LEASE MANAGEMENT

COLLEGE NAME : L.R.G. GOVT. ARTS' COLLEGE FOR WOMEN

COLLEGE CODE : bru07

TEAM ID: NM2025TMID27996

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1.INTRODUCTION

Lease Management helps organizations manage lease agreements efficiently, tracking payments, renewals, and compliance.

1.1 Project Overview

This project automates lease processes, allowing users to:

- **Track lease terms and renewals**
- **Manage tenant payments**
- **Generate reports for compliance**

It provides a centralized system to reduce manual work and errors, making lease management faster easier.

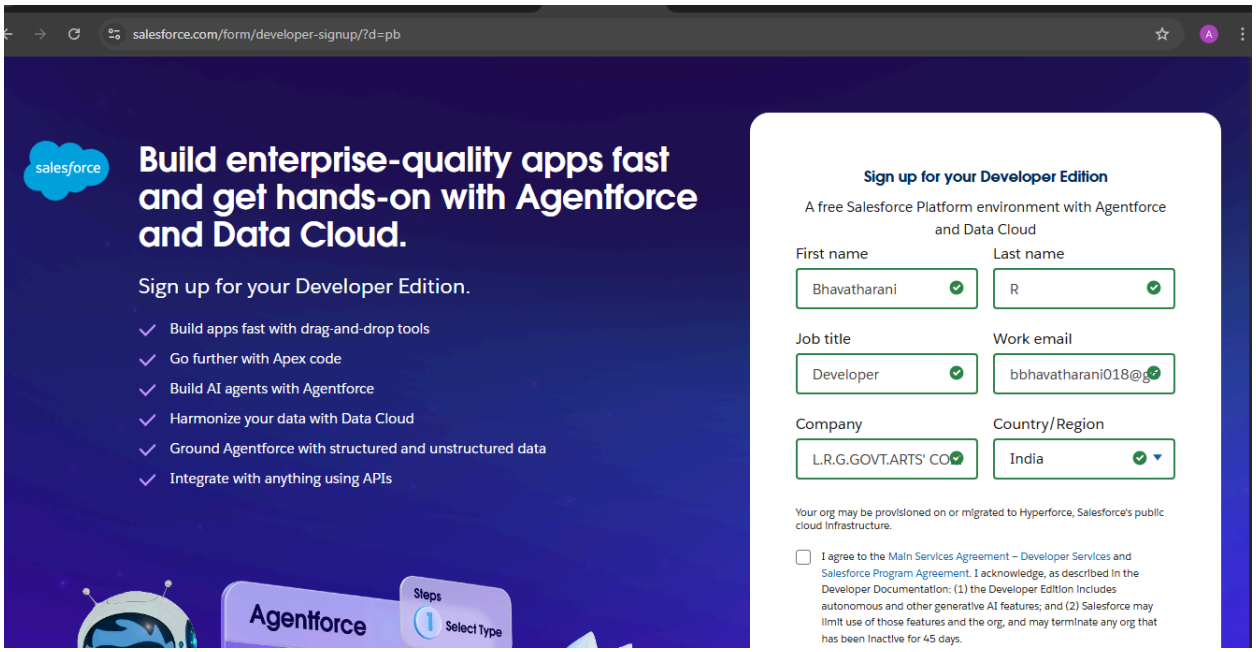
1.2. Purpose

1. **The aim of the Lease Management project is to streamline and digitize lease operations, enabling efficient monitoring of agreements, payments, and renewals. It helps minimize mistakes, save time, and offer a unified platform for managing all lease-related activities.**

DEVELOPMENT PHASE

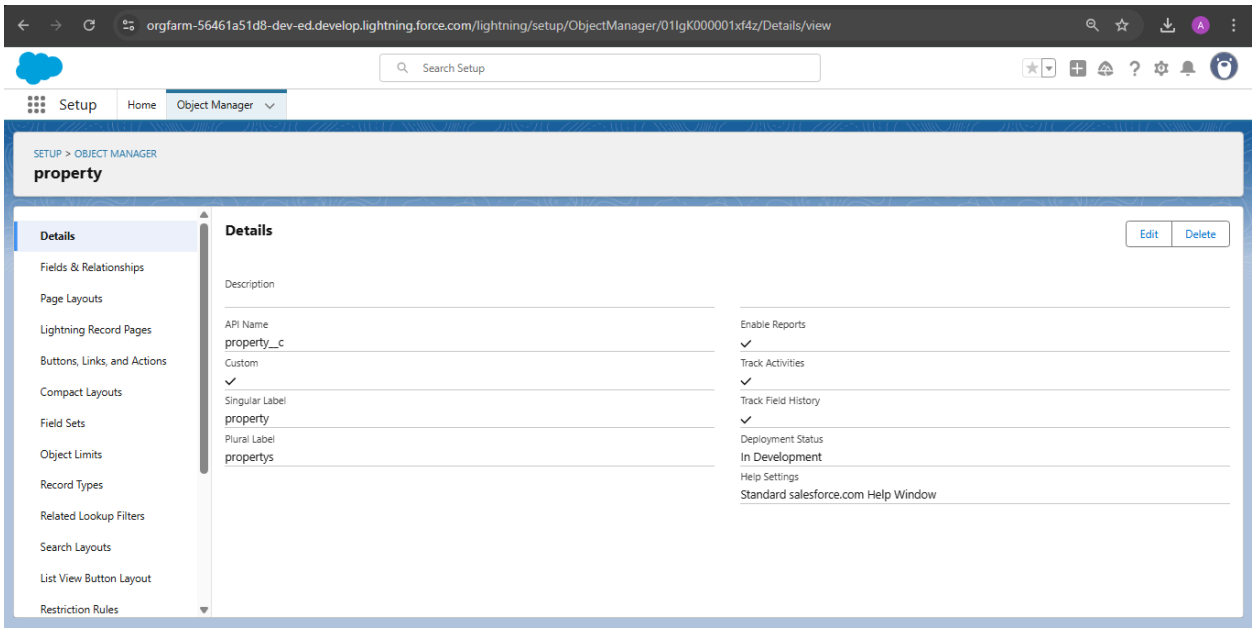
Creating Developer Account

By using this URL - https://developer.salesforce.com/signup

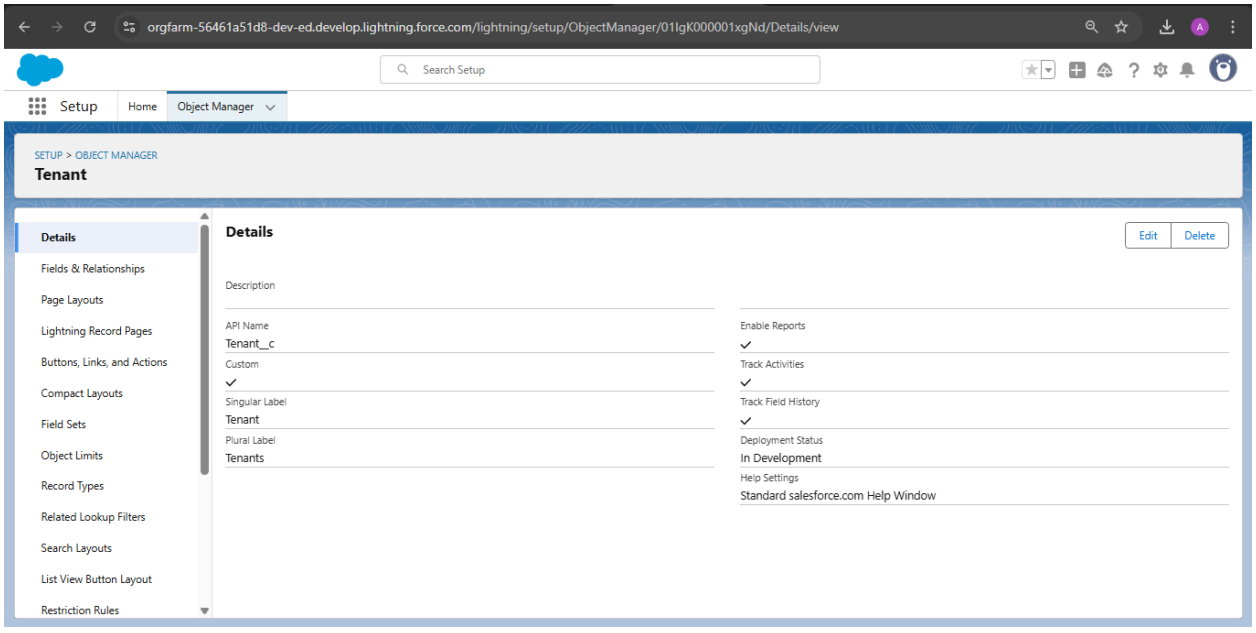


Create objects:

