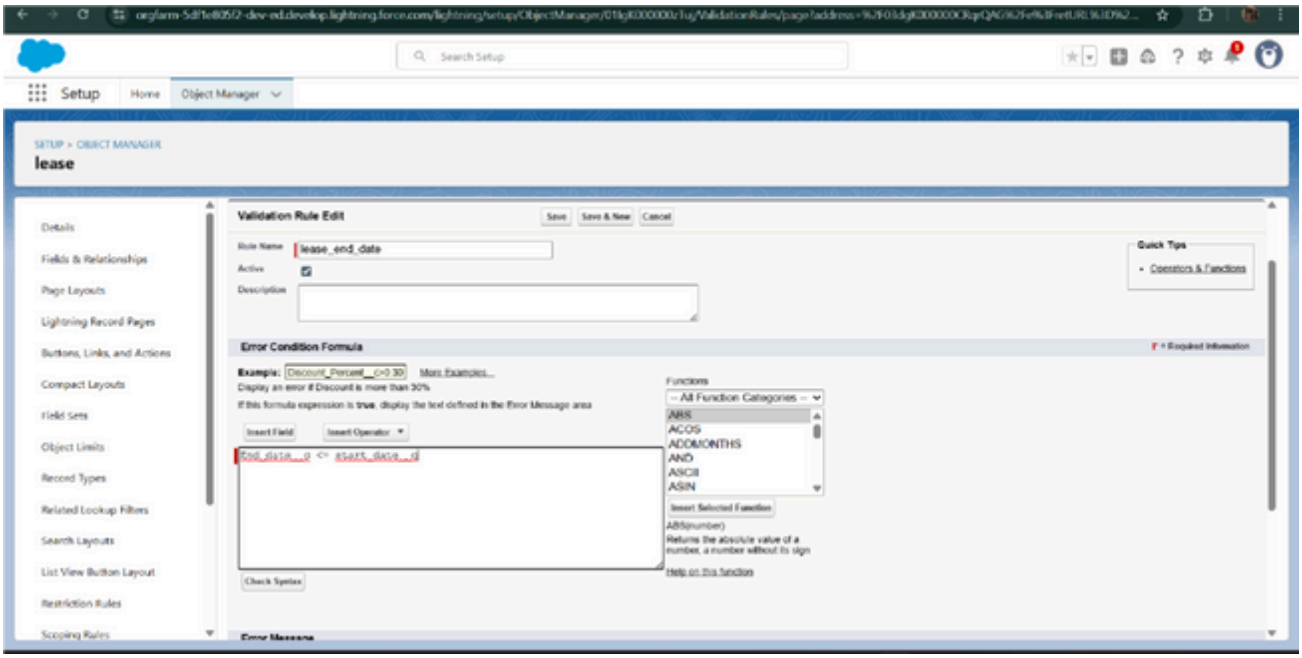
Custom: Sales Profile
Custom: Support Profile
Customer Community Login User

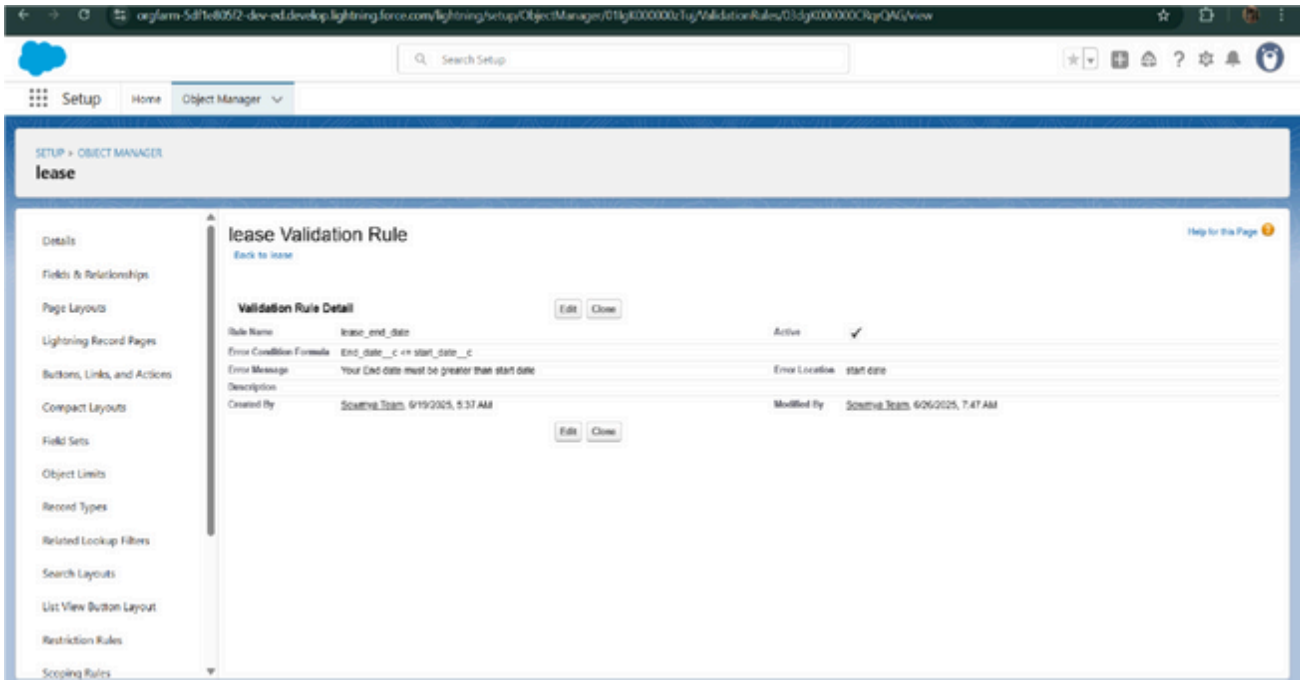

Lease Management
Payment
Tenants
property
lease
Payment
Recently Viewed
5 items • Updated a few seconds ago
New
Import
Change Owner
Assign Label
Payment Name
1 Rahul
2 Rick
3 Raj
4 Sam
5 Lahari

- Implemented Flows for monthly rent and payment success

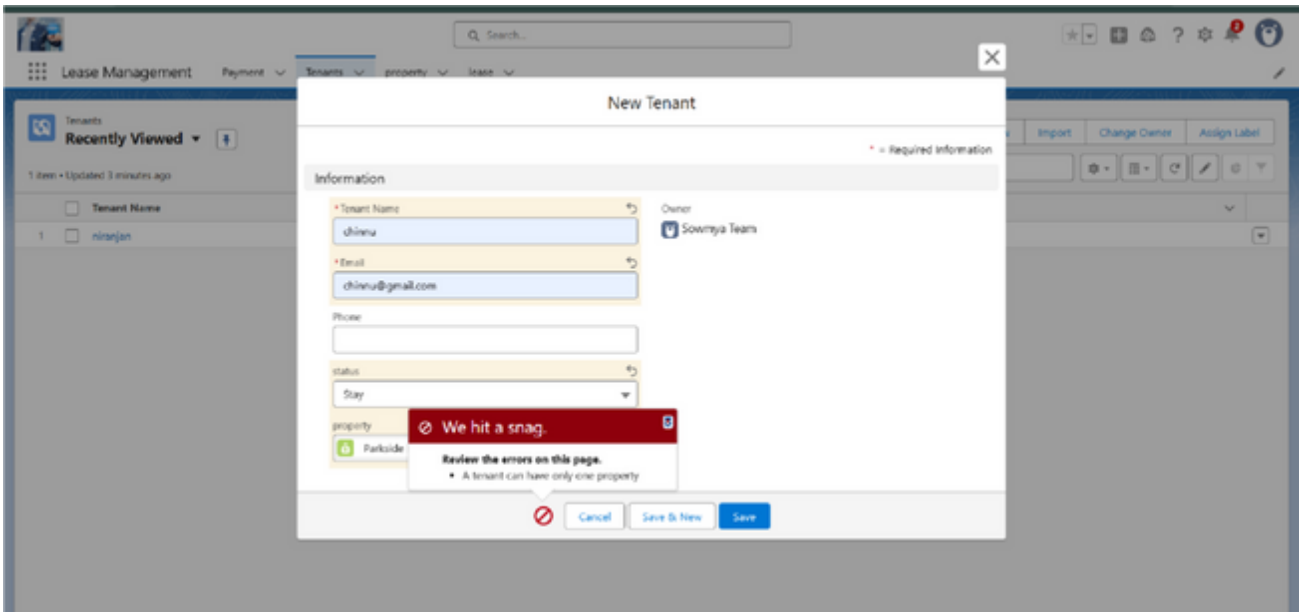


- To create a validation rule to a Lease Object

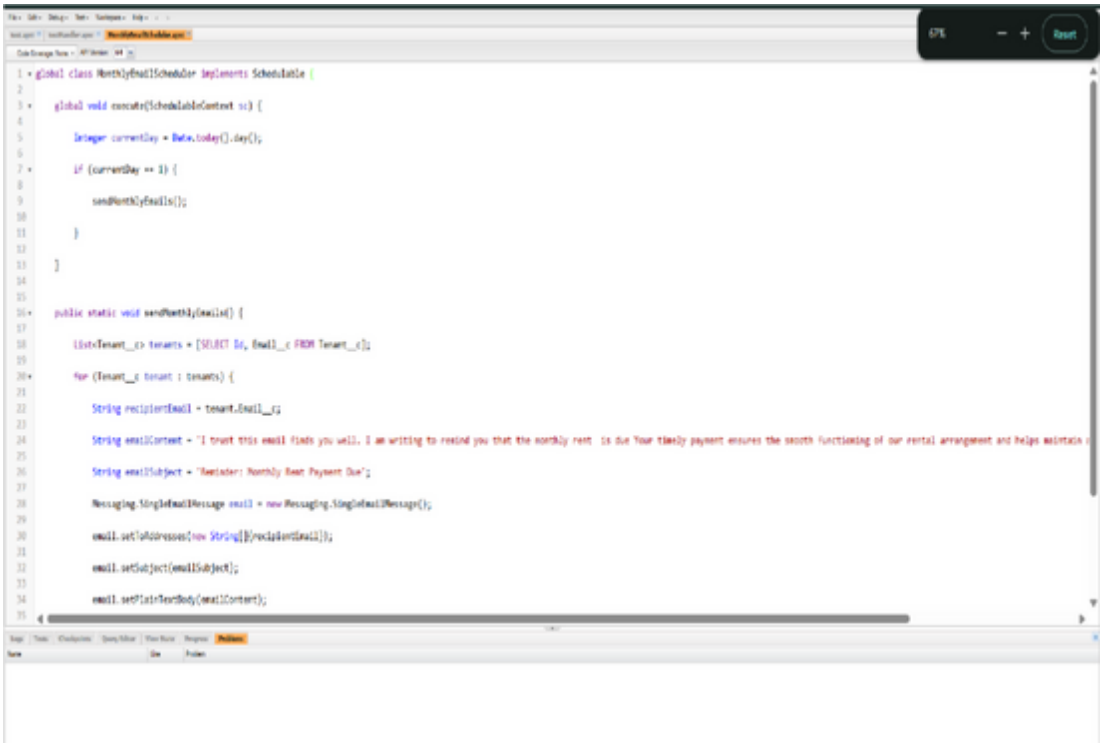




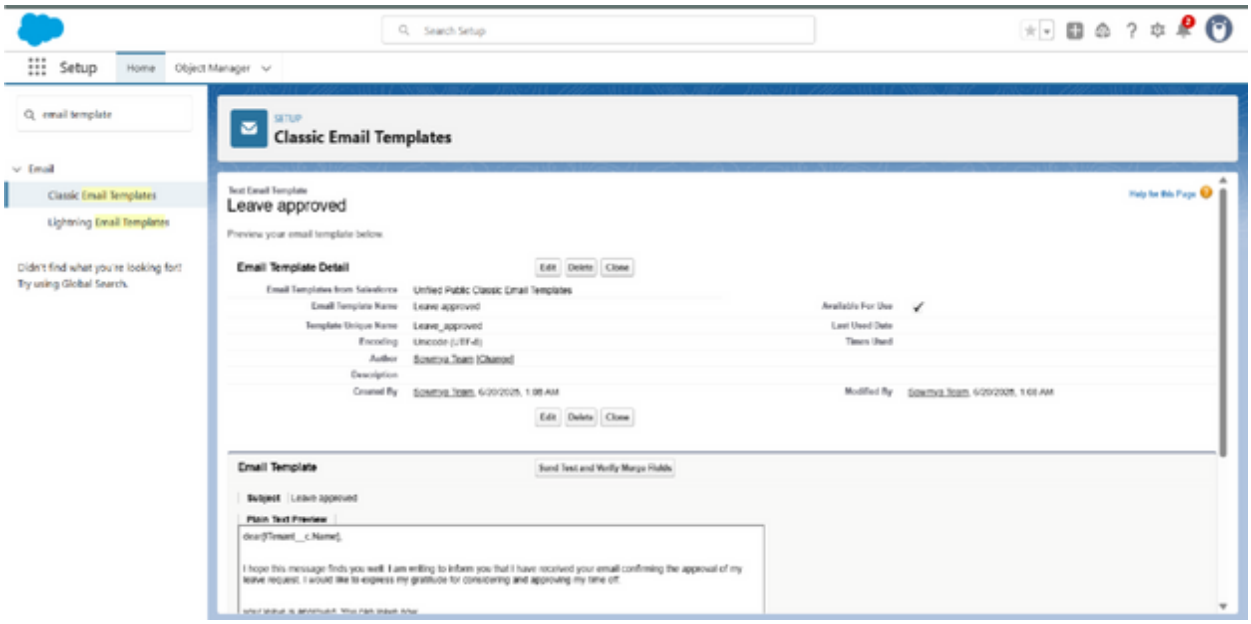
- Added Apex trigger to restrict multiple tenants per property

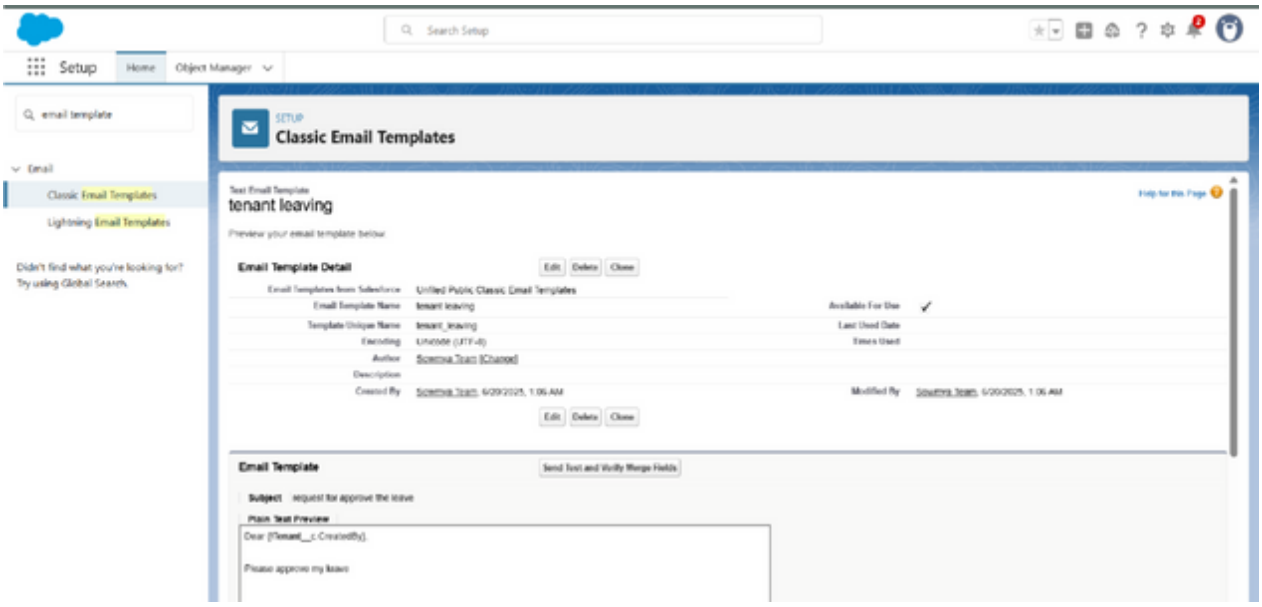


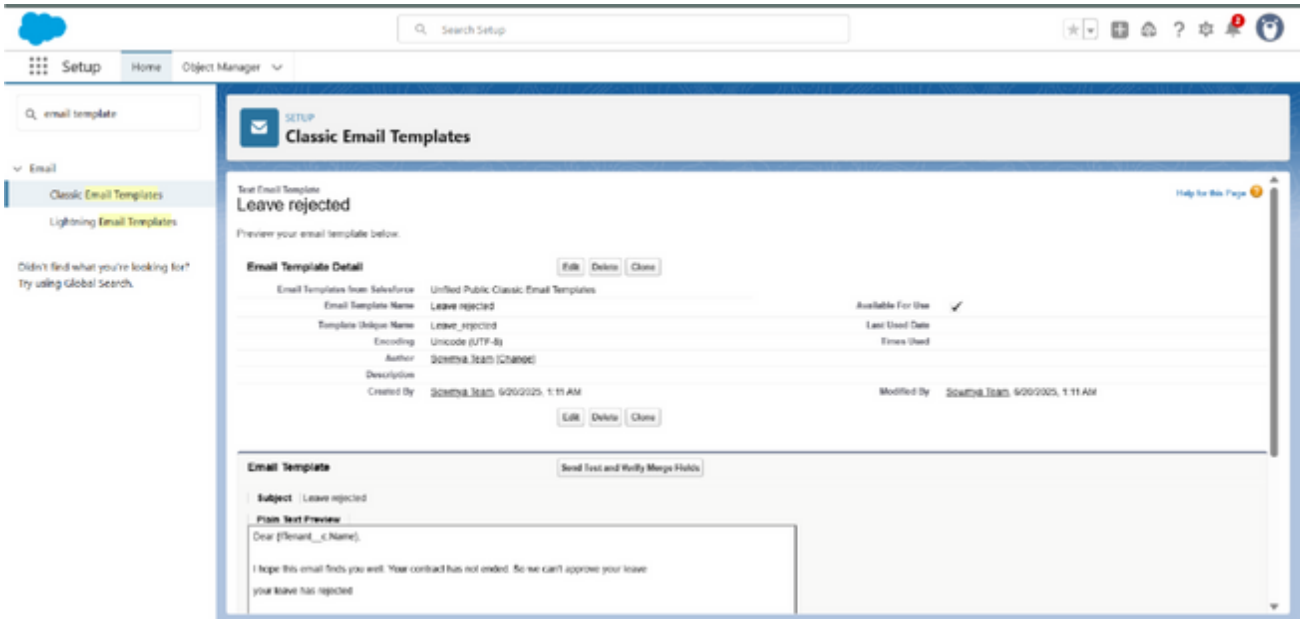
- Scheduled monthly reminder emails using Apex class

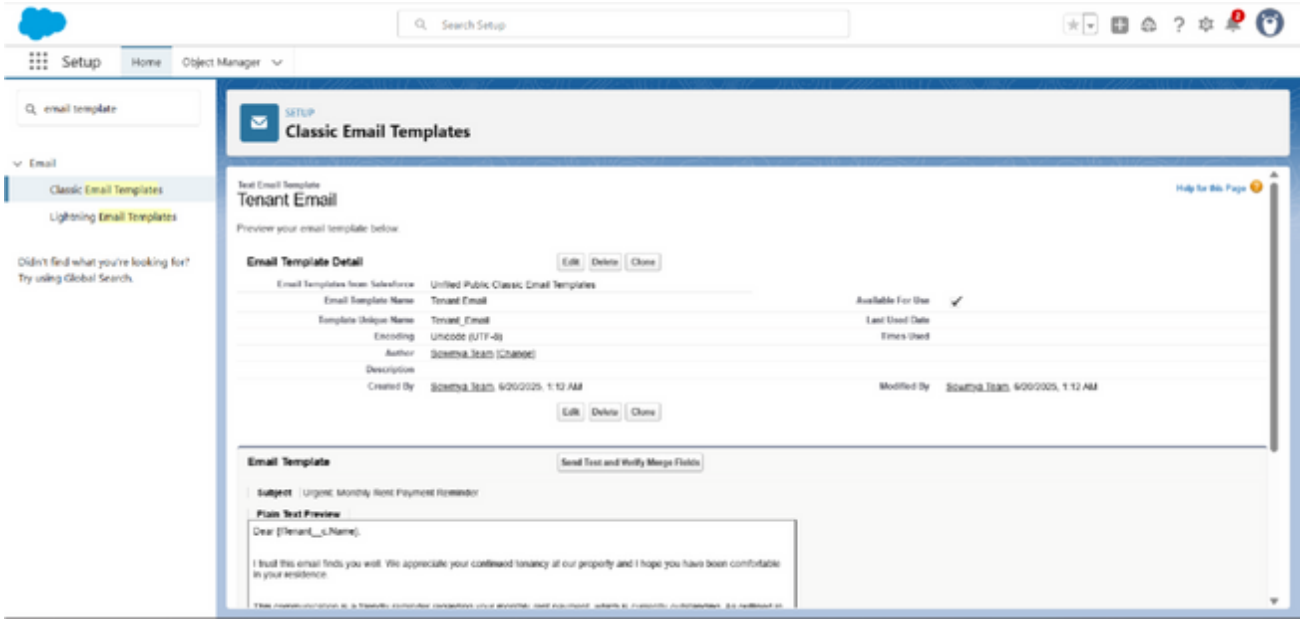


- Built and tested email templates for leave request, approval, rejection, payment, and reminders






Search Setup
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
Leave rejected
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
Leave rejected
Available For Use
Template Unique Name
Leave_rejected
Last Used Date
Encoding
Unicode (UTF-8)
Times Used
Author
Sowmya Team [Change]
Description
Created By
Sowmya Team, 6/20/2025, 1:11 AM
Modified By
Sowmya Team, 6/20/2025, 1:11 AM
Email Template
Send Test and Verify 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
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Try using Global Search.
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Help for this Page
Preview your email template below.
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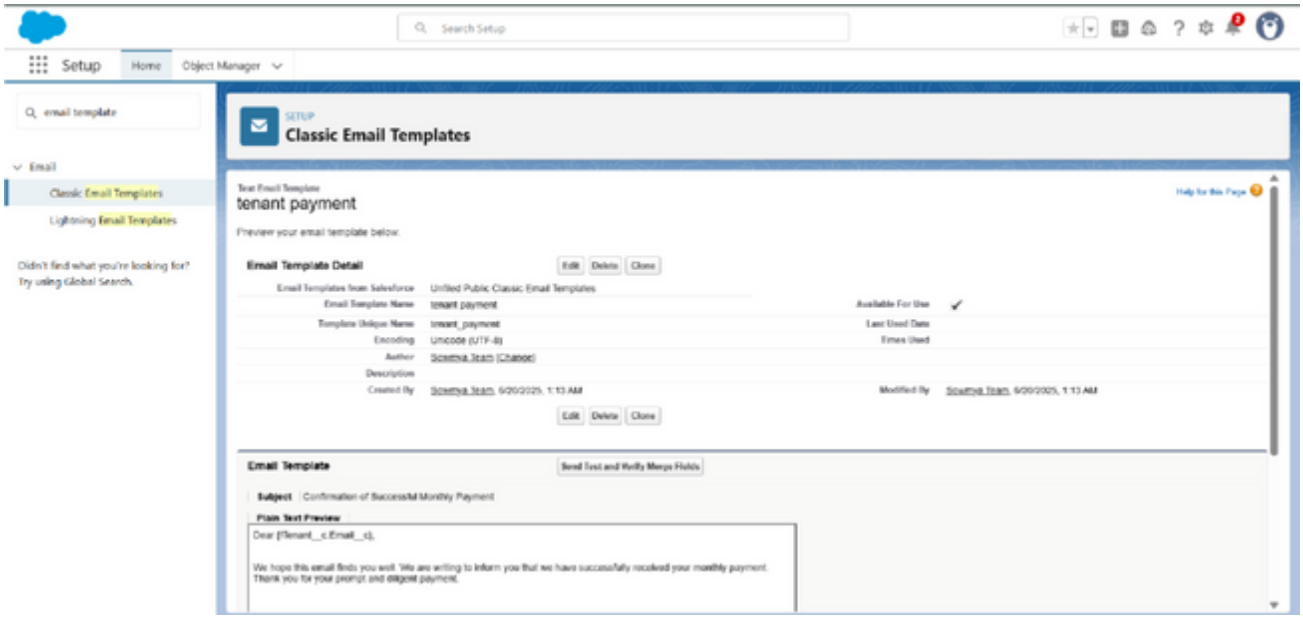
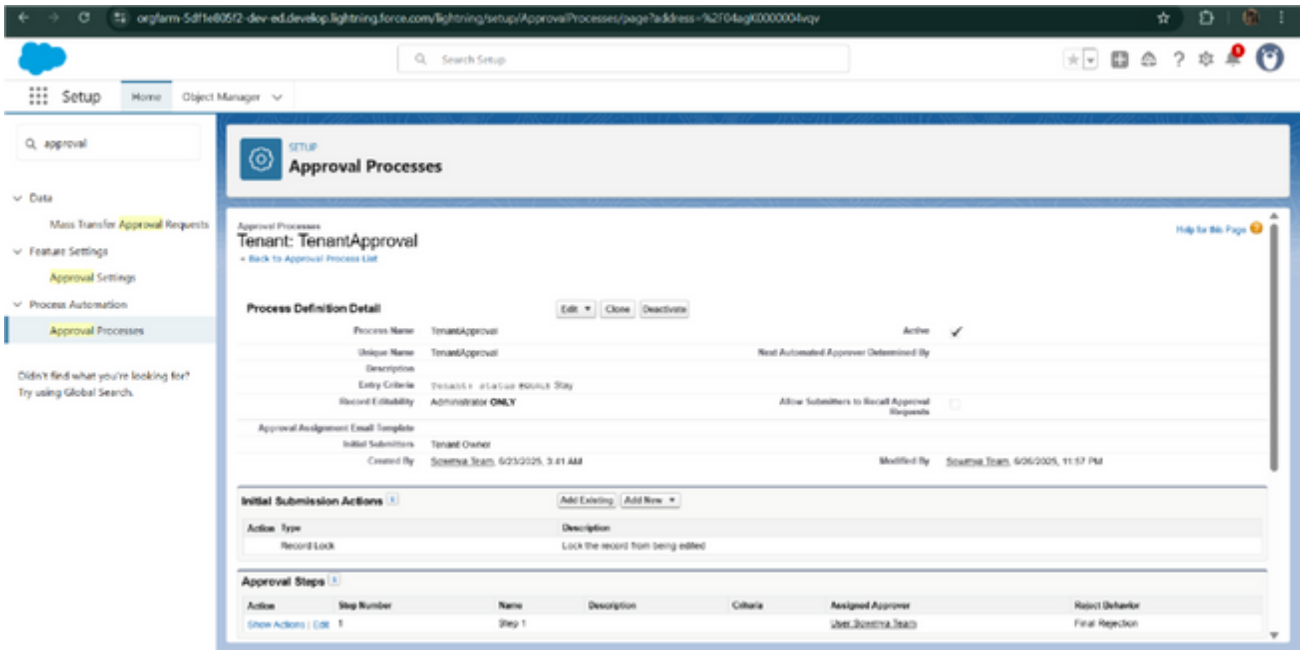
Tenant Email
Available For Use
Template Unique Name
Tenant_Email
Last Used Date
Encoding
Unicode (UTF-8)
Times Used
Author
Sowmya Team [Change]
Description
Created By
Sowmya Team, 6/20/2025, 1:12 AM
Modified By
Sowmya Team, 6/20/2025, 1:12 AM
Email Template
Send Test and Verify Merge Fields
Subject
Urgent: 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.