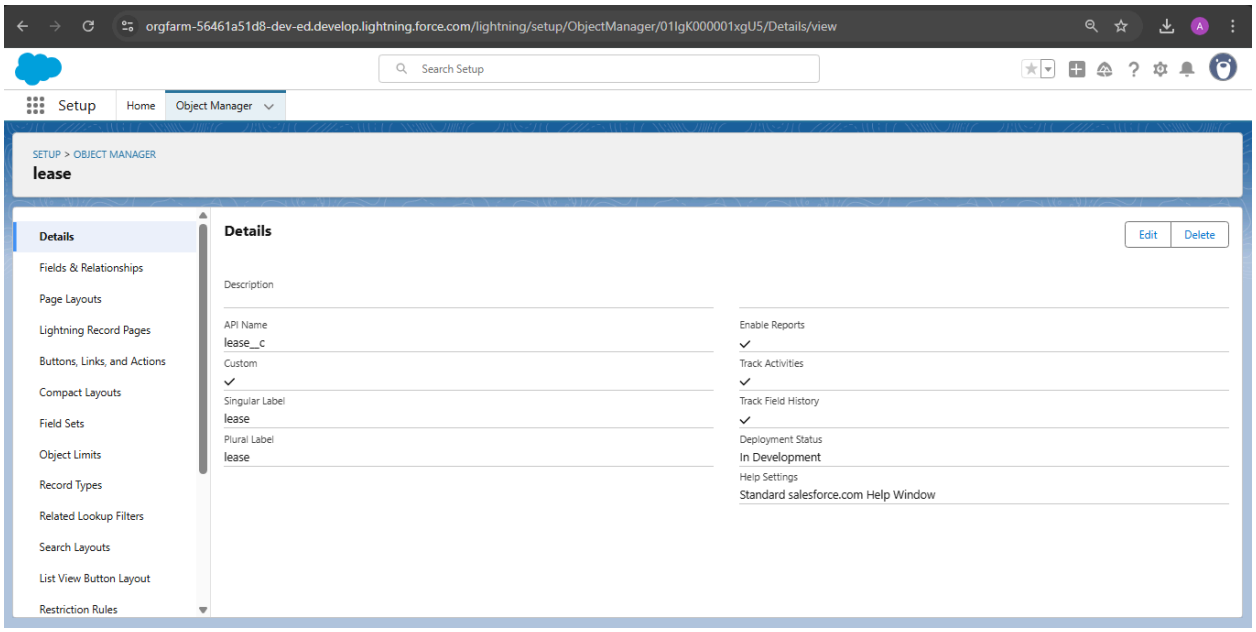
- **Property**



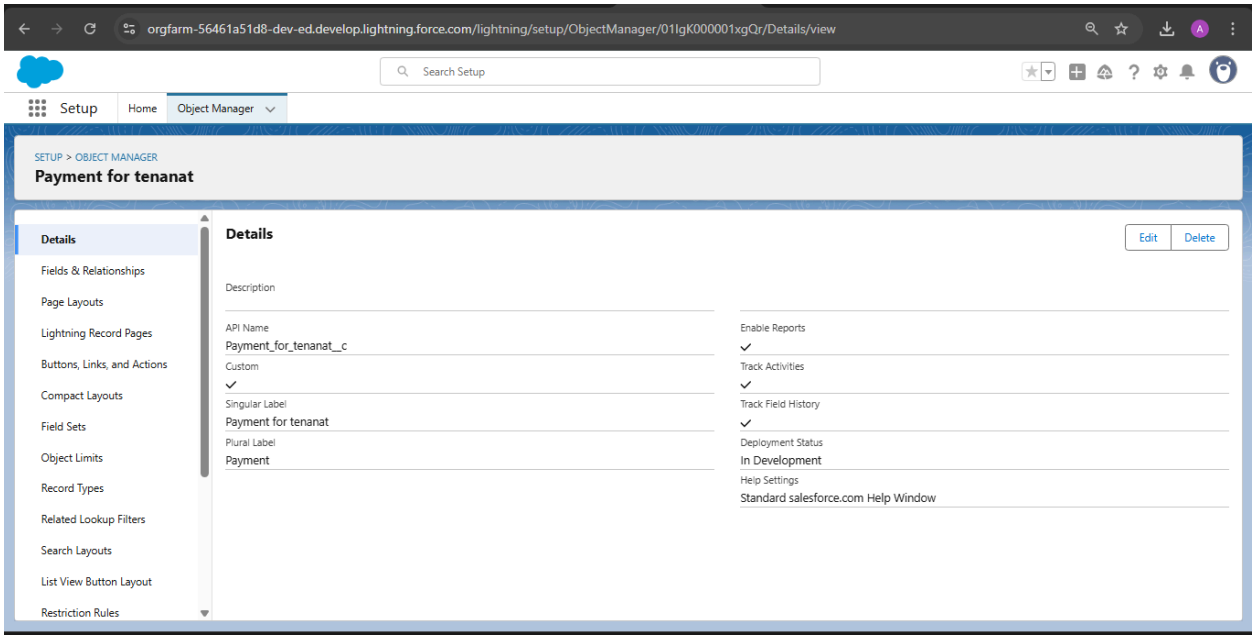
- **Tenant**



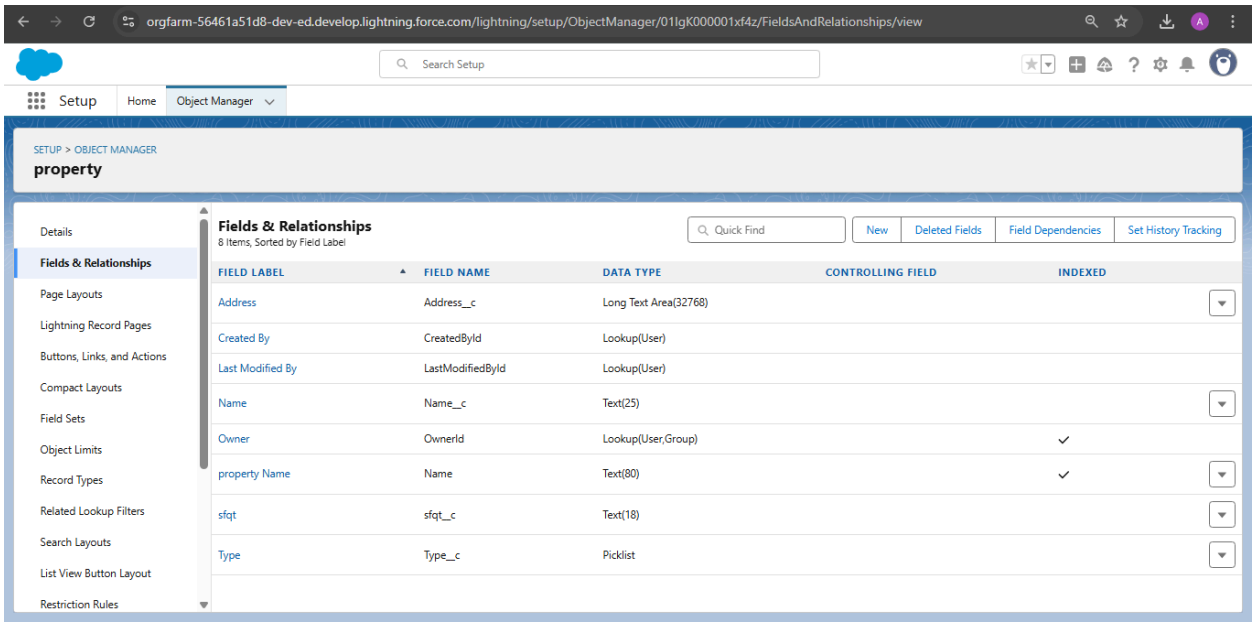
- **Lease**



- **Payment**



- Configured fields and relationships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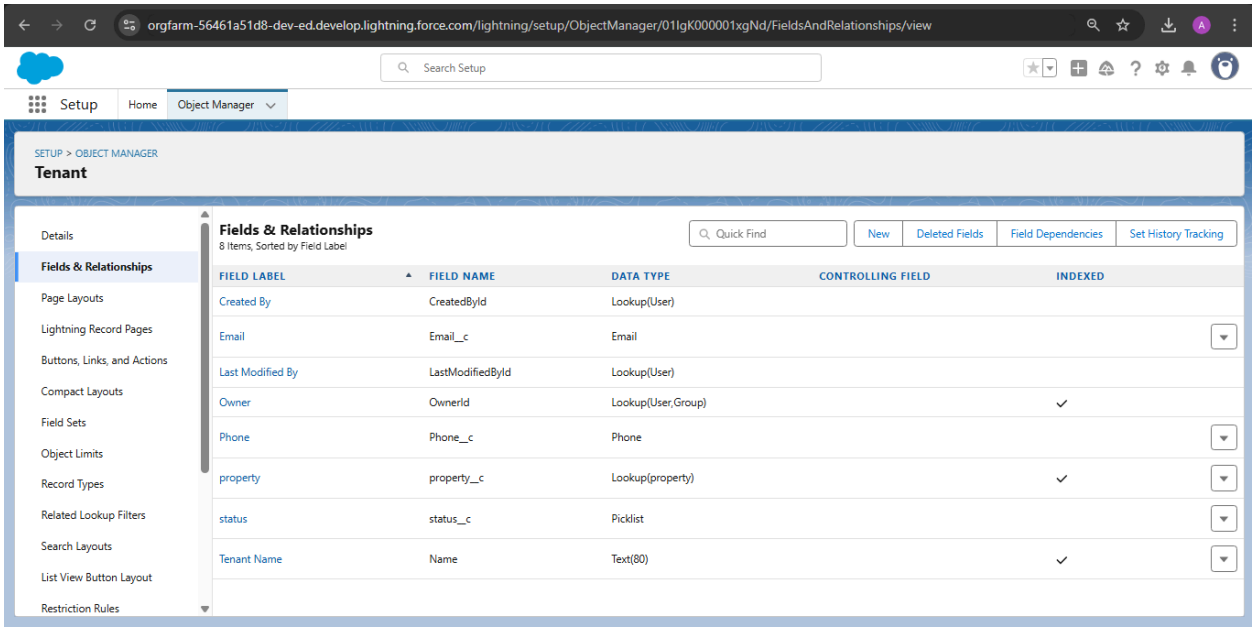
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
property
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Fields & Relationships
8 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 Name
Name
Text(80)
sfqt
sfqt__c
Text(18)
Type
Type__c
Picklist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Search Setup
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Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
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Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
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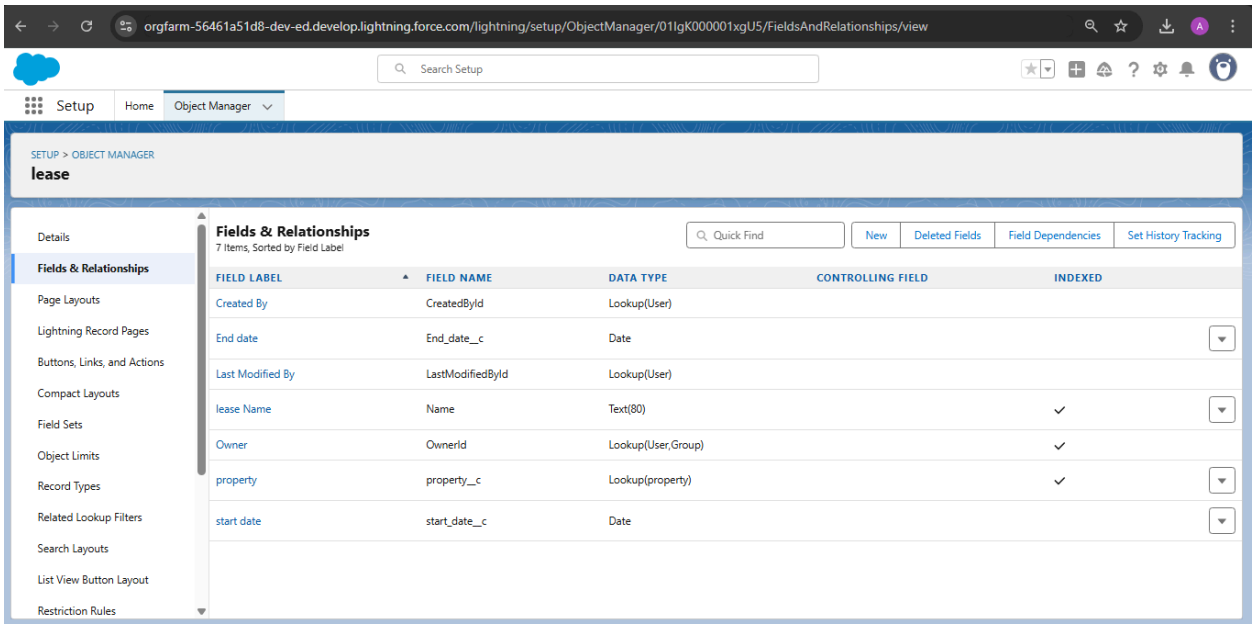
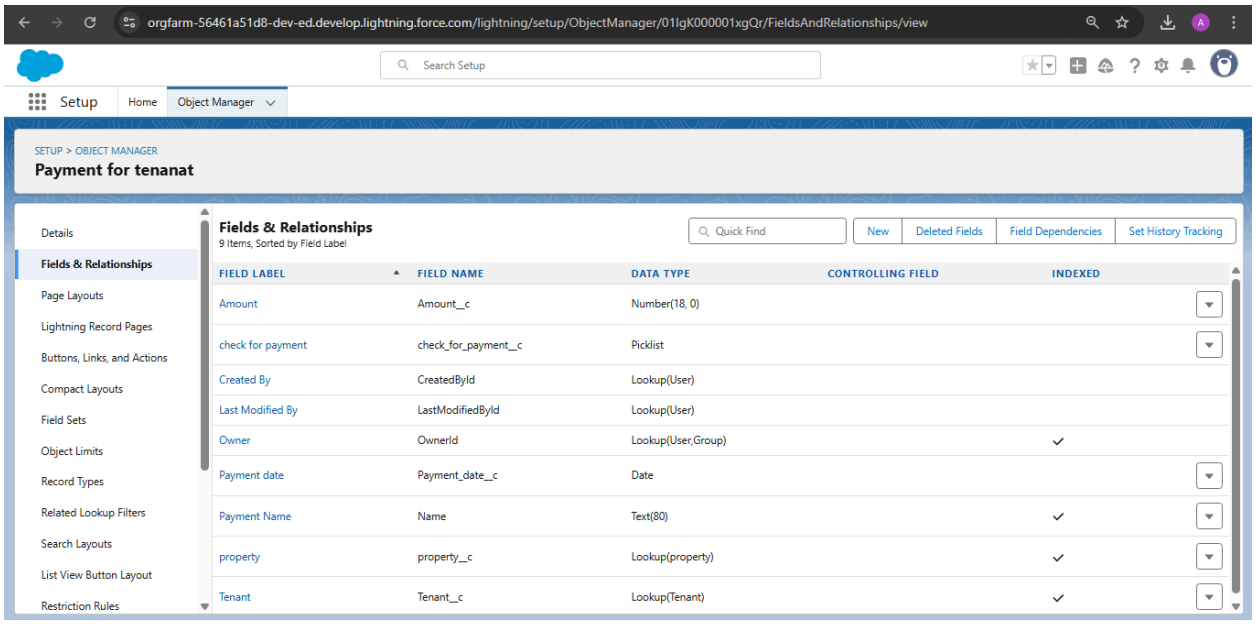
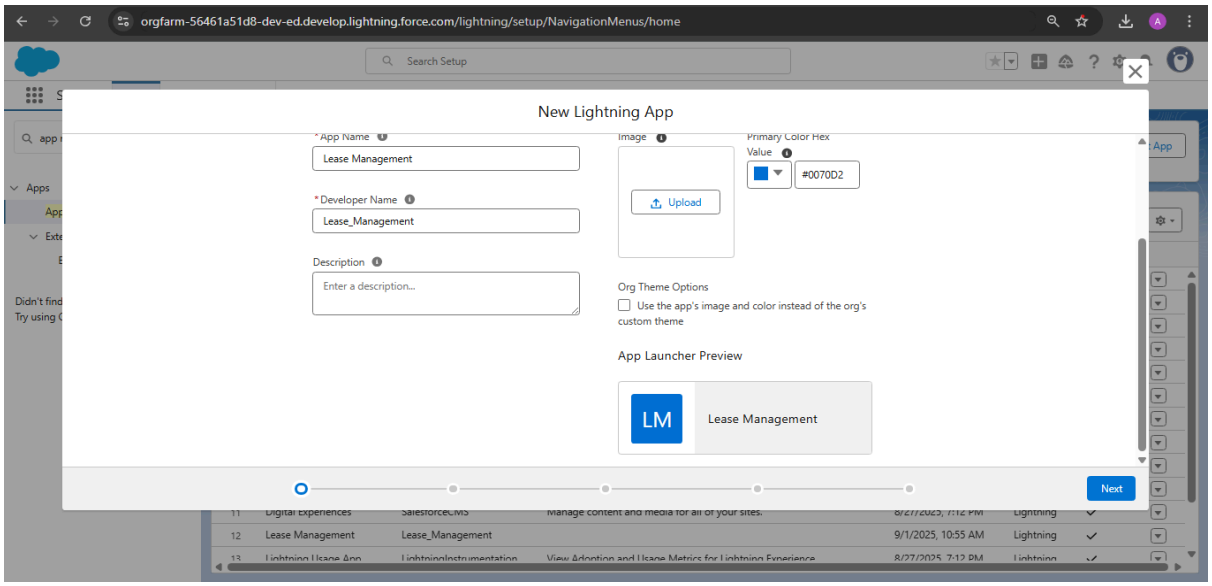
8 Items, Sorted by Field Label
Quick Find
New
Deleted Fields
Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
INDEXED
Created By
CreatedById
Lookup(User)
Email
Email__c
Email
Last Modified By
LastModifiedById
Lookup(User)
Owner
OwnerId
Lookup(User,Group)
Phone
Phone__c
Phone
property
property__c
Lookup(property)
status
status__c
Picklist
Tenant Name
Name
Text(80)