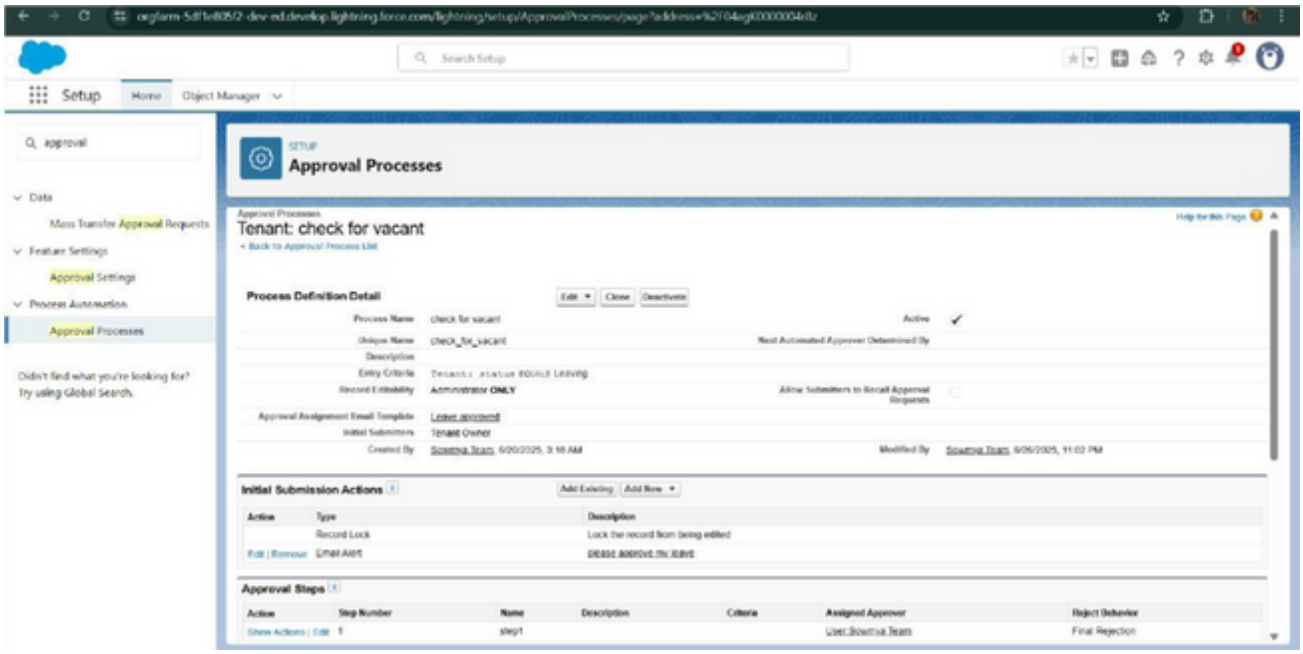


- Approval Process creation

For Tenant Leaving:

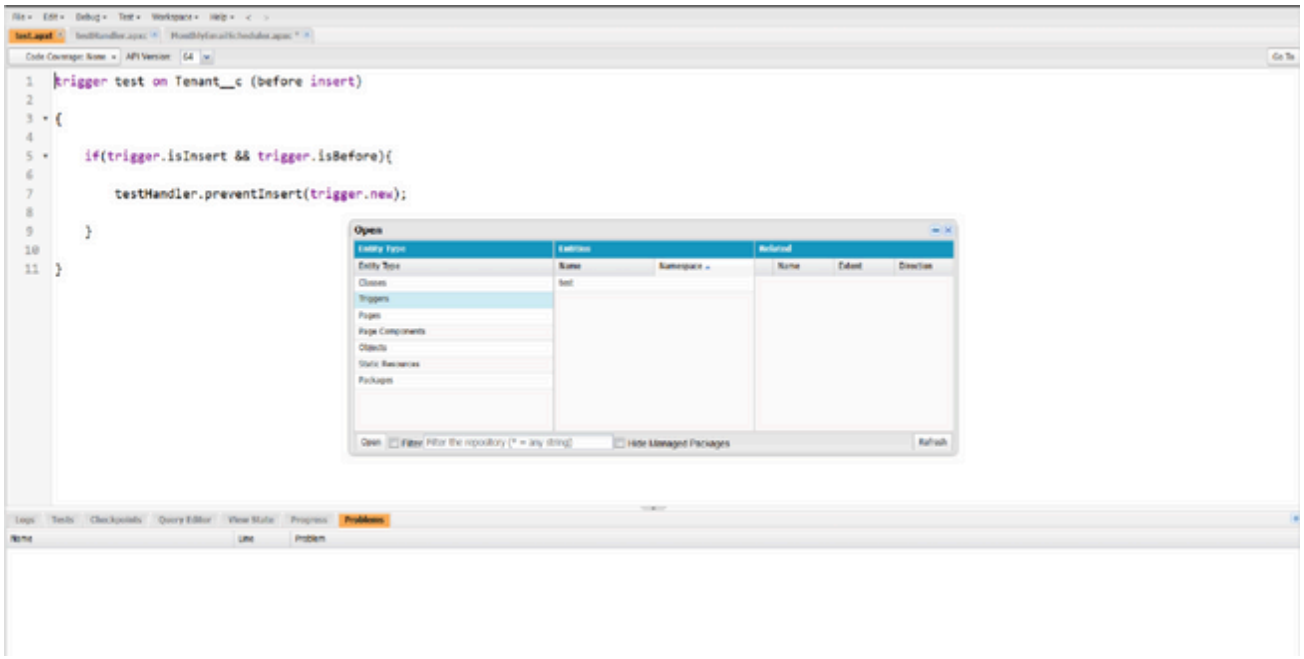


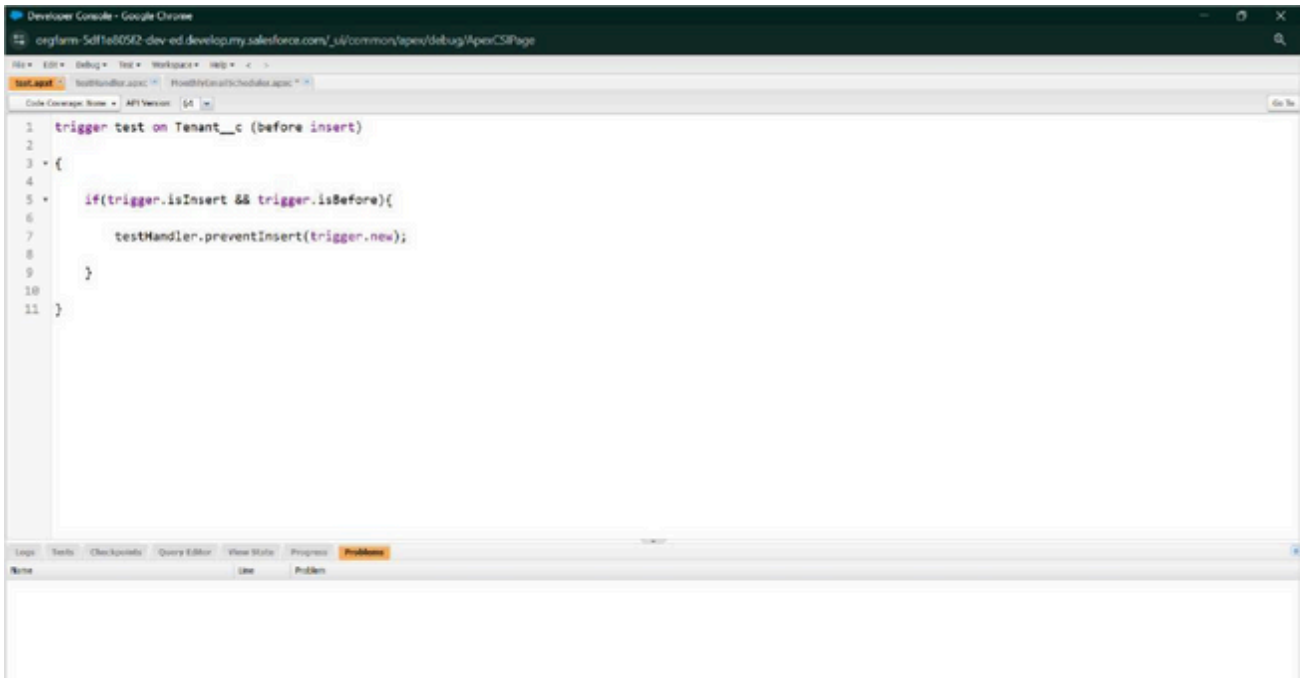
For Check for Vacant:



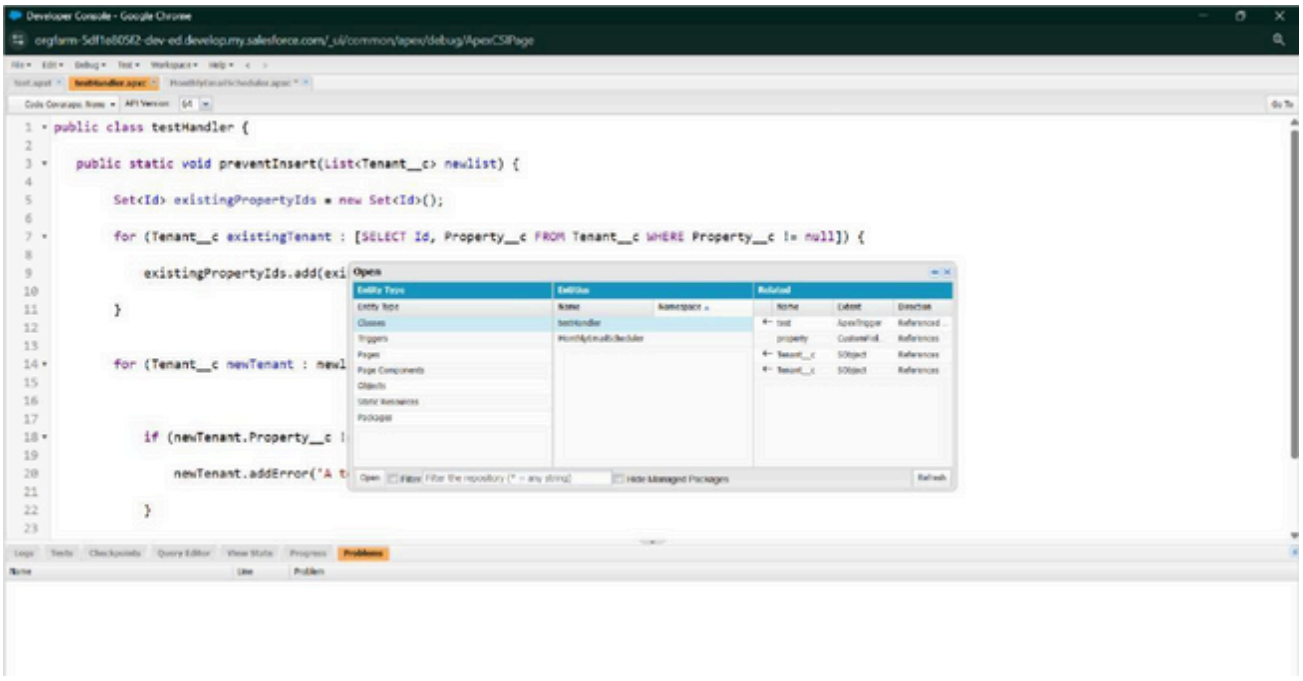
- Apex Trigger

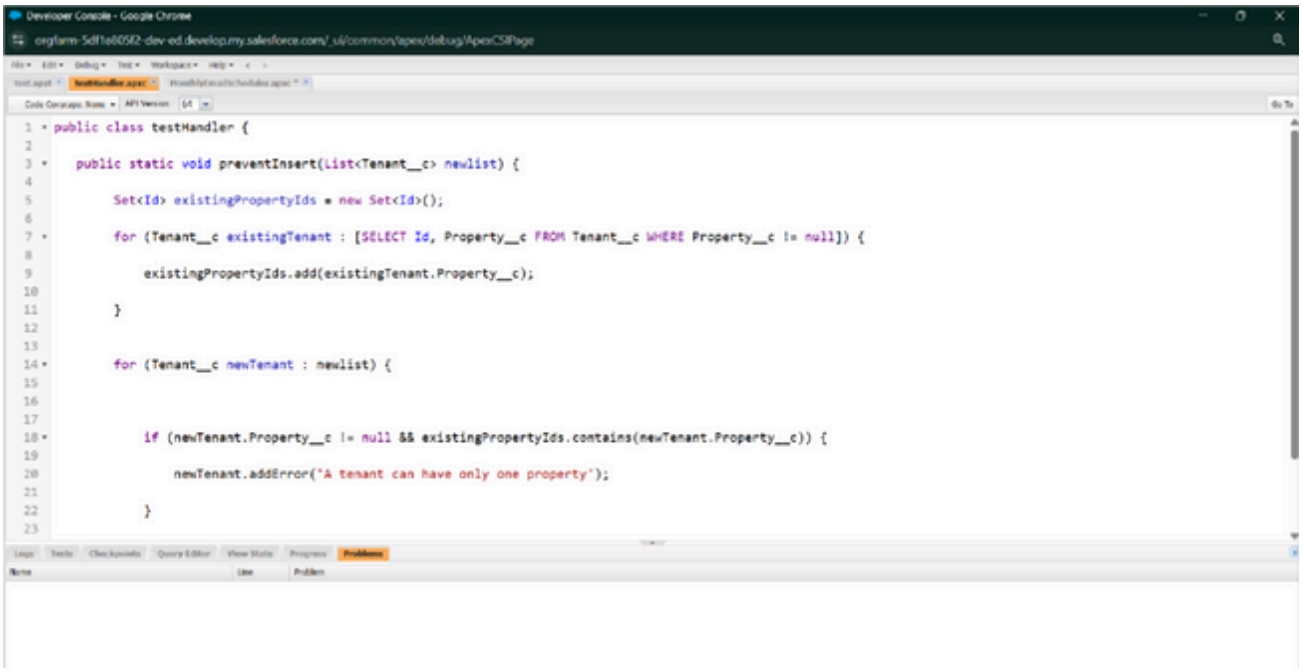
Create an Apex Trigger



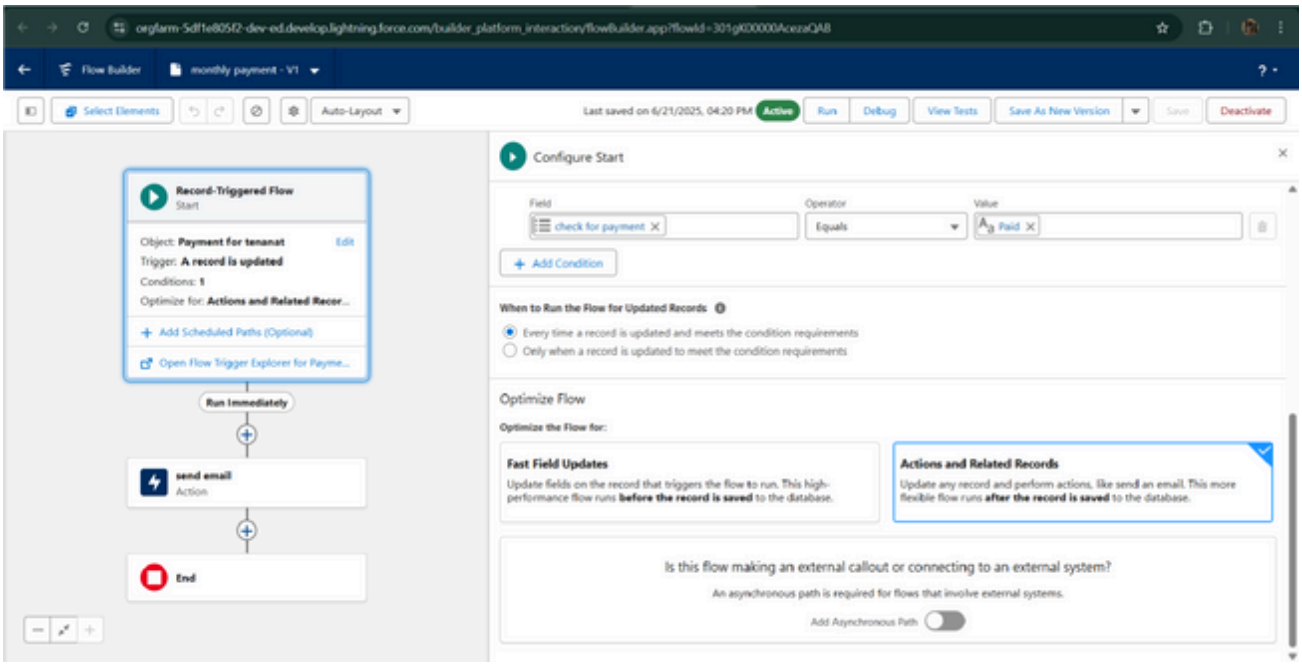


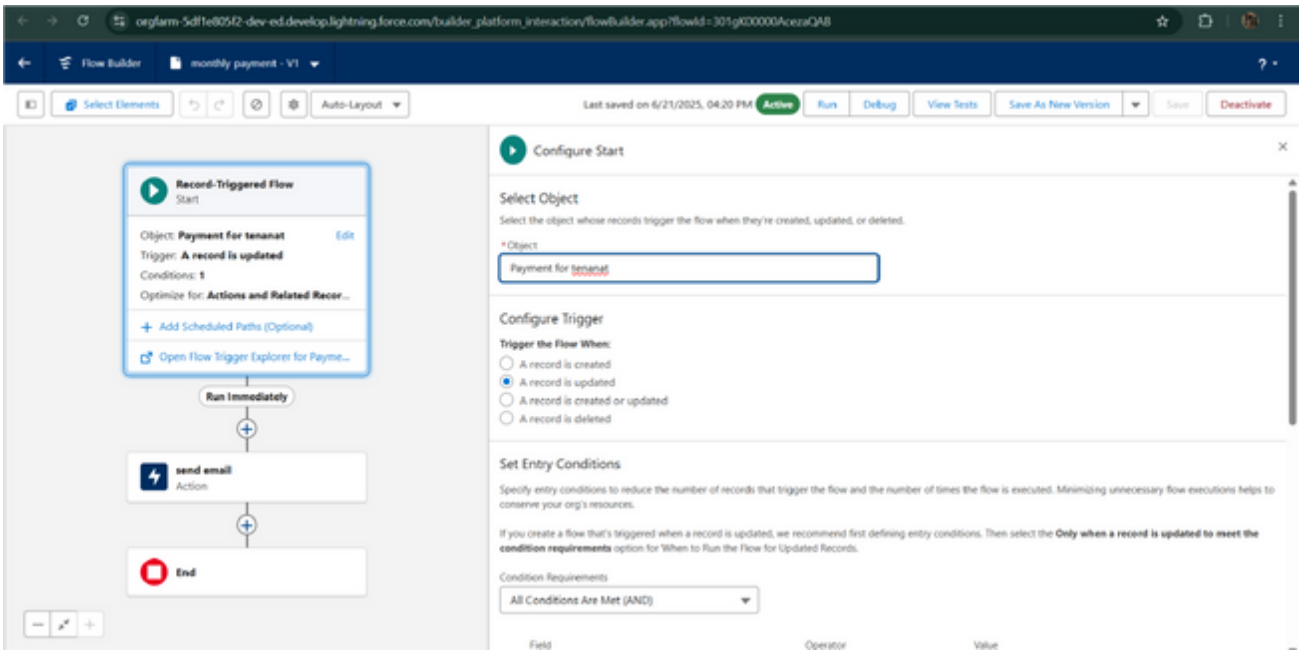
Create an Apex Handler class


Developer Console - Google Chrome
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(exi
}
for (Tenant__c newTenant : newl
if (newTenant.Property__c
newTenant.addError('A t
}
Open


Developer Console - Google Chrome
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');
}