- Developed Lightning App with relevant tabs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New Lightning App
*App Name
Lease Management
*Developer Name
Lease_Management
Description
Enter a description...
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
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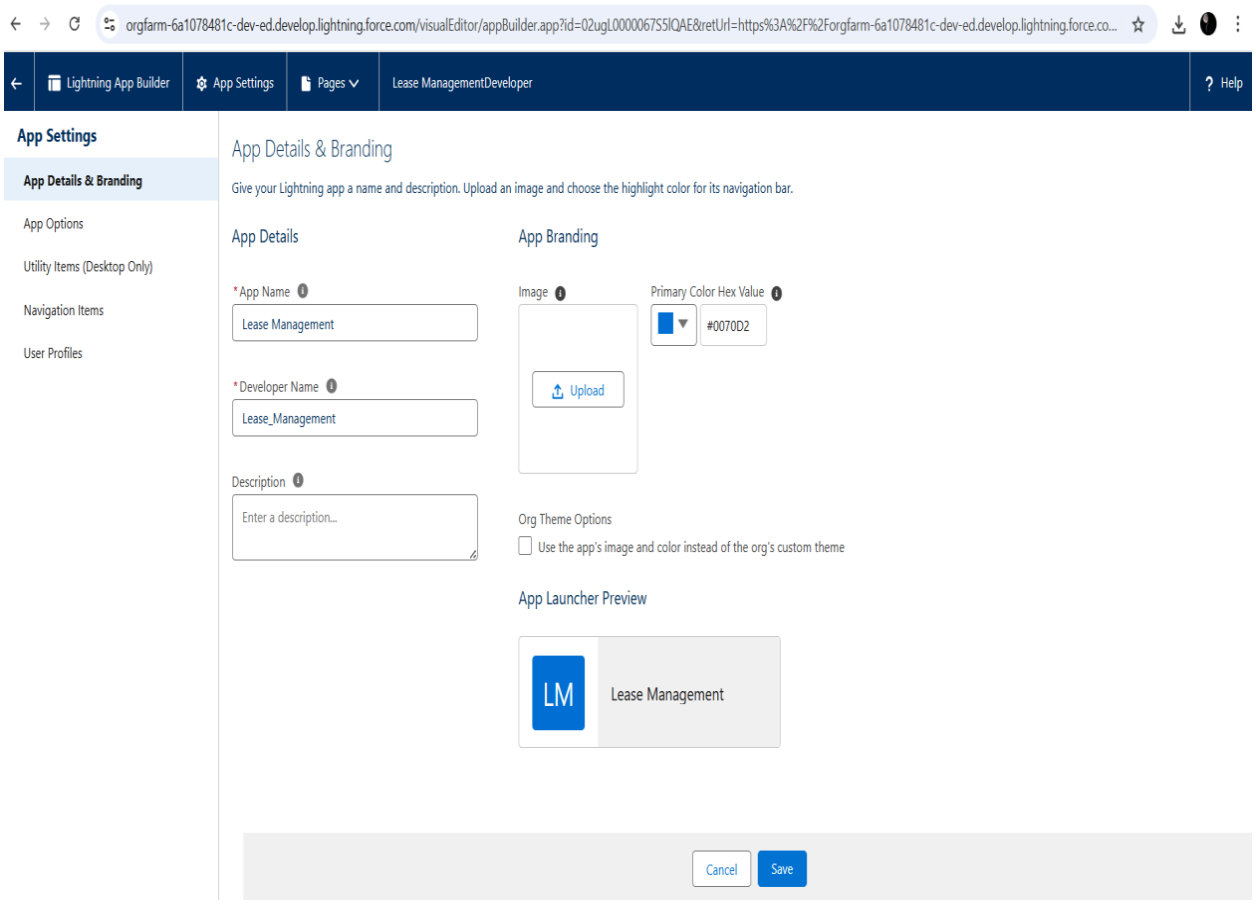
Lease Management
Next
12 Lease Management Lease_Management 9/1/2025, 10:55 AM Lightning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Lightning App Builder
App Settings
Pages
Lease ManagementDeveloper
Help
App Settings
App Details & Branding
App Options
Utility Items (Desktop Only)
Navigation Items
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 Management
*Developer Name
Lease_Management
Description
Enter a description...
App Branding
Image
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Primary Color Hex Value
#0070D2
Org Theme Options
Use the app's image and color instead of the org's custom theme
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Cancel
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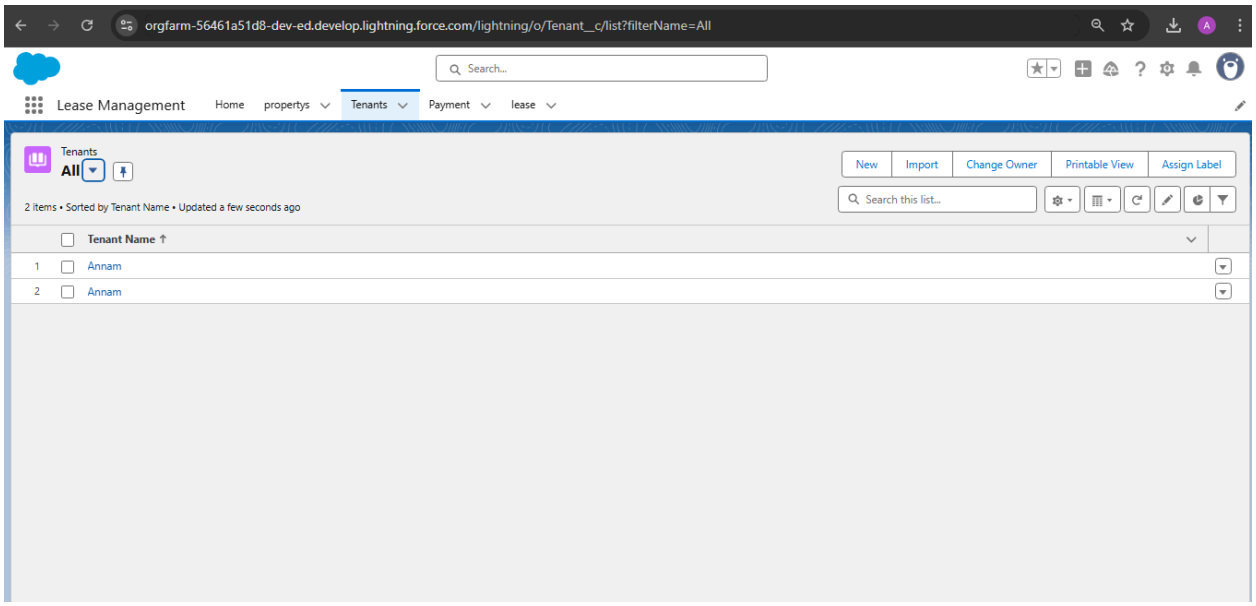
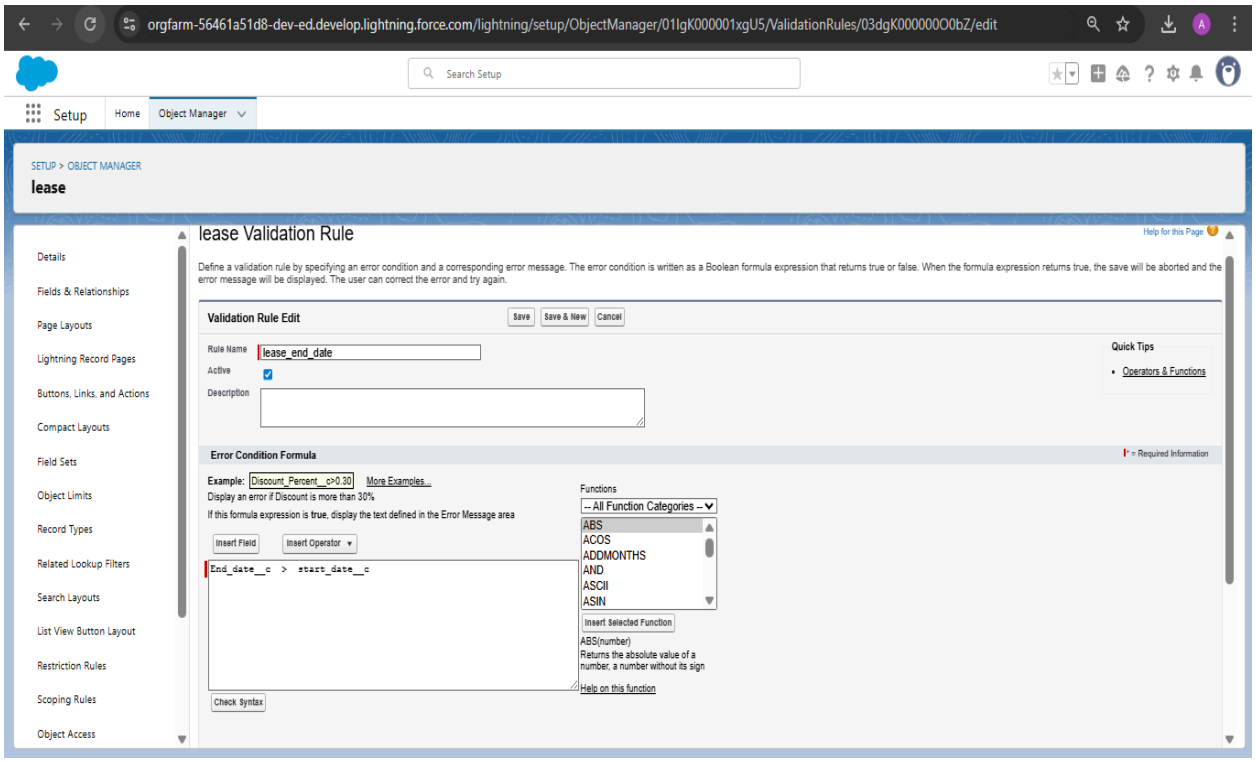
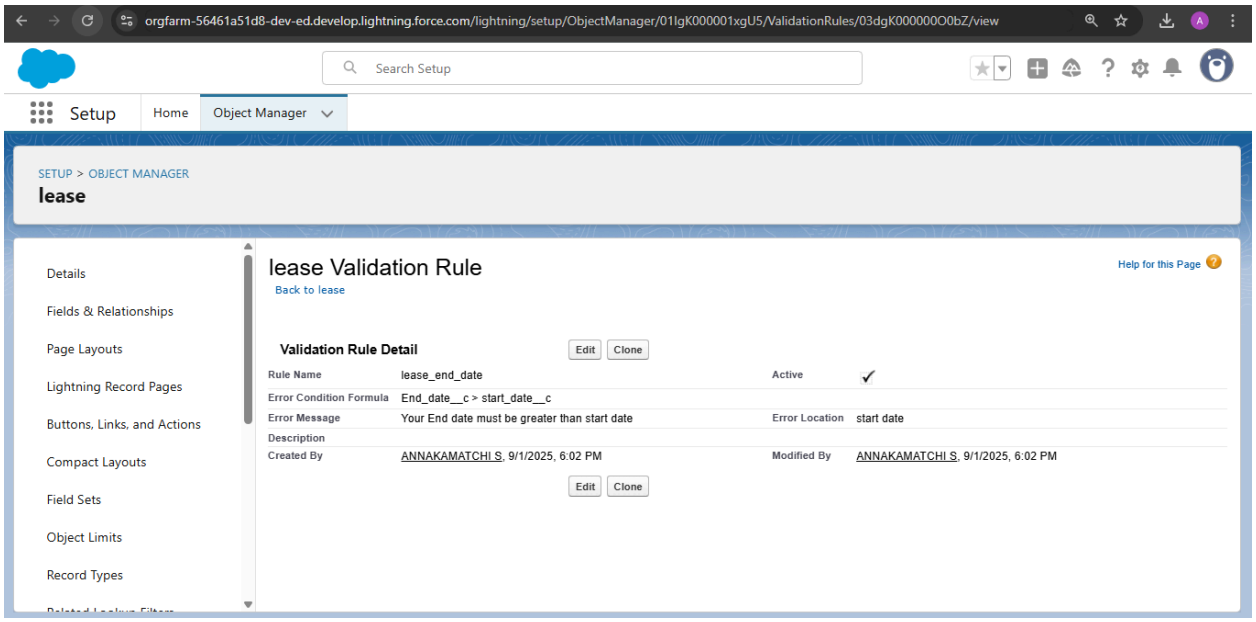
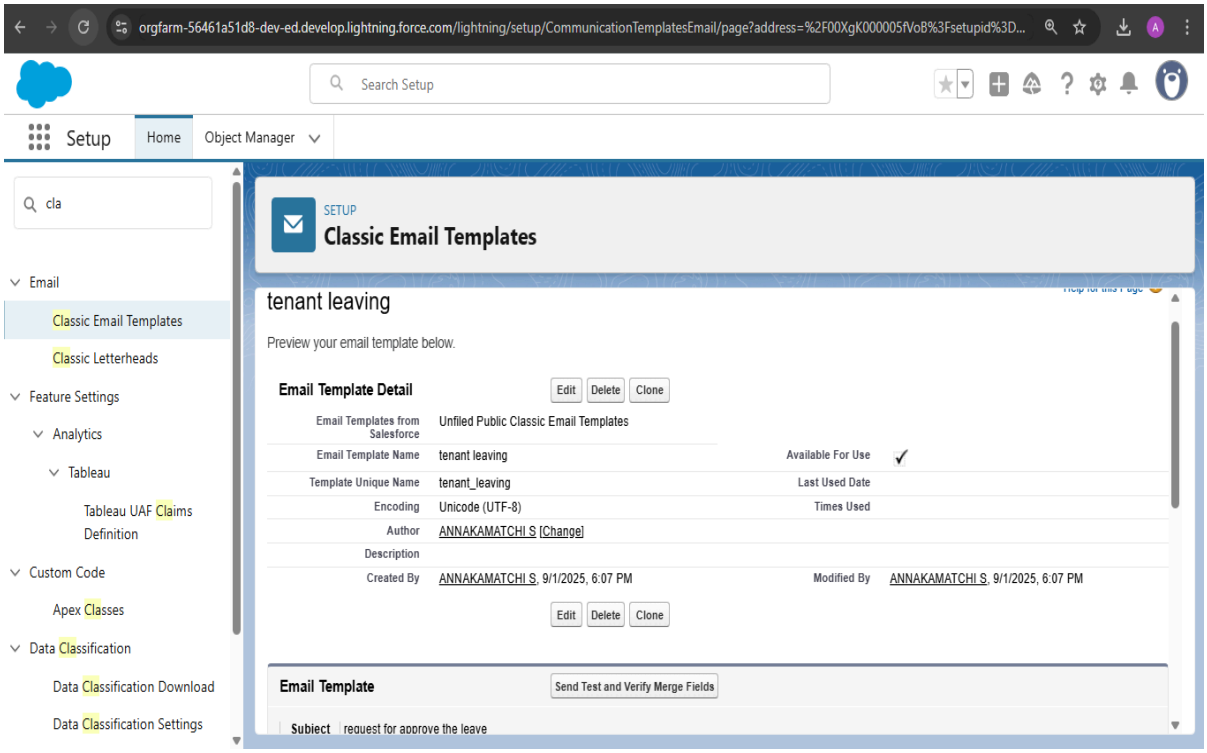