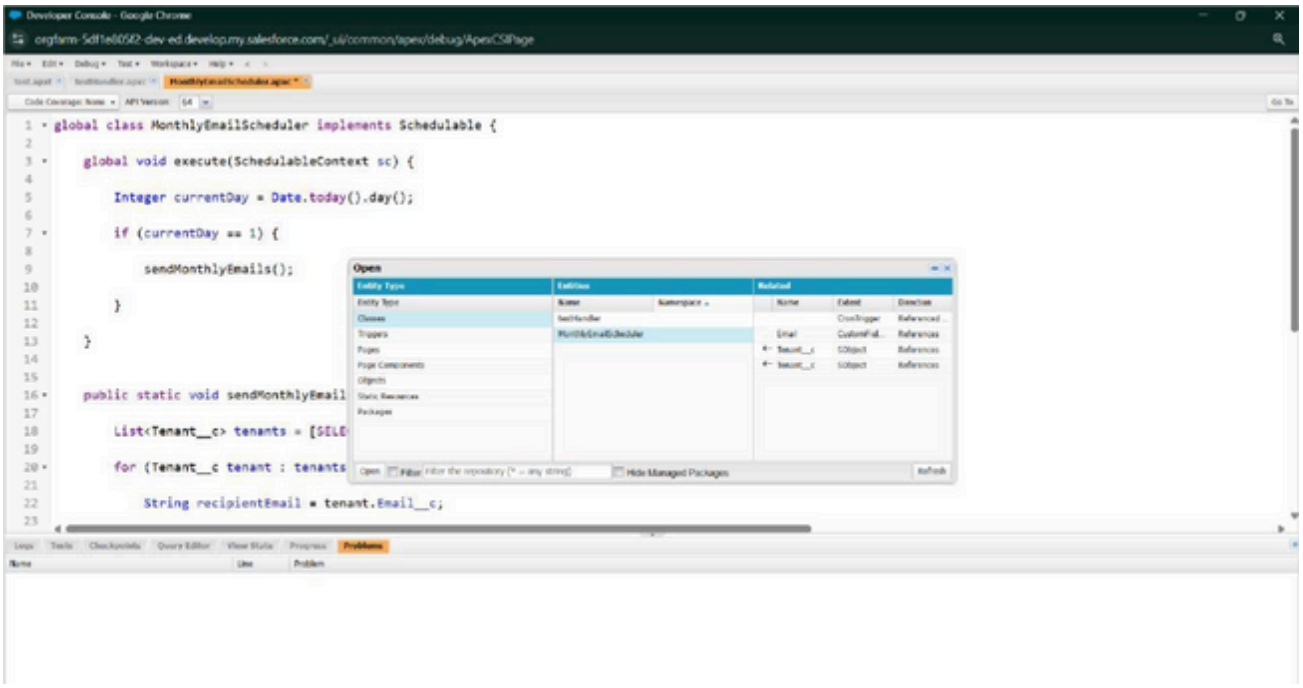
- FLOWS

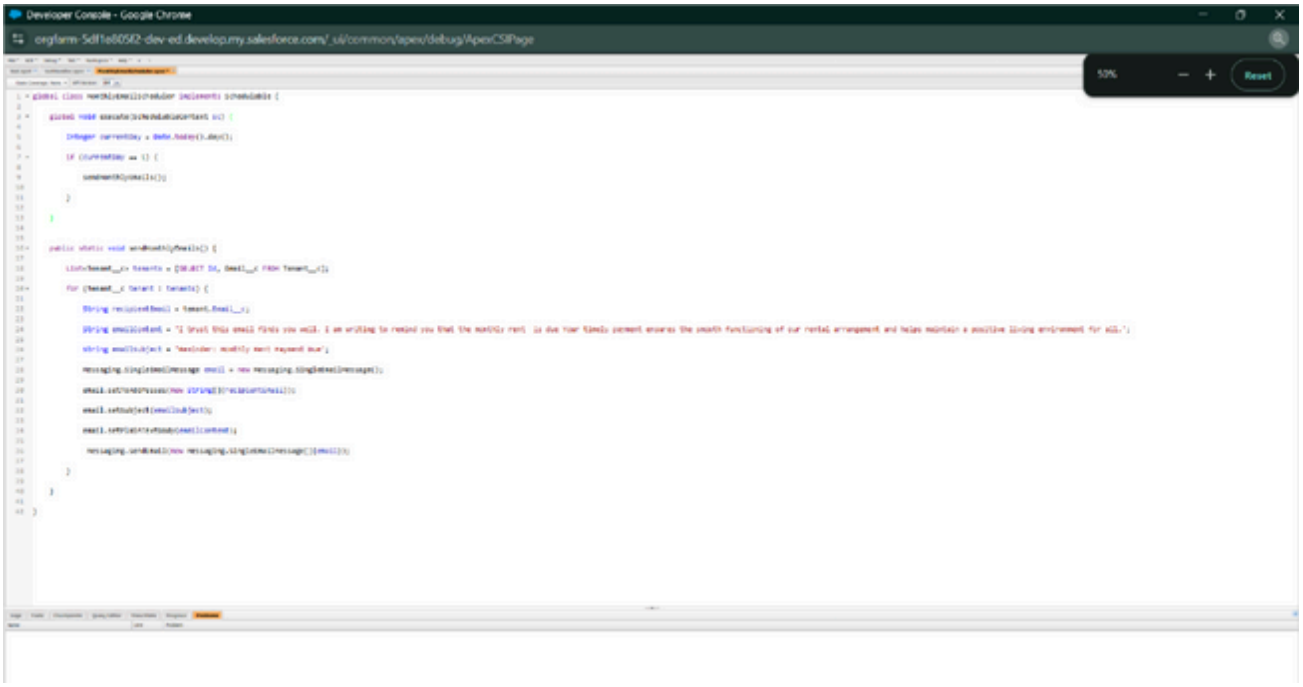




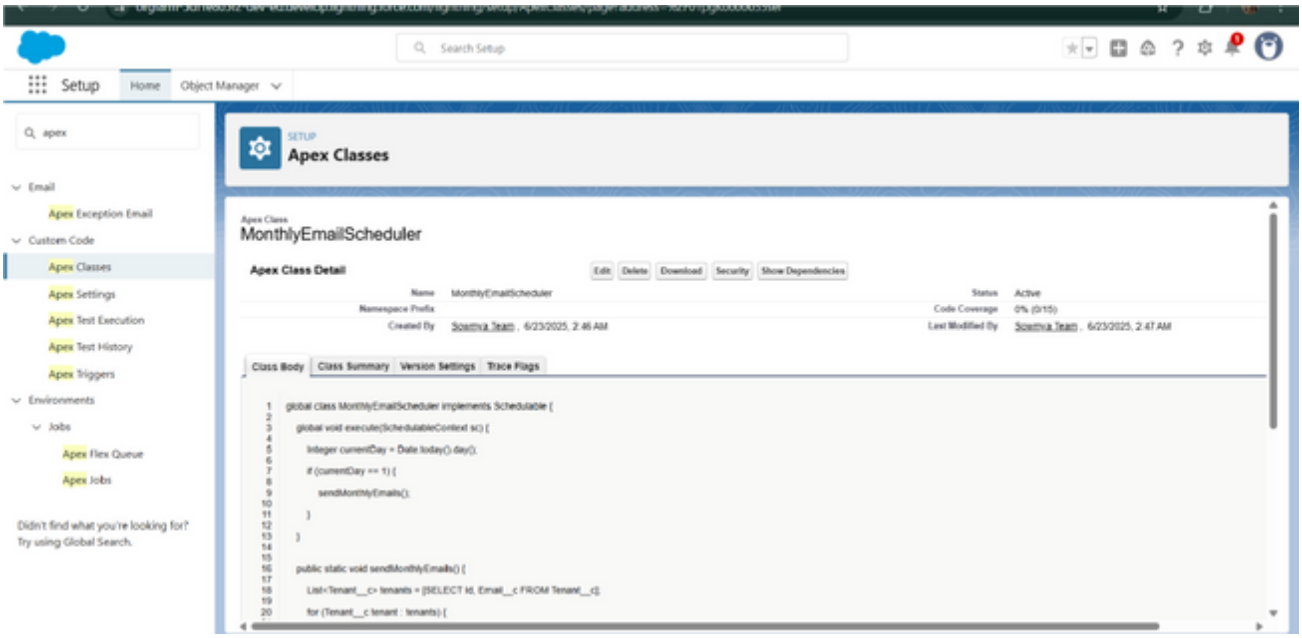
- Schedule class:

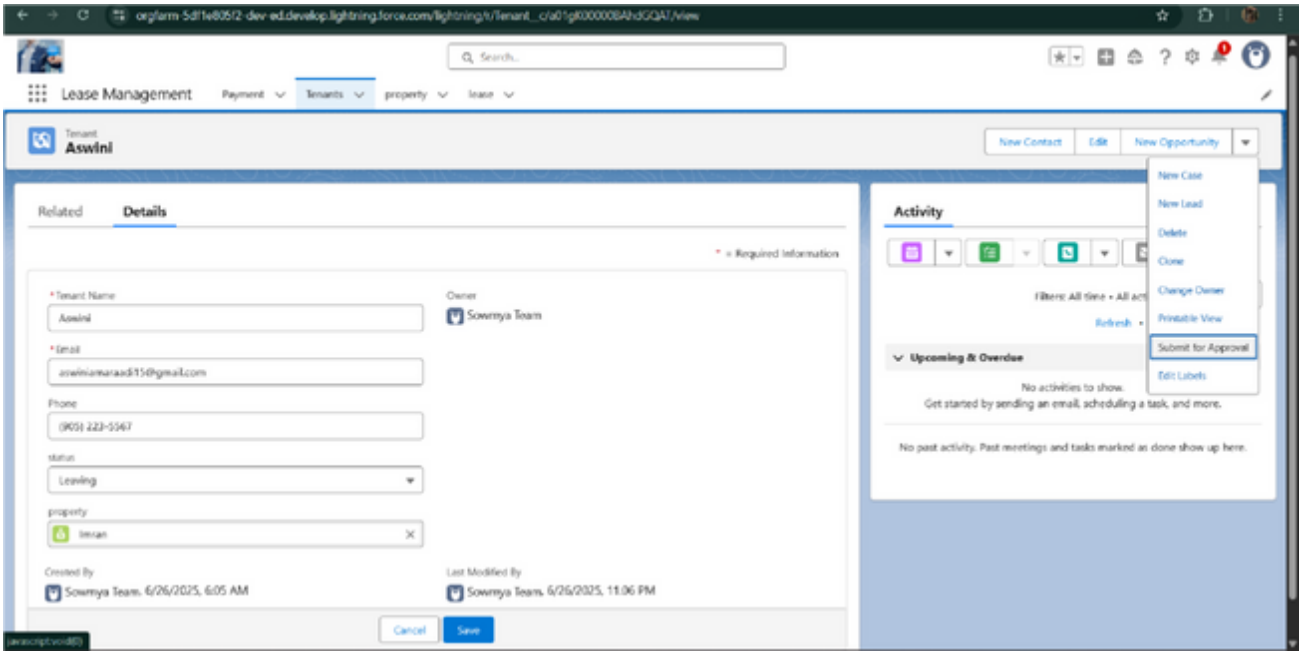
Create an Apex Class

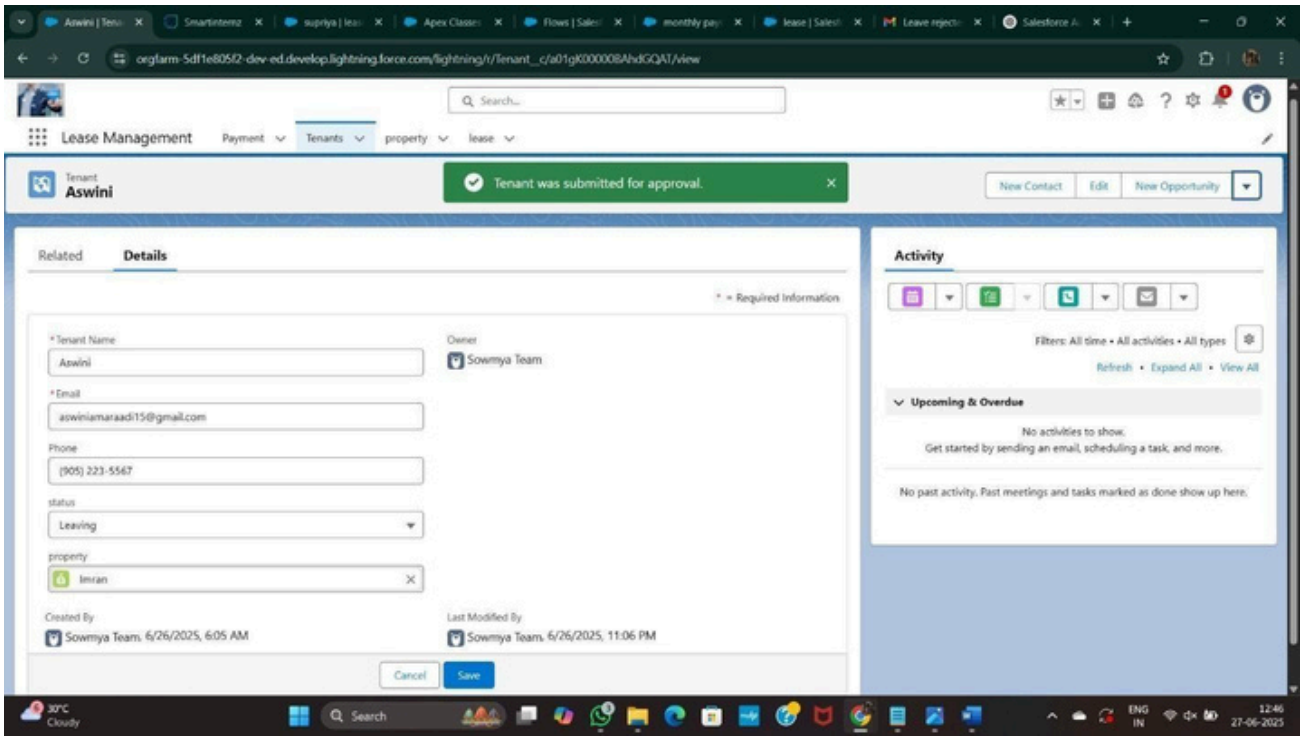


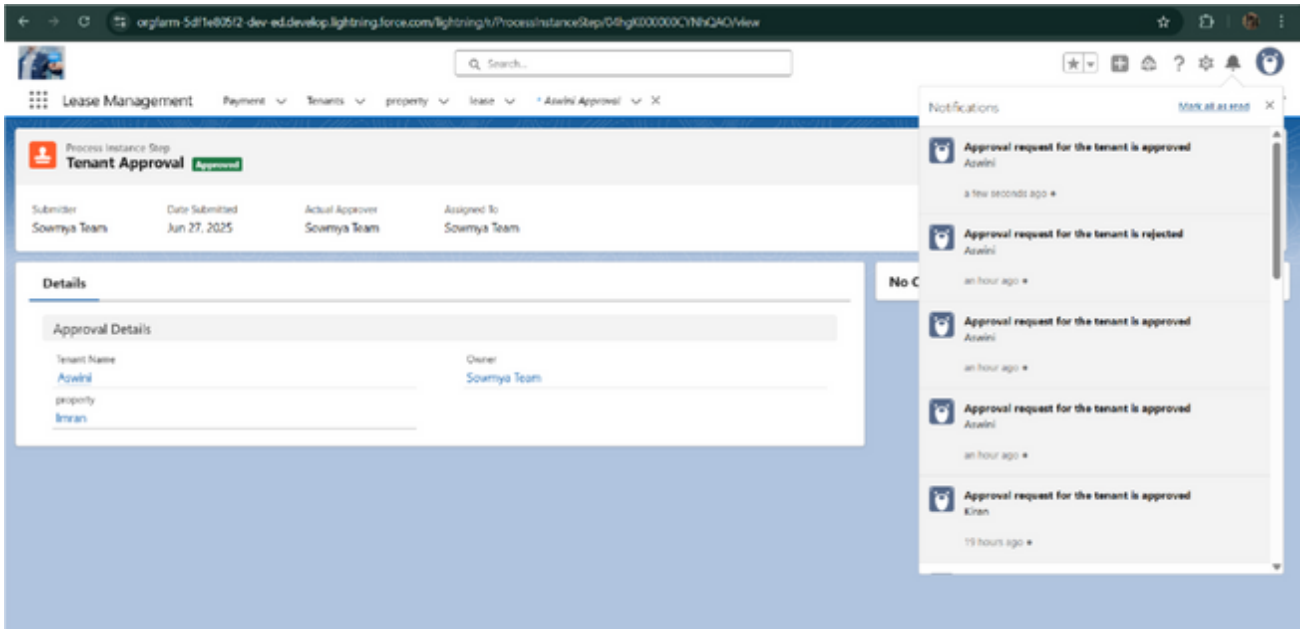


Schedule Apex class


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
Apex Class Detail
Edit
Delete
Download
Security
Show Dependencies
Name
MonthlyEmailScheduler
Namespace Prefix
Created By
Sowmya Team , 6/23/2025, 2:46 AM
Status
Active
Code Coverage
0% (0/15)
Last Modified By
Sowmya Team , 6/23/2025, 2:47 AM
Class Body
Class Summary
Version Settings
Trace Flags
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) {


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
aswiniamaraad9154@gmail.com
Phone
(903) 223-5567
status
Leasing
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
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.