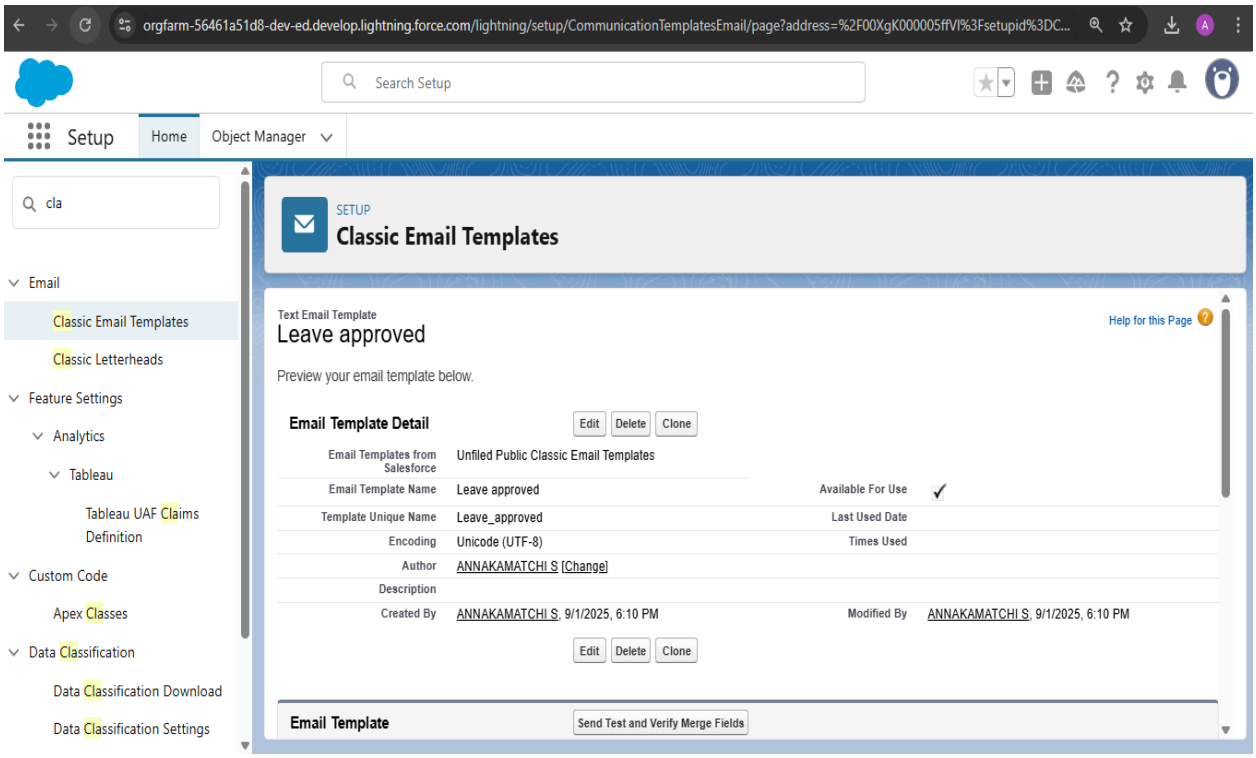
- To create a validation rule to a Lease Object





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

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Email
Classic Email Templates
Classic Letterheads
Feature Settings
Analytics
Tableau
Tableau UAF Claims Definition
Custom Code
Apex Classes
Data Classification
Data Classification Download
Data Classification Settings
SETUP
Classic Email Templates
Text Email Template
Leave approved
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 approved
Available For Use
Template Unique Name
Leave_approved
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ANNAKAMATCHI S, 9/1/2025, 6:10 PM
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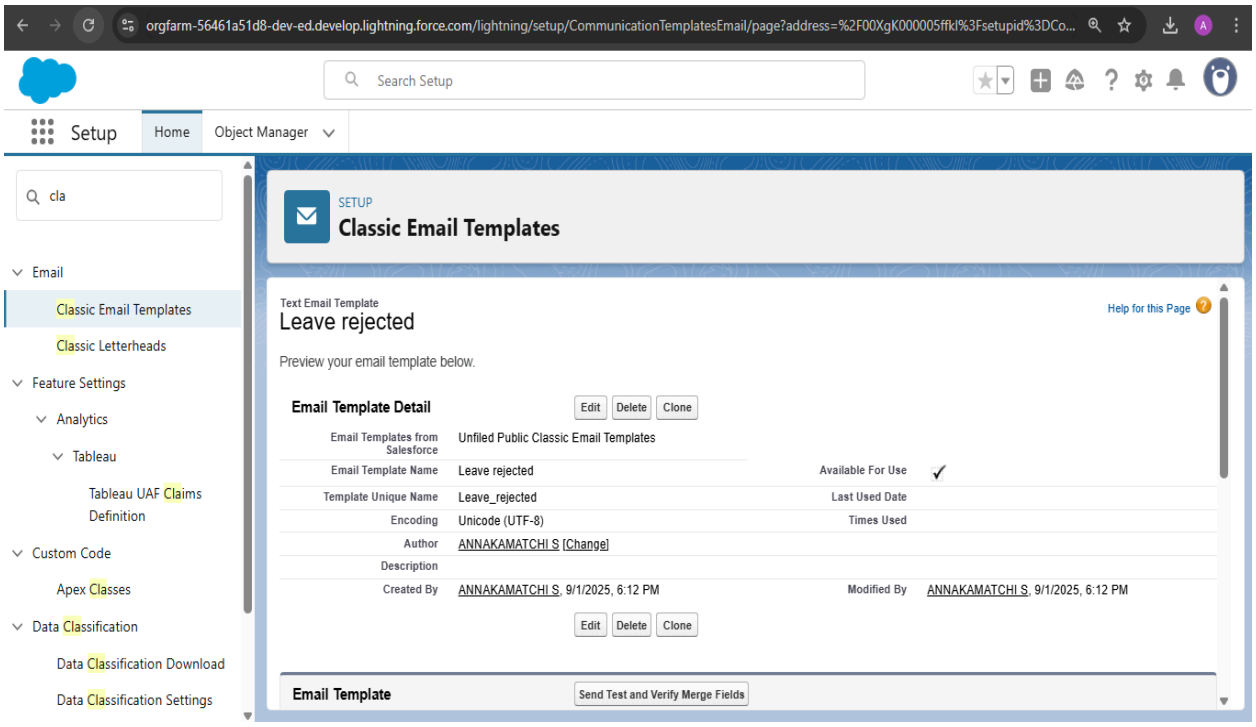
Send Test and Verify Merge Fields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Search Setup
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Classic Letterheads
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Analytics
Tableau
Tableau UAF Claims Definition
Custom Code
Apex Classes
Data Classification
Data Classification Download
Data Classification Settings
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
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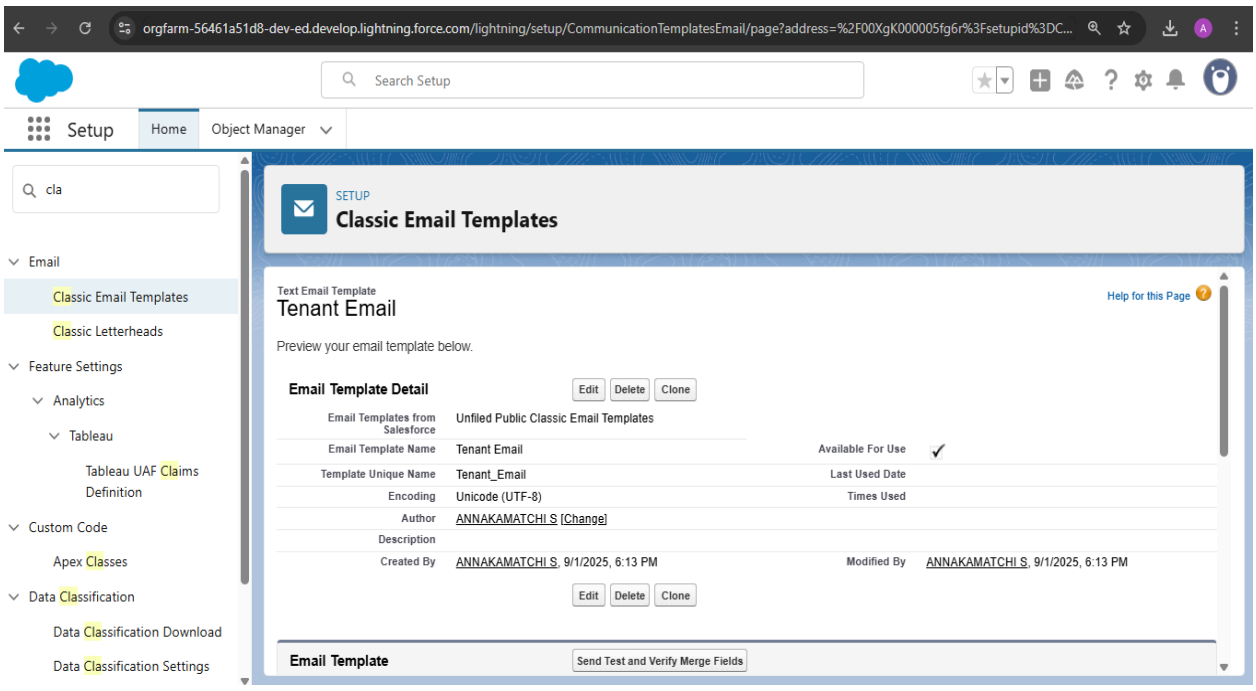
Send Test and Verify Merge Fields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Email
Classic Email Templates
Classic Letterheads
Feature Settings
Analytics
Tableau
Tableau UAF Claims Definition
Custom Code
Apex Classes
Data Classification
Data Classification Download
Data Classification Settings
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
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Created By
ANNAKAMATCHI S, 9/1/2025, 6:13 PM
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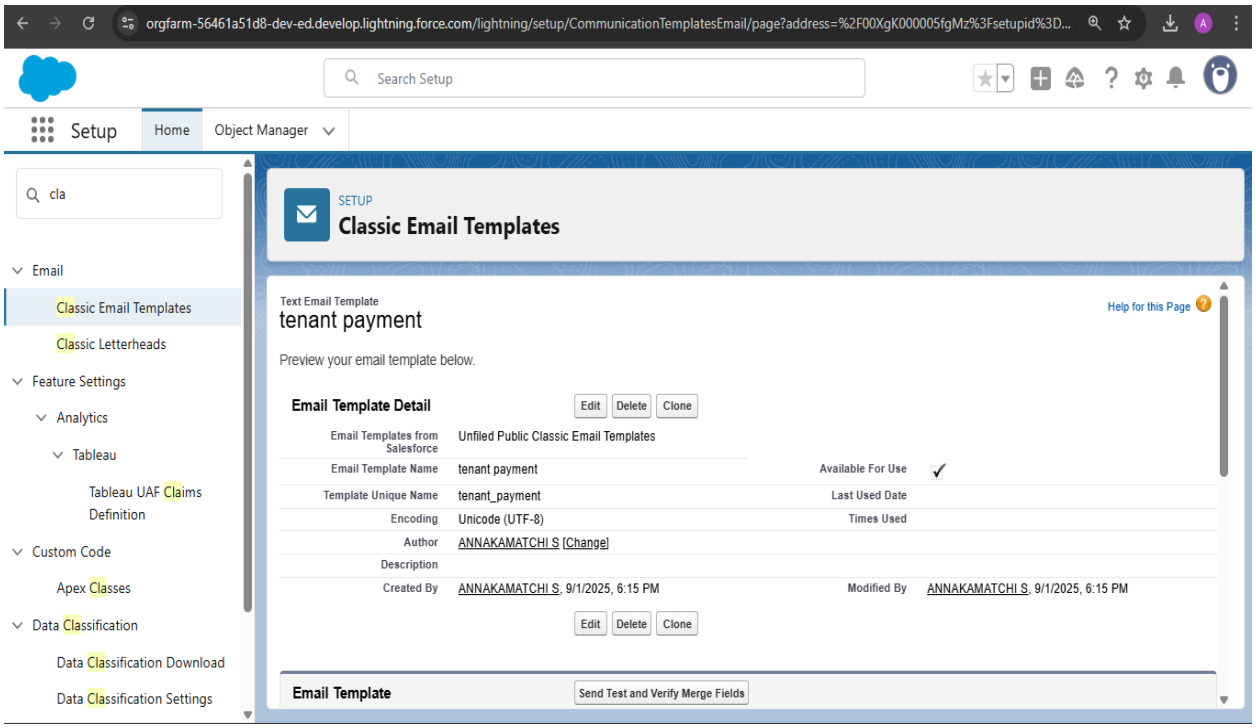
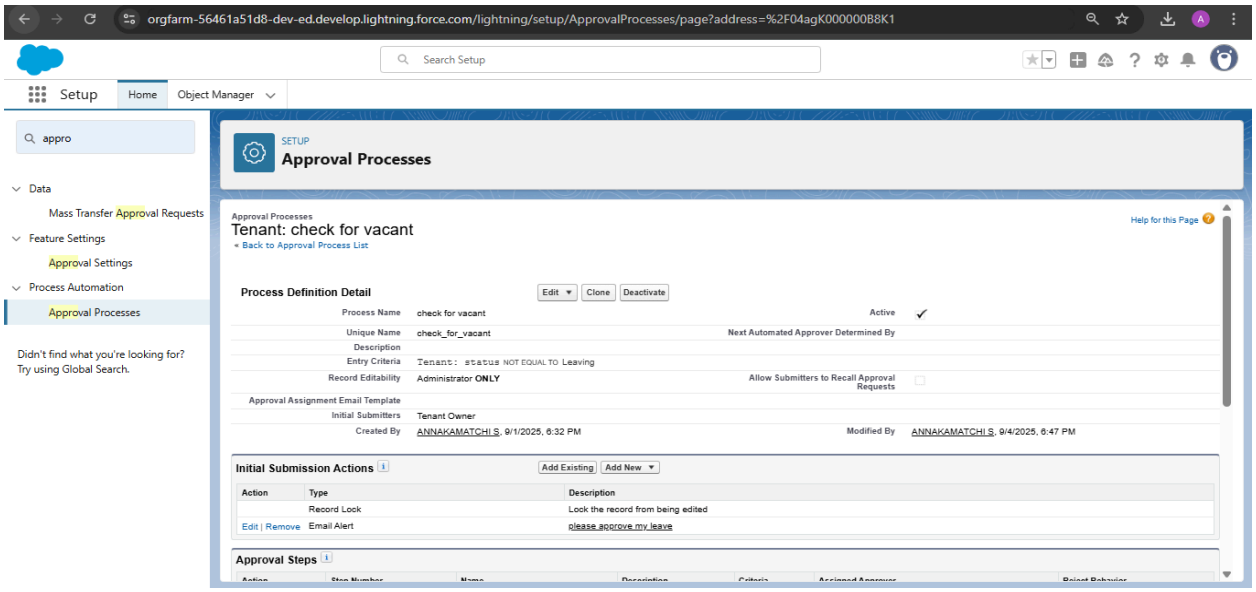
Email Template
Send Test and Verify Merge Fields



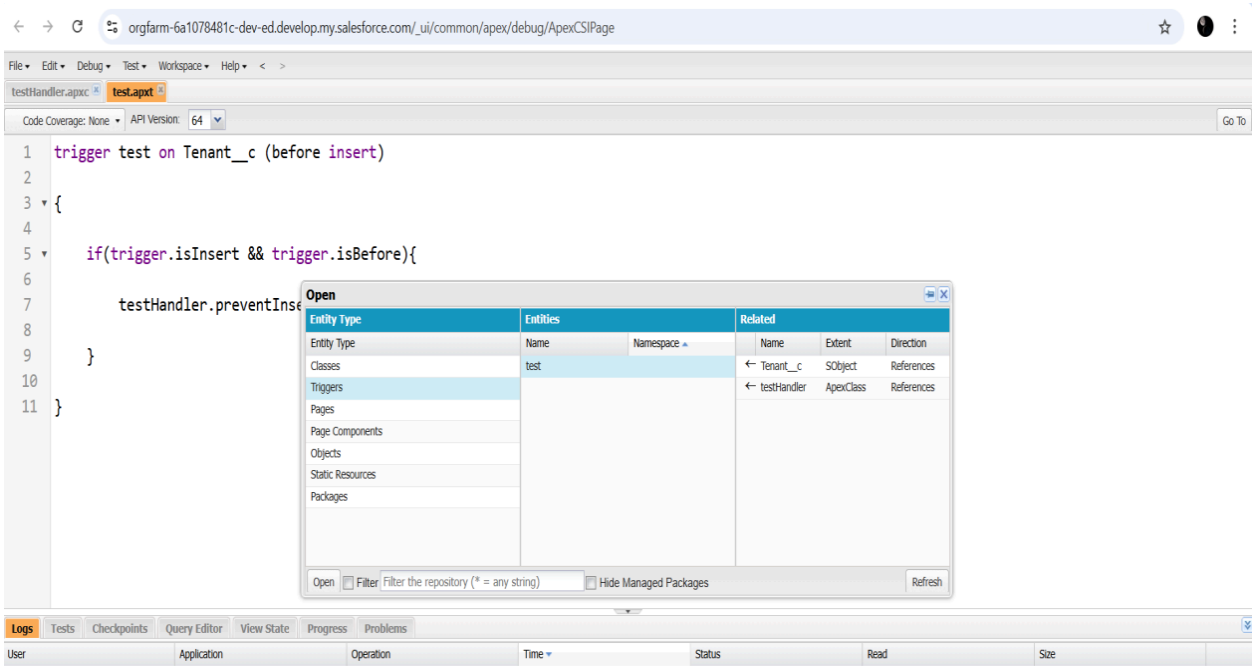
- Approval Process creation

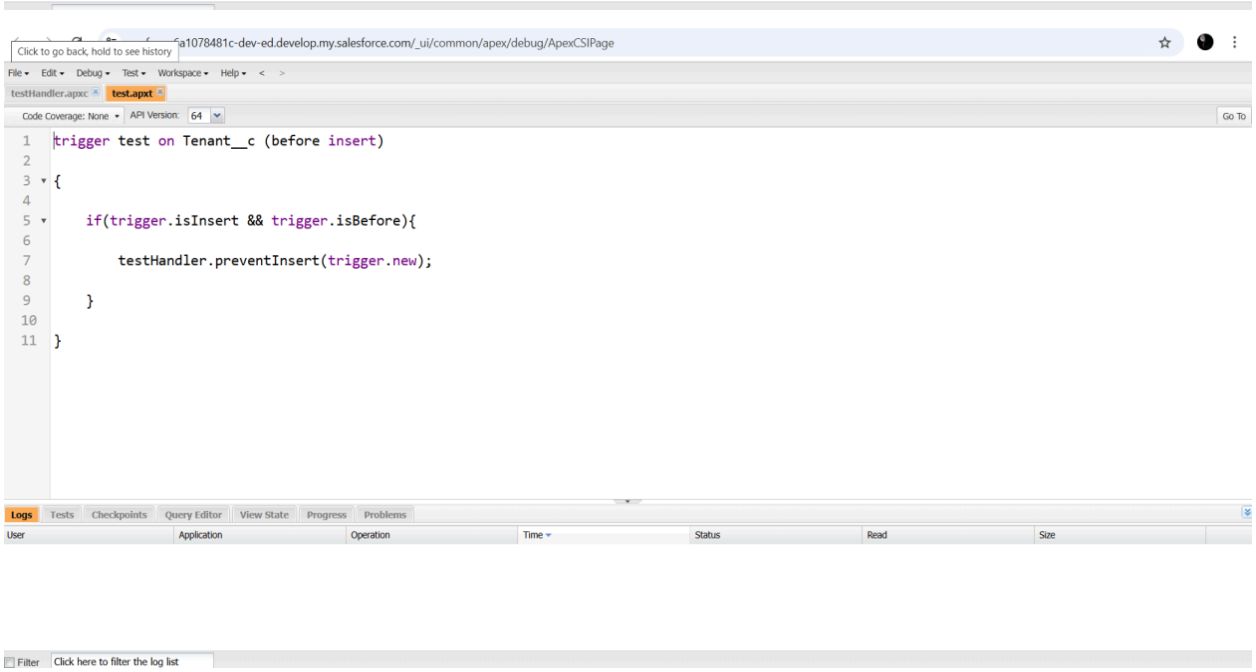
For Check for Vacant:



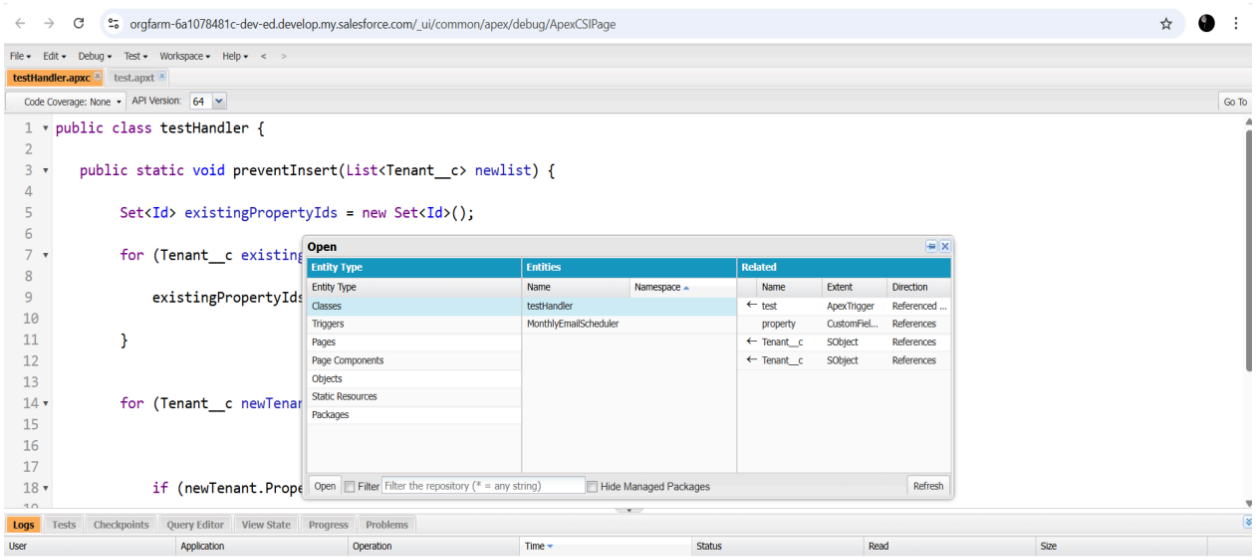
- Apex Trigger

Create an Apex Trigger





Create an Apex Handler class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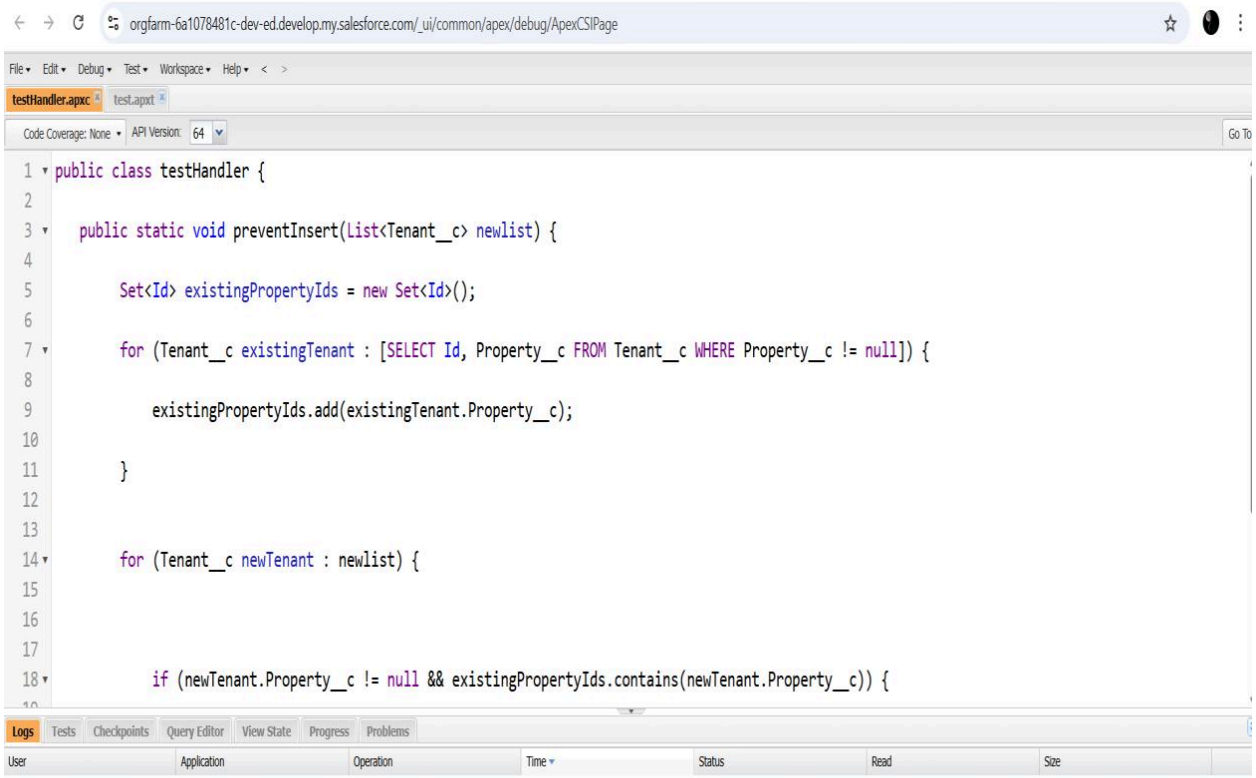
File Edit Debug Test Workspace Help
testHandler.apxc
test.apxt
Code Coverage: None
API Version: 64
Go To
1 public class testHandler {
3 public static void preventInsert(List<Tenant__c> newlist) {
5 Set<Id> existingPropertyIds = new Set<Id>();
7 for (Tenant__c existing
9 existingPropertyIds
11 }
14 for (Tenant__c newTenar
18 if (newTenant.Prope
Open
Entity Type
Entities
Related
Name
Namespace
Extent
Direction
Classes
Triggers
Pages
Page Components
Objects
Static Resources
Packages
testHandler
MonthlyEmailScheduler
test
ApexTrigger
property
CustomFiel...
Tenant__c
SObject
Open
Filter
Filter the repository (* = any string)
Hide Managed Packages
Refresh
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time
Status
Read
Size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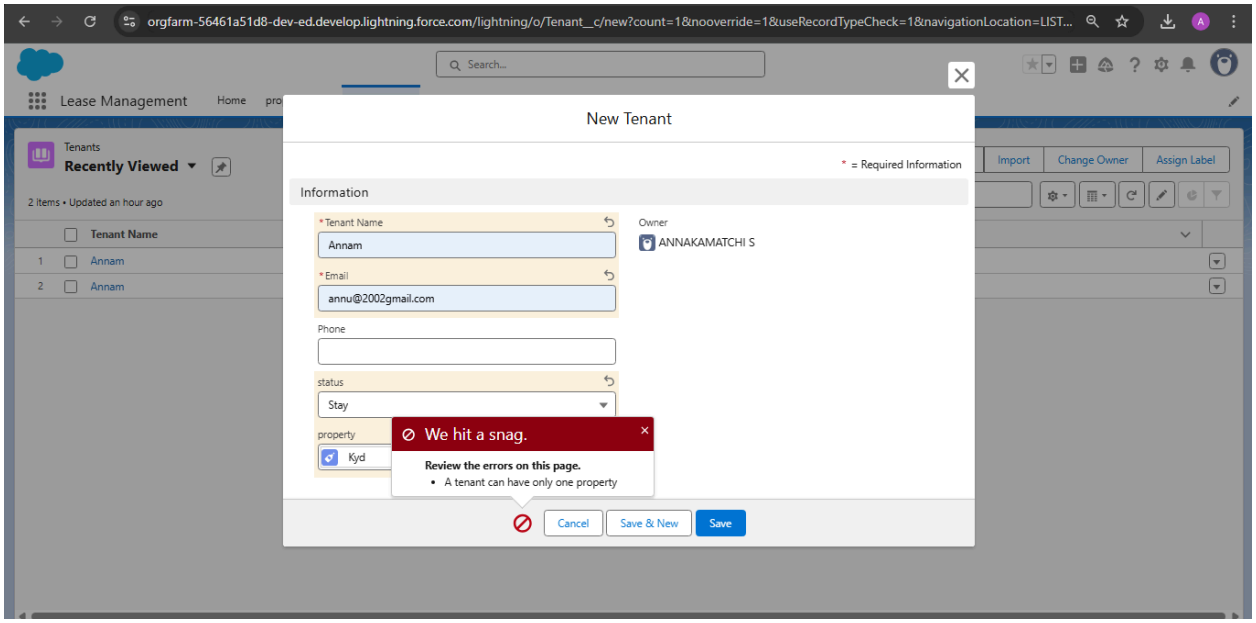
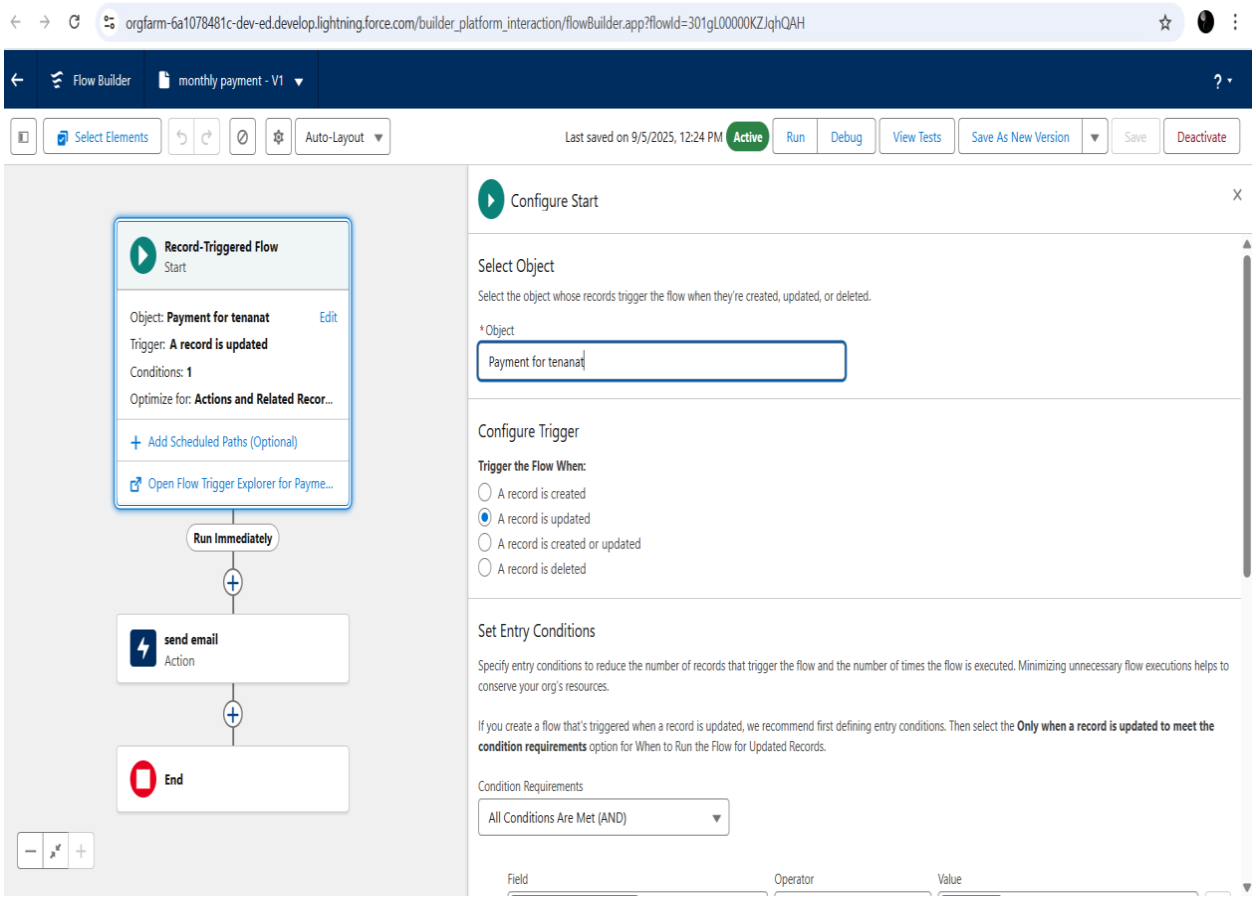
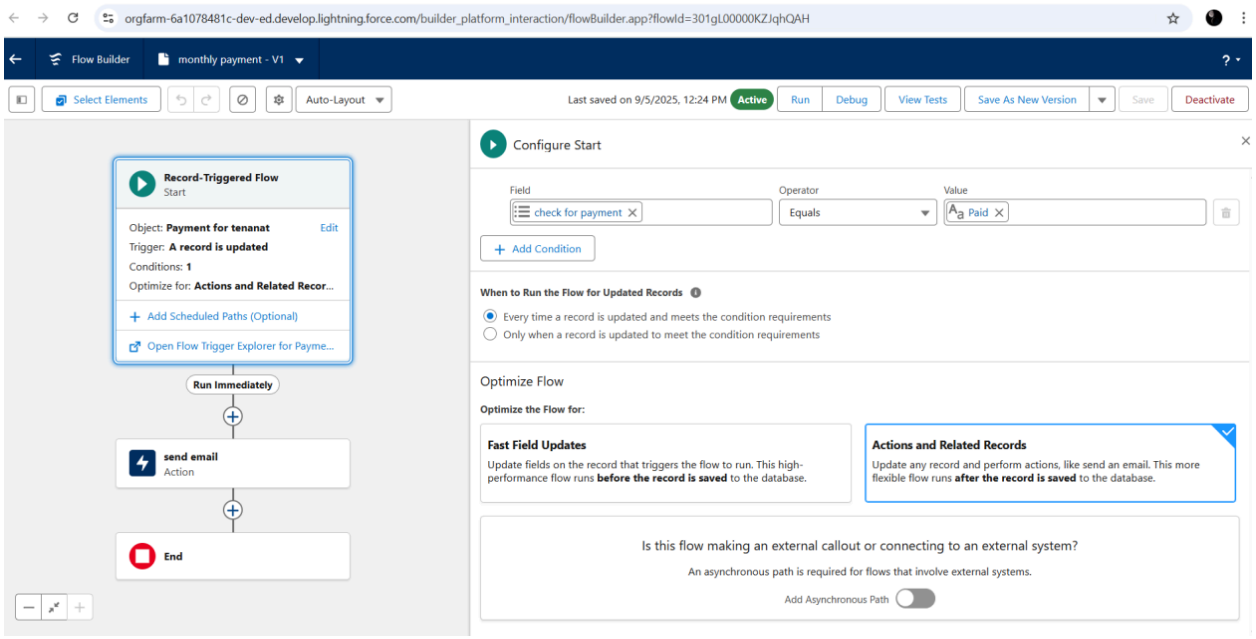
File Edit Debug Test Workspace Help
testHandler.apxc
test.apxt
Code Coverage: None
API Version: 64
Go To
1 public class testHandler {
3 public static void preventInsert(List<Tenant__c> newlist) {
5 Set<Id> existingPropertyIds = new Set<Id>();
7 for (Tenant__c existingTenant : [SELECT Id, Property__c FROM Tenant__c WHERE Property__c != null]) {
9 existingPropertyIds.add(existingTenant.Property__c);
11 }
14 for (Tenant__c newTenant : newlist) {
18 if (newTenant.Property__c != null && existingPropertyIds.contains(newTenant.Property__c)) {
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time
Status
Read
Size