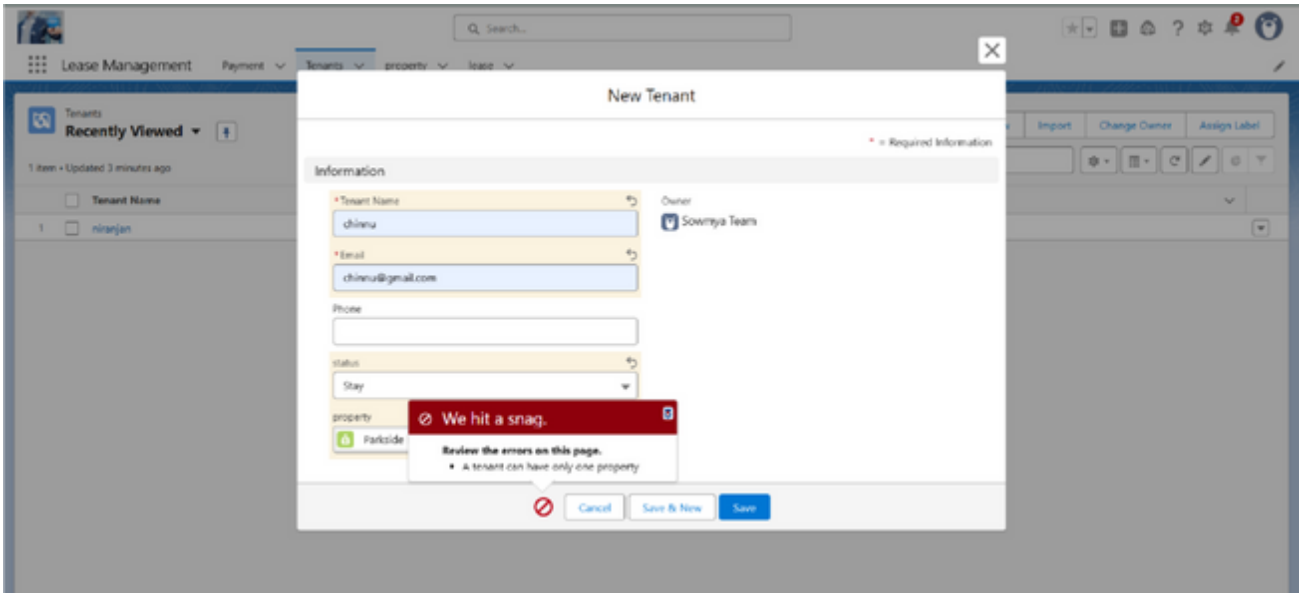

Lease Management
Payment
Tenants
property
lease
Tenant
Aswini
Tenant was submitted for approval.
New Contact
Edit
New Opportunity
Related
Details
* = Required Information
*Tenant Name
Aswini
Owner
Sowmya Team
*Email
aswiniamaraadi15@gmail.com
Phone
(905) 223-5567
status
Leaving
property
Imran
Created 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.


Lease Management
Payment
Tenants
property
lease
Aswini Approval
Process Instance Step
Tenant Approval
Approved
Submitter
Sowmya Team
Date Submitted
Jun 27, 2025
Actual Approver
Sowmya Team
Assigned To
Sowmya Team
Details
Approval Details
Tenant Name
Aswini
Owner
Sowmya Team
property
Imran
Notifications
Mark all as read
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
Kiran
19 hours ago