- Added Apex trigger to restrict multiple tenants per property

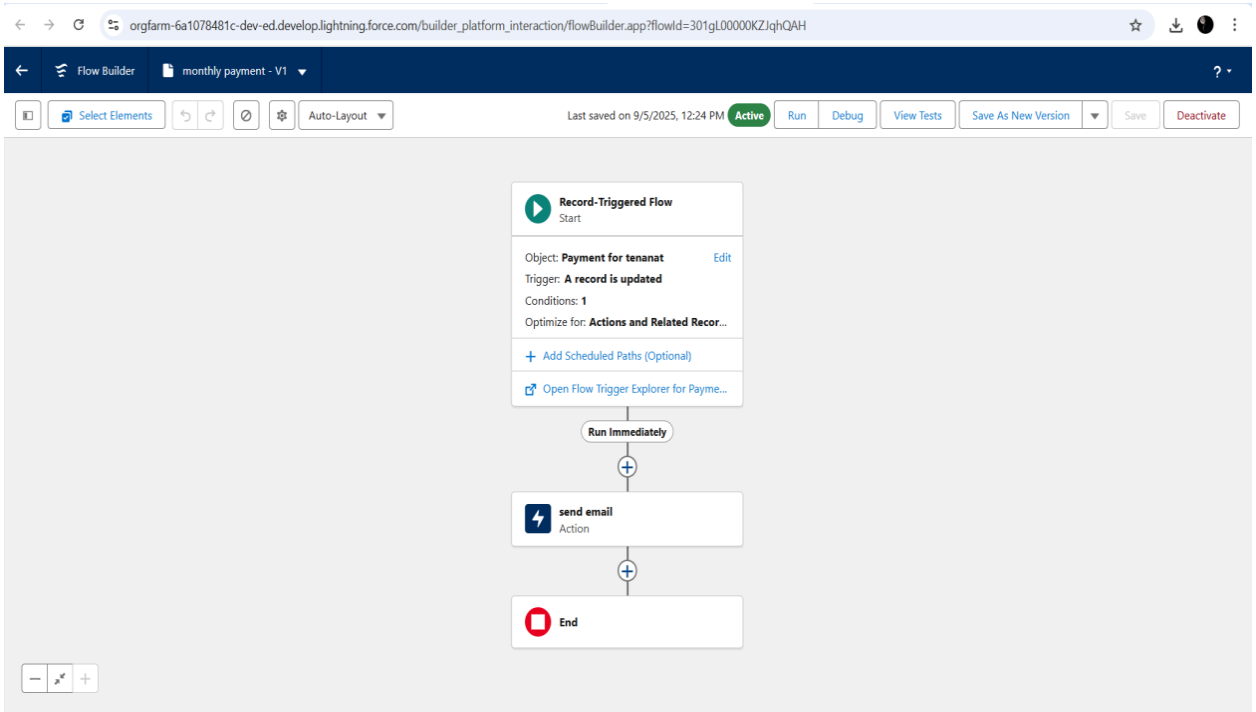


- FLOWS



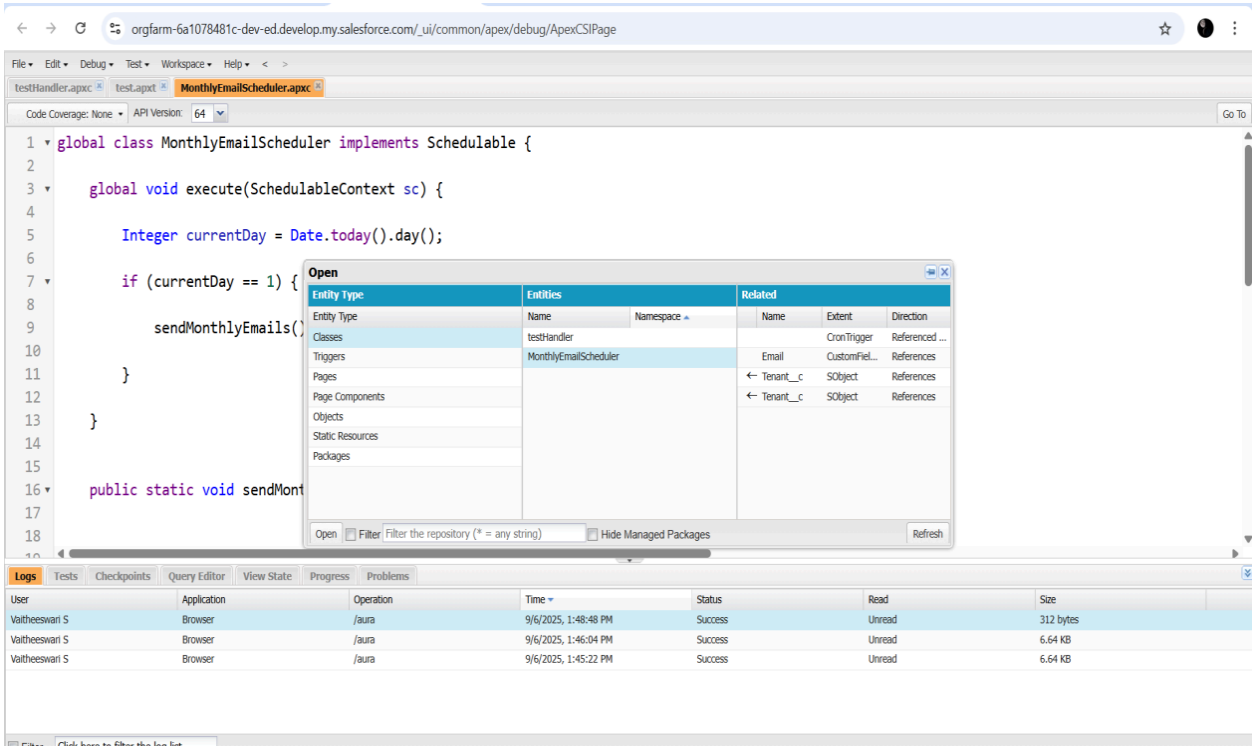


- Implemented Flows for monthly rent and payment success



- Schedule class:

Create an Apex Class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File Edit Debug Test Workspace Help
testHandler.apxc
test.apxt
MonthlyEmailScheduler.apxc
Code Coverage: None
API Version: 64
Go To
1 global class MonthlyEmailScheduler implements Schedulable {
3 global void execute(SchedulableContext sc) {
5 Integer currentDay = Date.today().day();
7 if (currentDay == 1) {
9 sendMonthlyEmails()
11 }
13 }
16 public static void sendMont
Open
Entity Type
Entities
Related
Entity Type
Name
Namespace
Name
Extent
Direction
Classes
Triggers
Pages
Page Components
Objects
Static Resources
Packages
testHandler
MonthlyEmailScheduler
CronTrigger
Referenced ...
Email
CustomFiel...
References
Tenant__c
SObject
References
Tenant__c
SObject
References
Open
Filter
Filter the repository (* = any string)
Hide Managed Packages
Refresh
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time
Status
Read
Size
Vaitheeswari S
Browser
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Success
Unread
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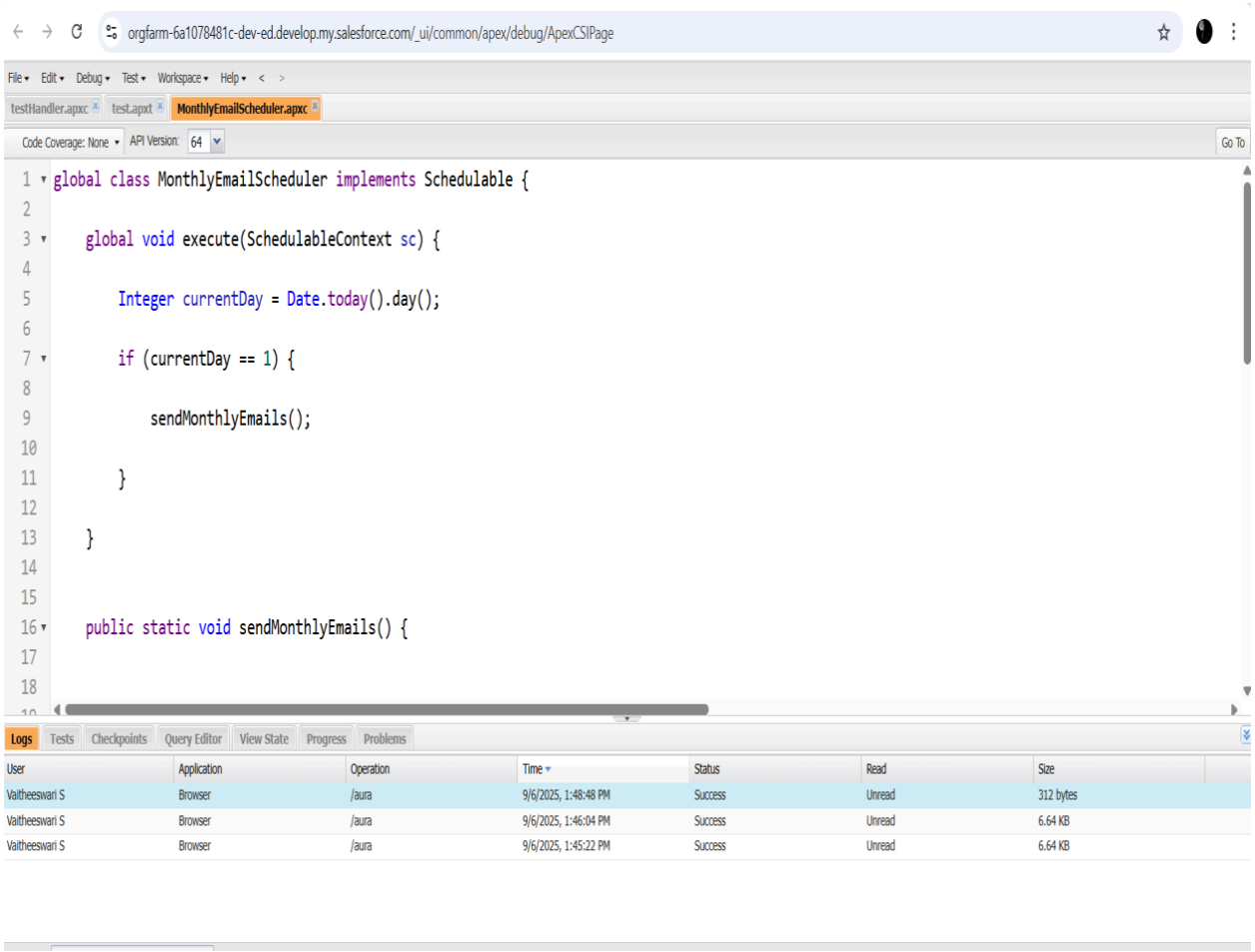
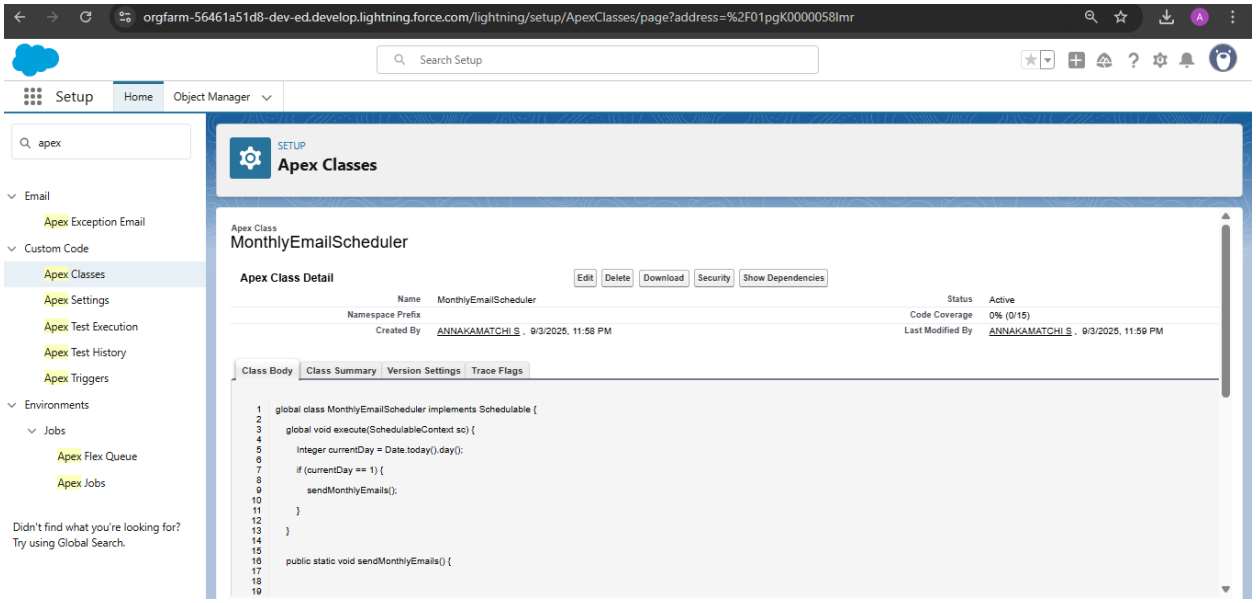
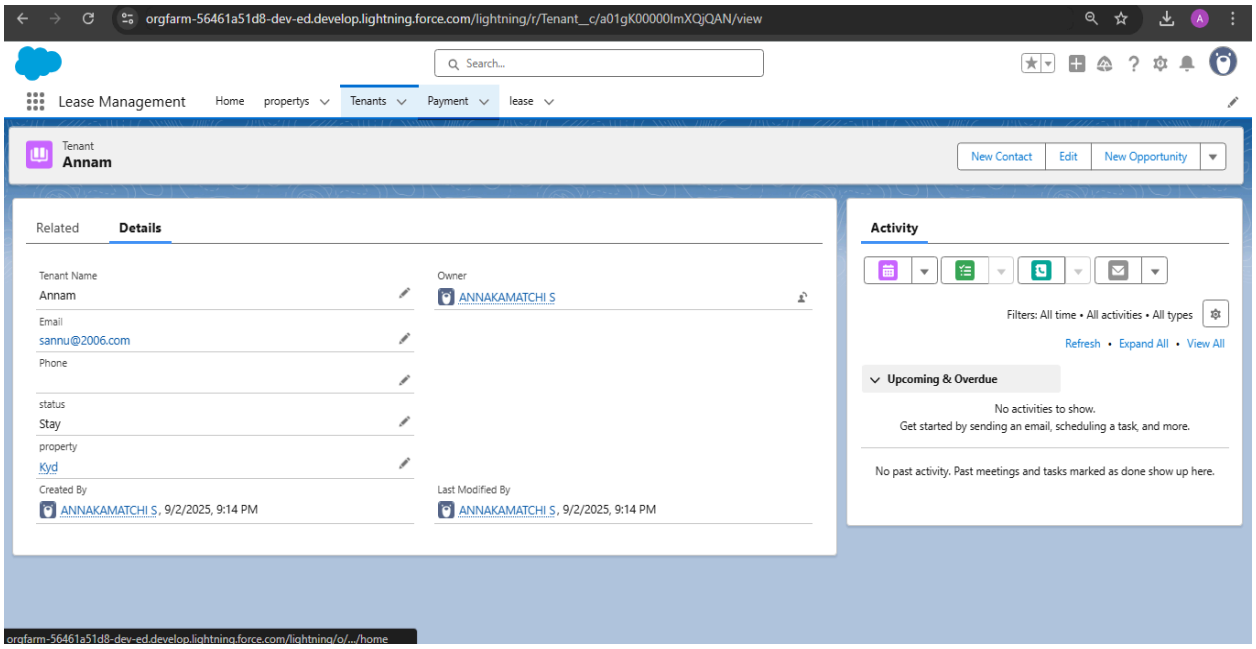