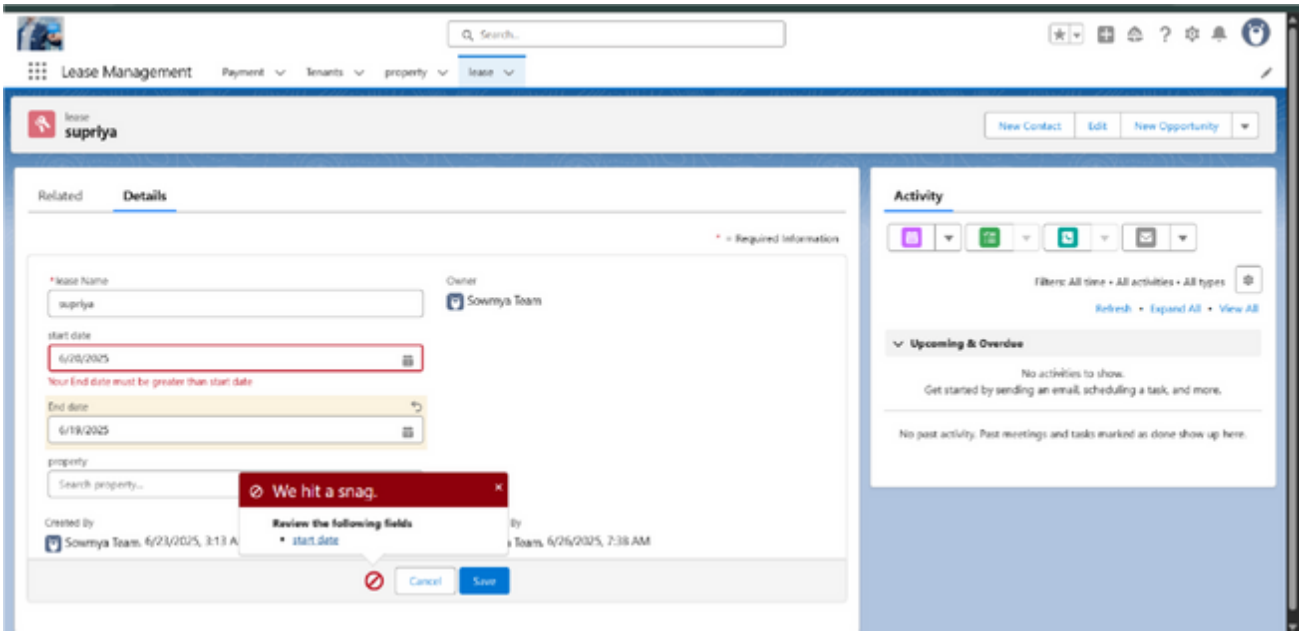
FUNCTIONAL AND PERFORMANCE TESTING

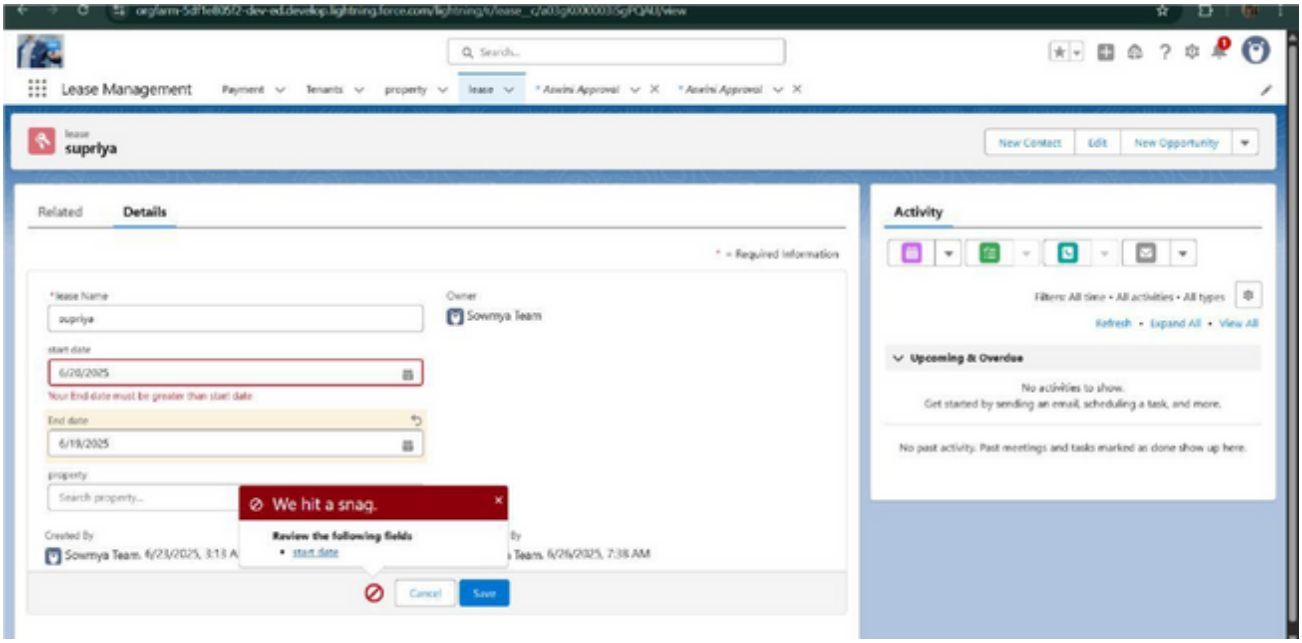
Performance Testing

- Trigger validation by entering duplicate tenant-property records

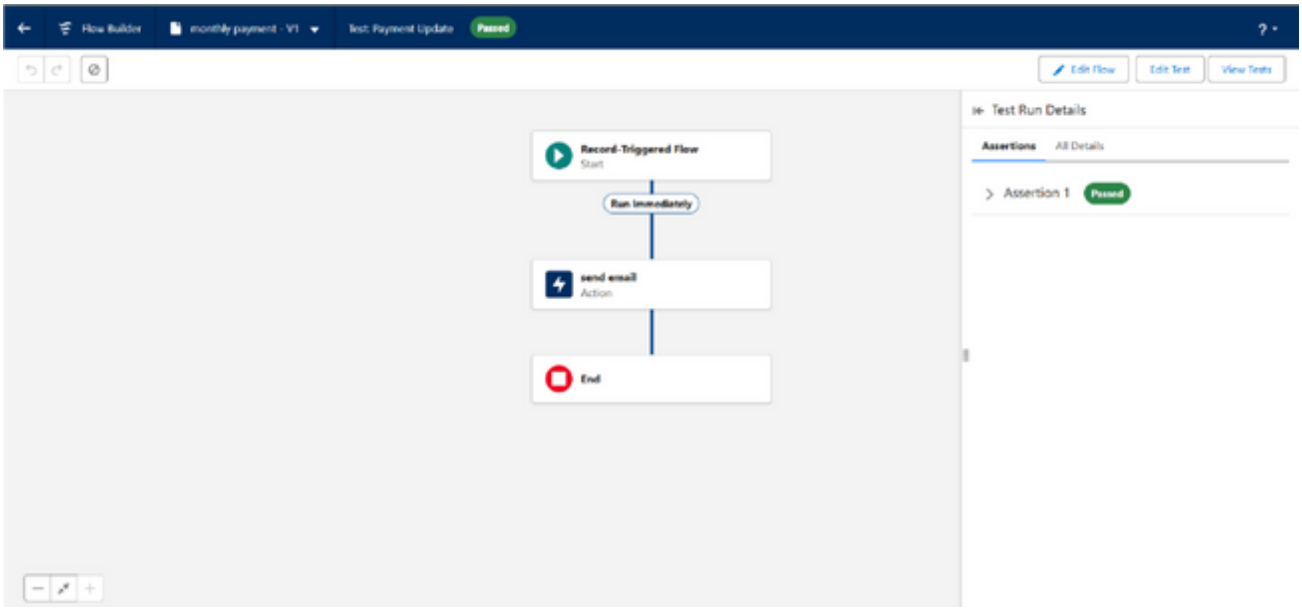


- Validation Rule checking

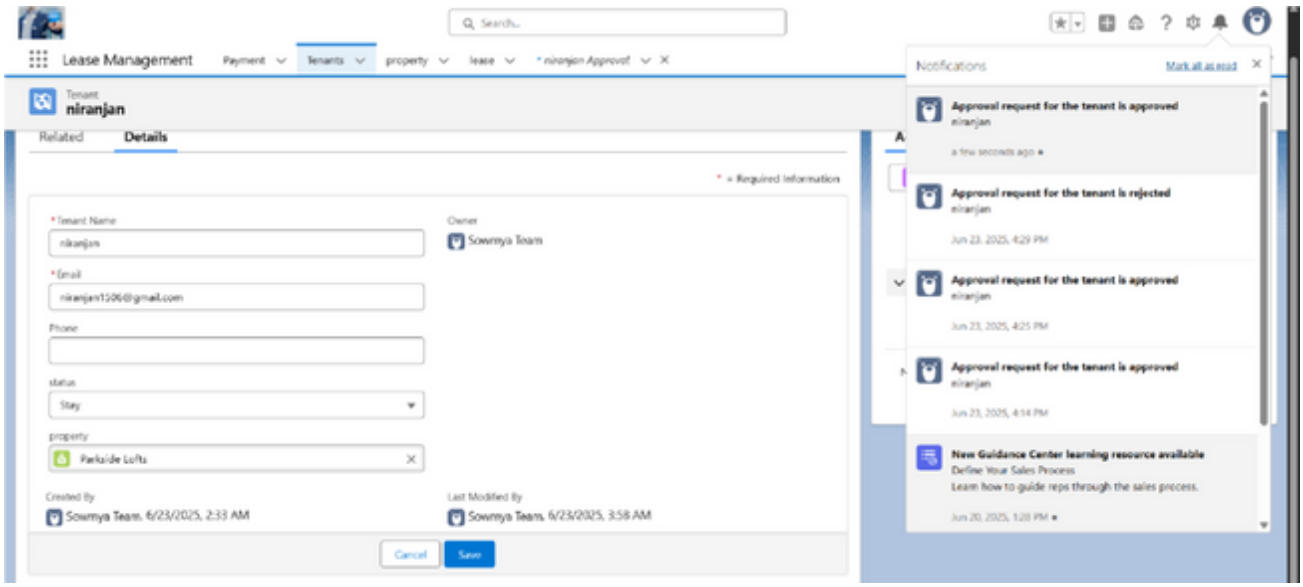


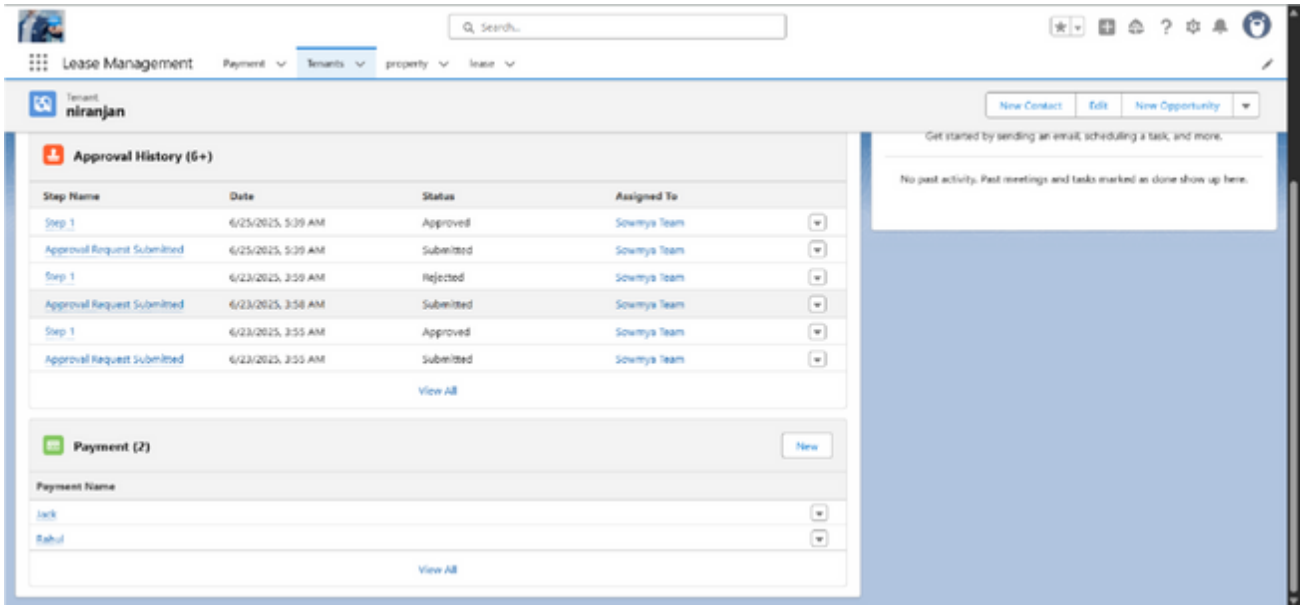


- Test flows on payment update



- Approval process validated through email alerts and status updates

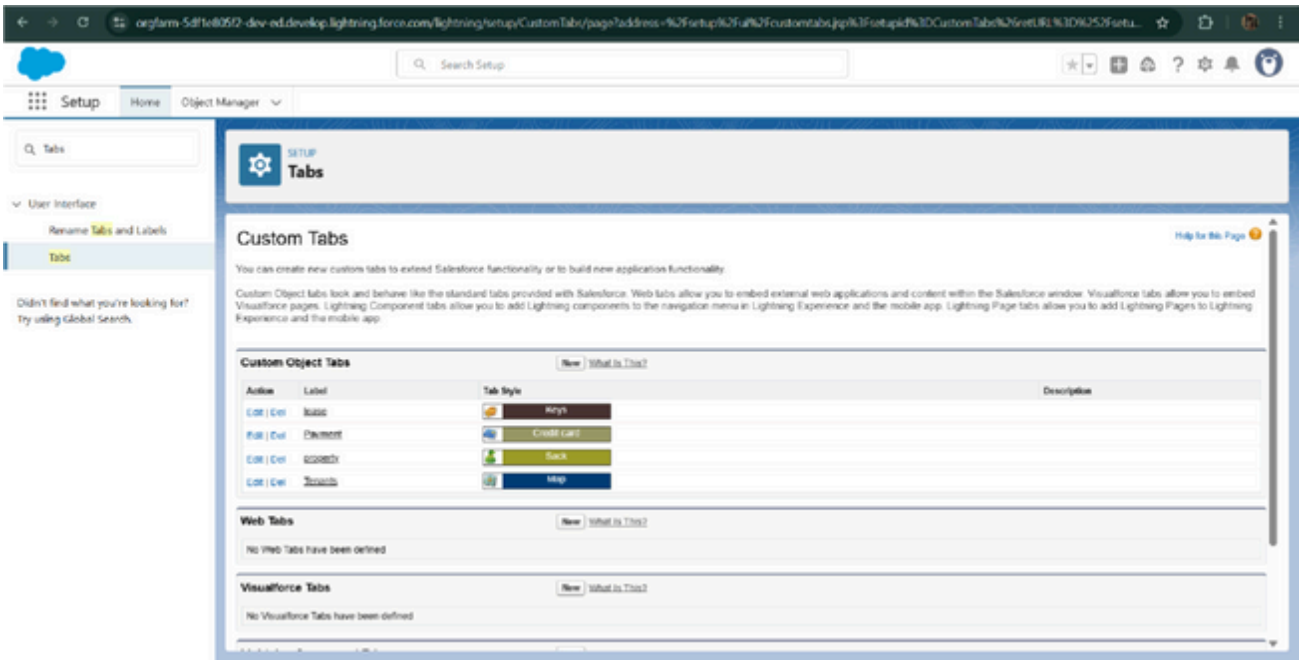

Lease Management
Payment
Tenants
property
lease
niranjan Approval
Tenant
niranjan
Related
Details
* = Required Information
*Tenant Name
niranjan
Owner
Sowmya Team
*Email
niranjan1506@gmail.com
Phone
status
Stay
property
Parkside Lofts
Created By
Sowmya Team, 6/23/2025, 2:33 AM
Last Modified By
Sowmya 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, 1:28 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.

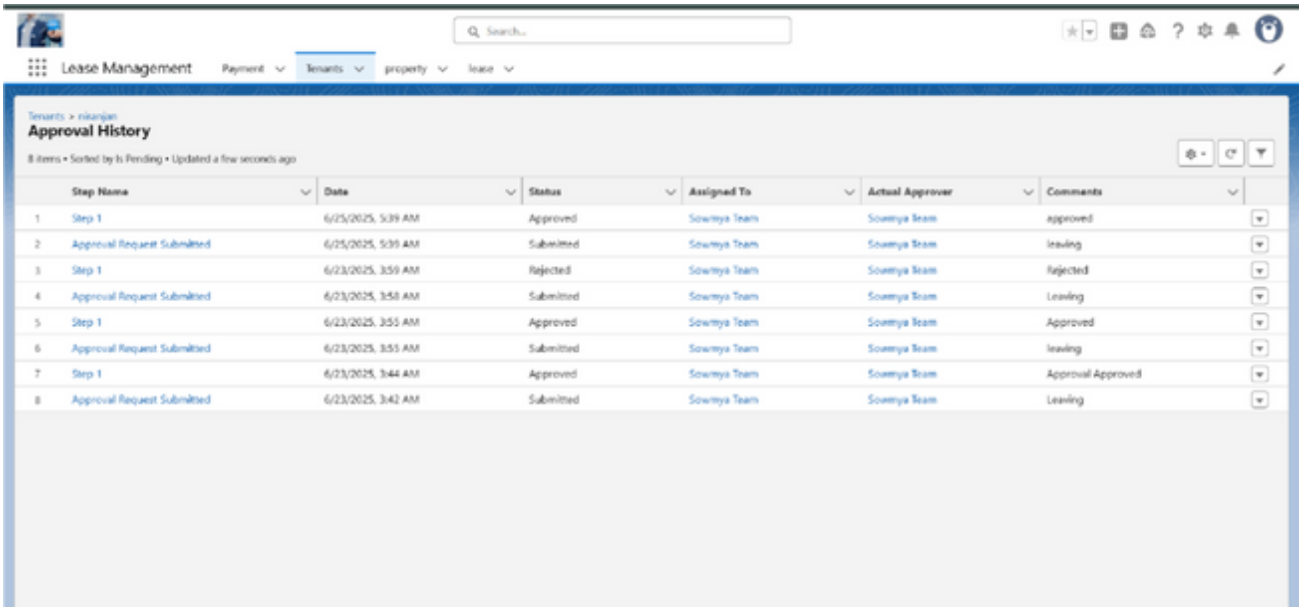
RESULTS

Output Screenshots

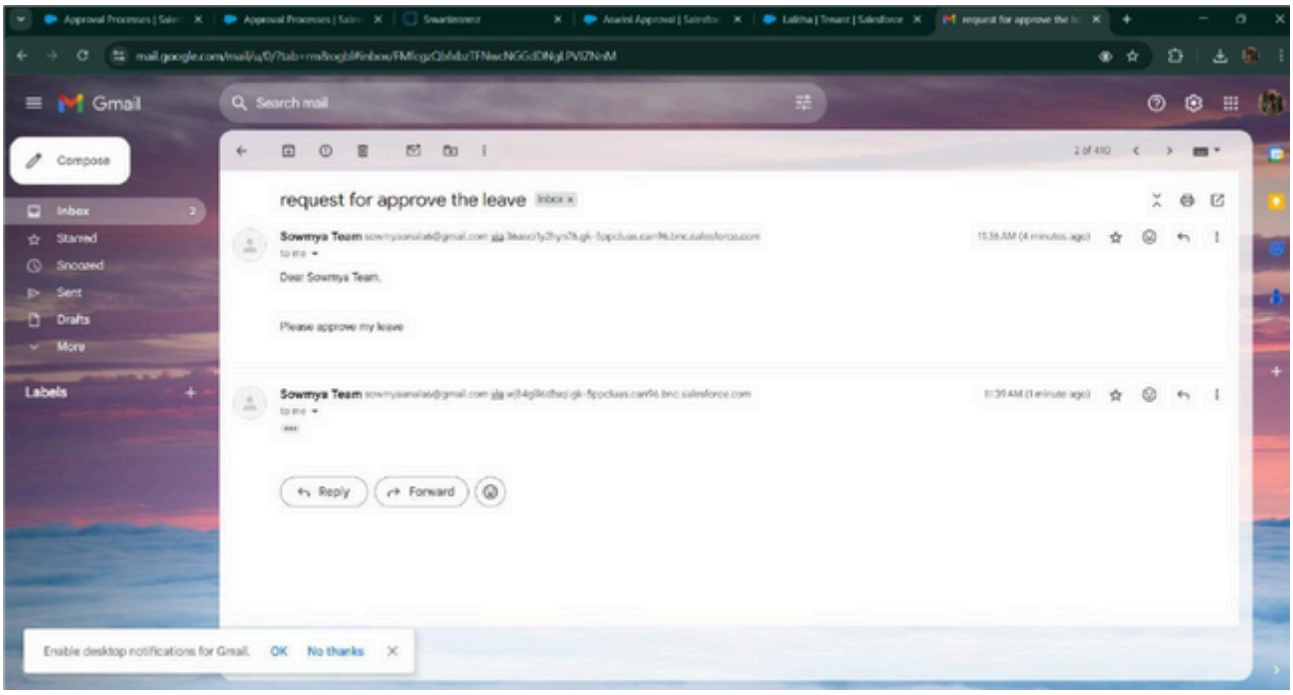
- Tabs for Property, Tenant, Lease, Payment



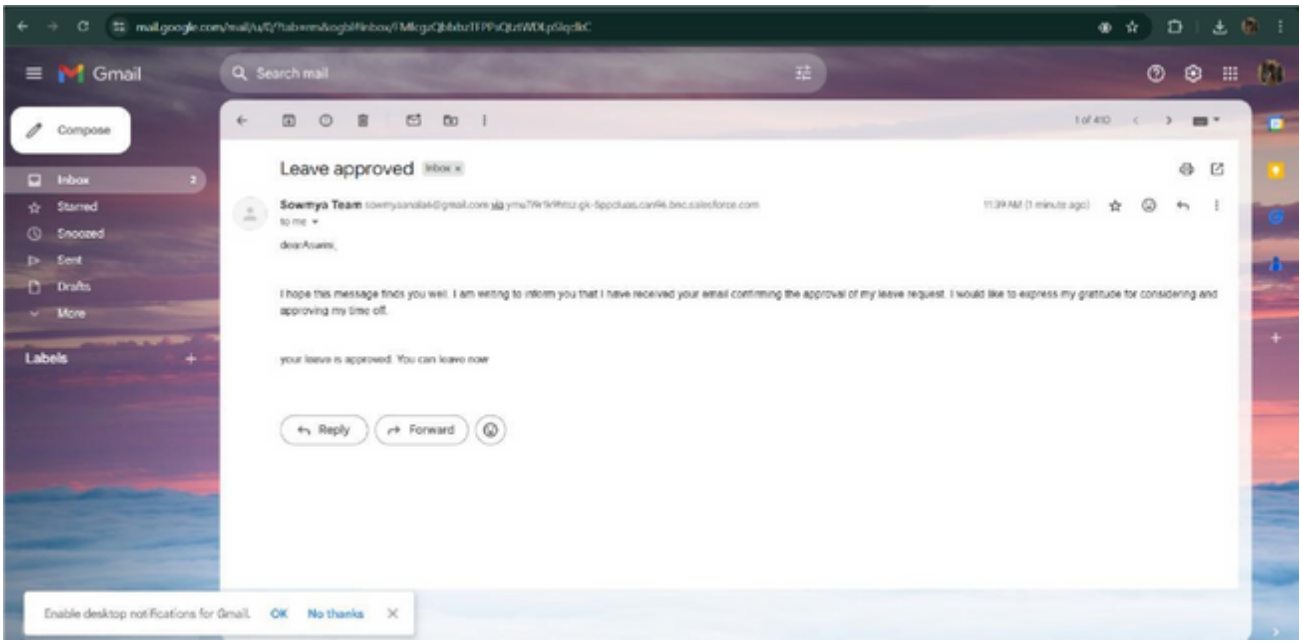
- Email alerts



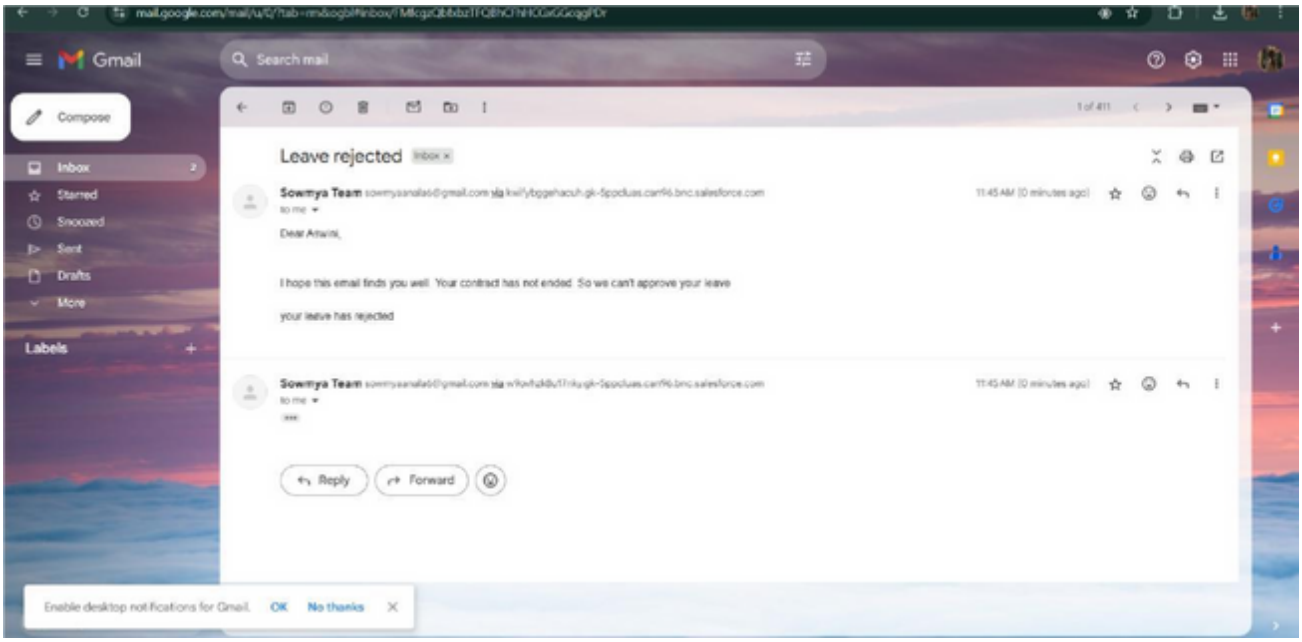
- Request for approve the leave



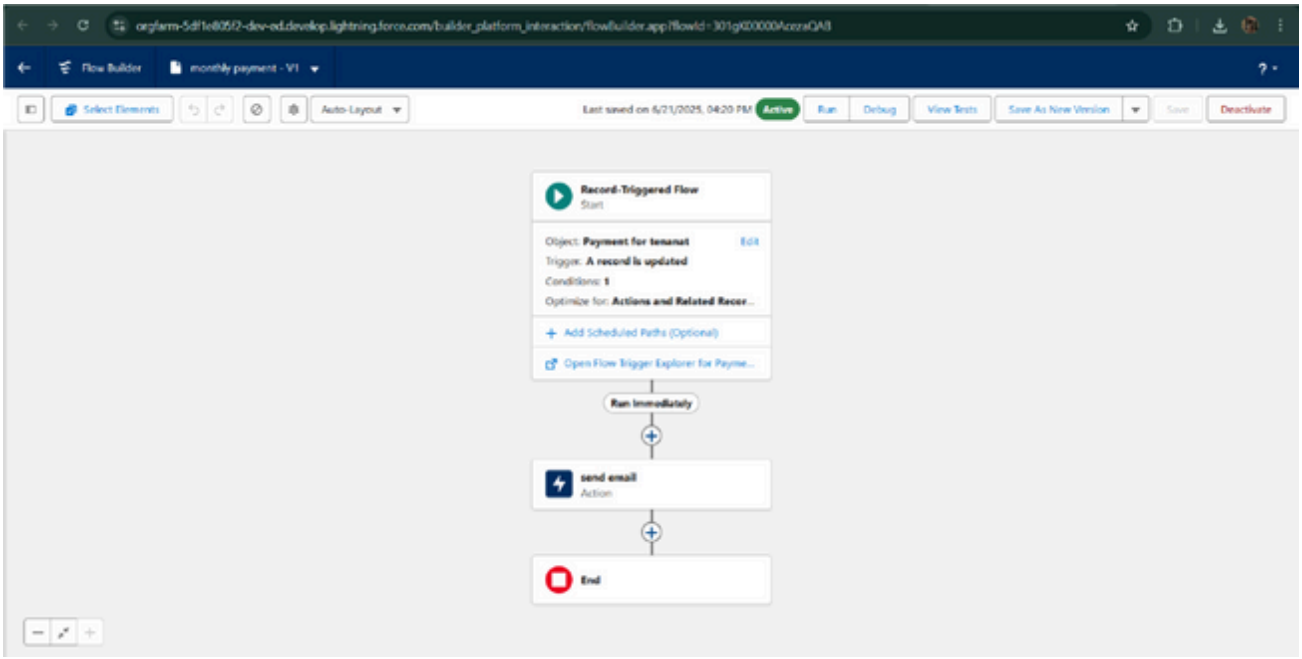
- Leave approved



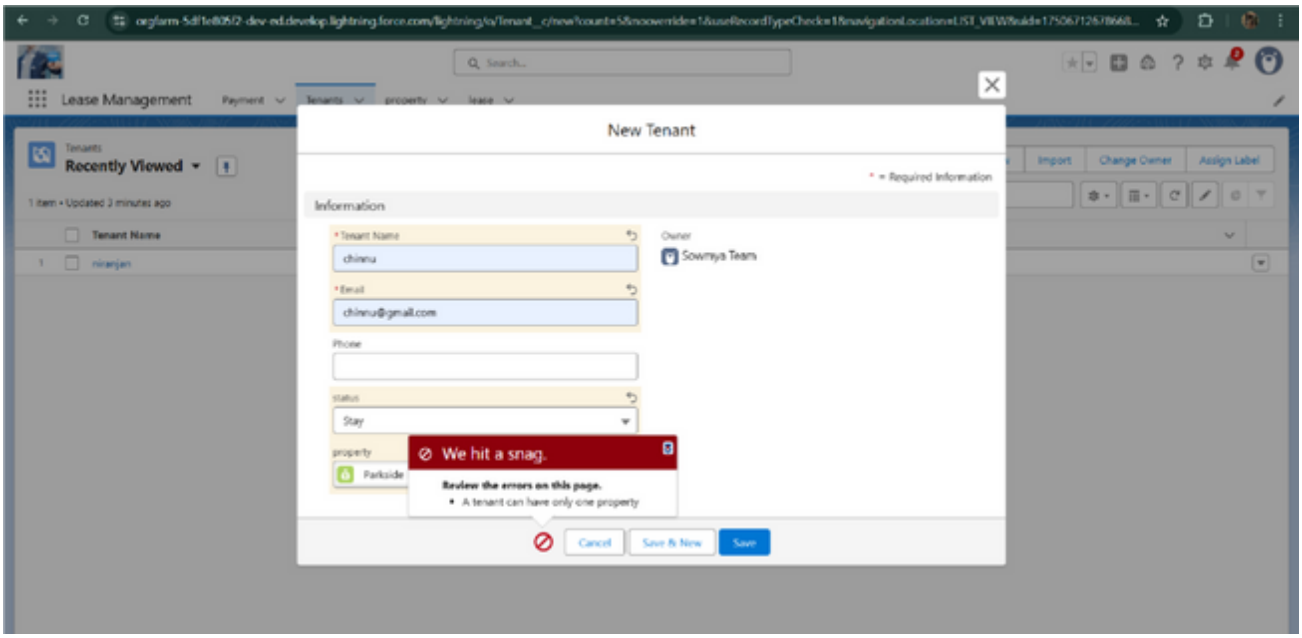
- Leave rejected



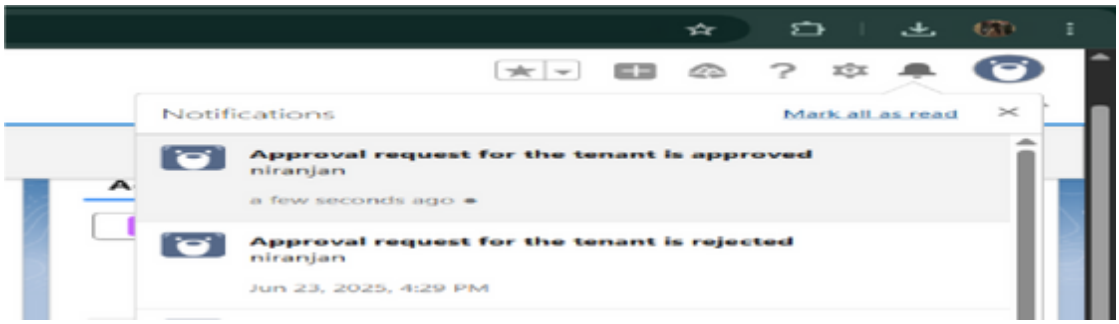
- Flow runs



- 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');

}

}

}

}

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}); } } }

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.