Schedule Apex classes

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Search...
Lease Management
Home
propertys
Tenants
Payment
lease
Tenant
Annam
New Contact
Edit
New Opportunity
Related
Details
Tenant Name
Annam
Owner
ANNAKAMATCHI S
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Phone
status
Stay
property
Kyd
Created By
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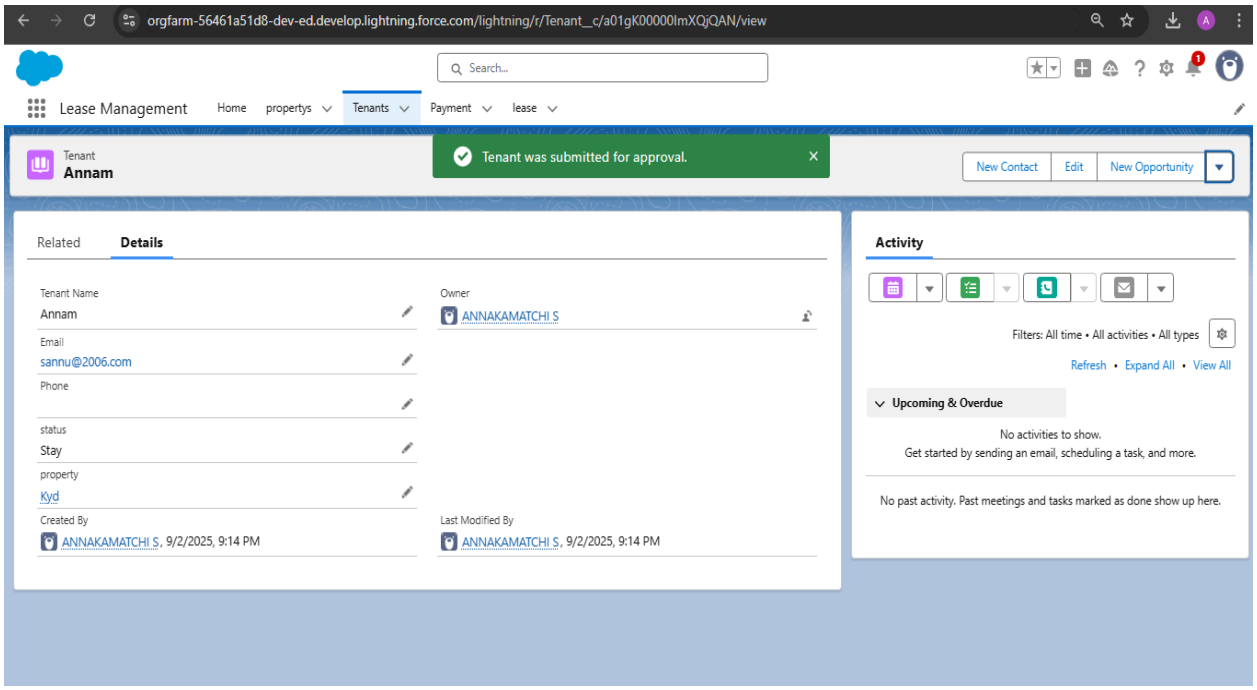
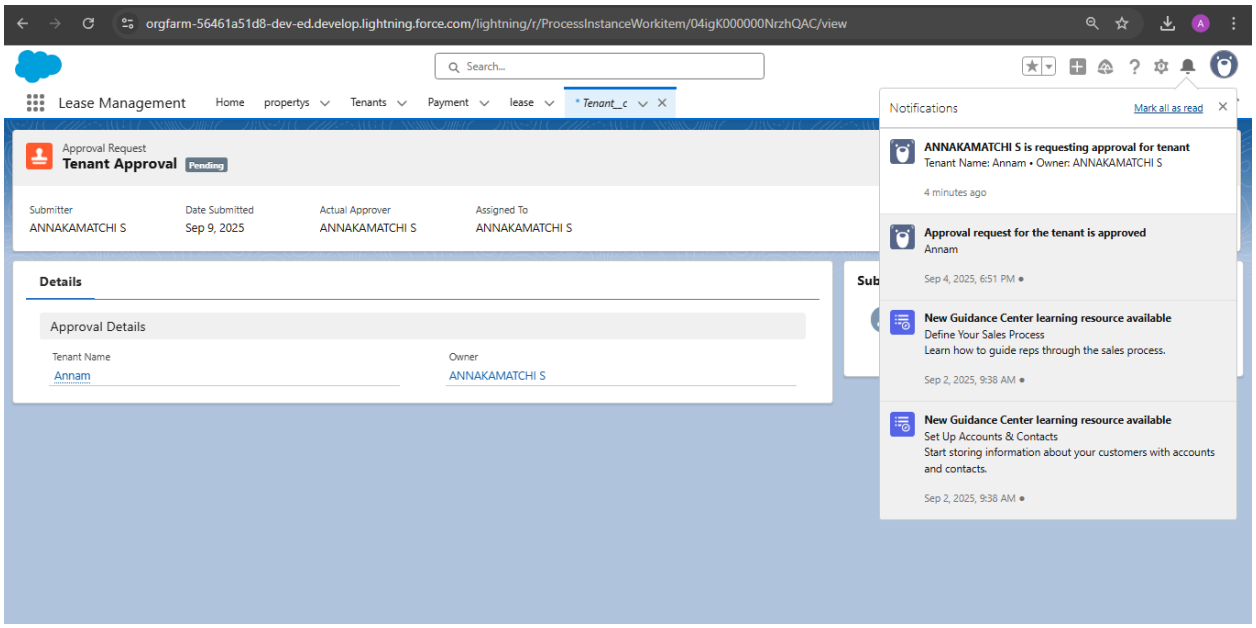
Last Modified By
ANNAKAMATCHI S, 9/2/2025, 9:14 PM
Activity
Filters: All time • All activities • All types
Refresh • Expand All • View All
Upcoming & Overdue
No activities to show.
Get started by sending an email, scheduling a task, and more.
No past activity. Past meetings and tasks marked as done show up here.
orgfarm-56461a51d8-dev-ed.develop.lightning.force.com/lightning/o/.../home

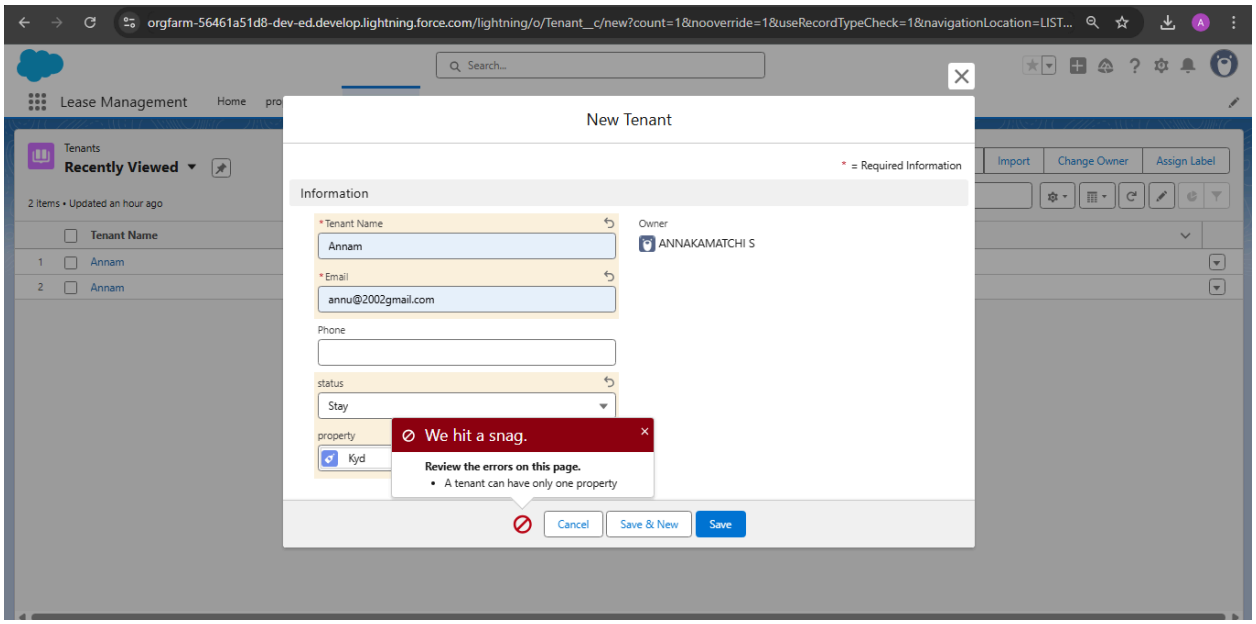

orgfarm-56461a51d8-dev-ed.develop.lightning.force.com/lightning/r/Tenant__c/a01gK00000ImXQjQAN/view
Search...
Lease Management
Home
propertys
Tenants
Payment
lease
Tenant
Annam
Tenant was submitted for approval.
New Contact
Edit
New Opportunity
Related
Details
Tenant Name
Annam
Owner
ANNAKAMATCHI S
Email
sannu@2006.com
Phone
status
Stay
property
Kyd
Created By
ANNAKAMATCHI S, 9/2/2025, 9:14 PM
Last Modified By
ANNAKAMATCHI S, 9/2/2025, 9:14 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.



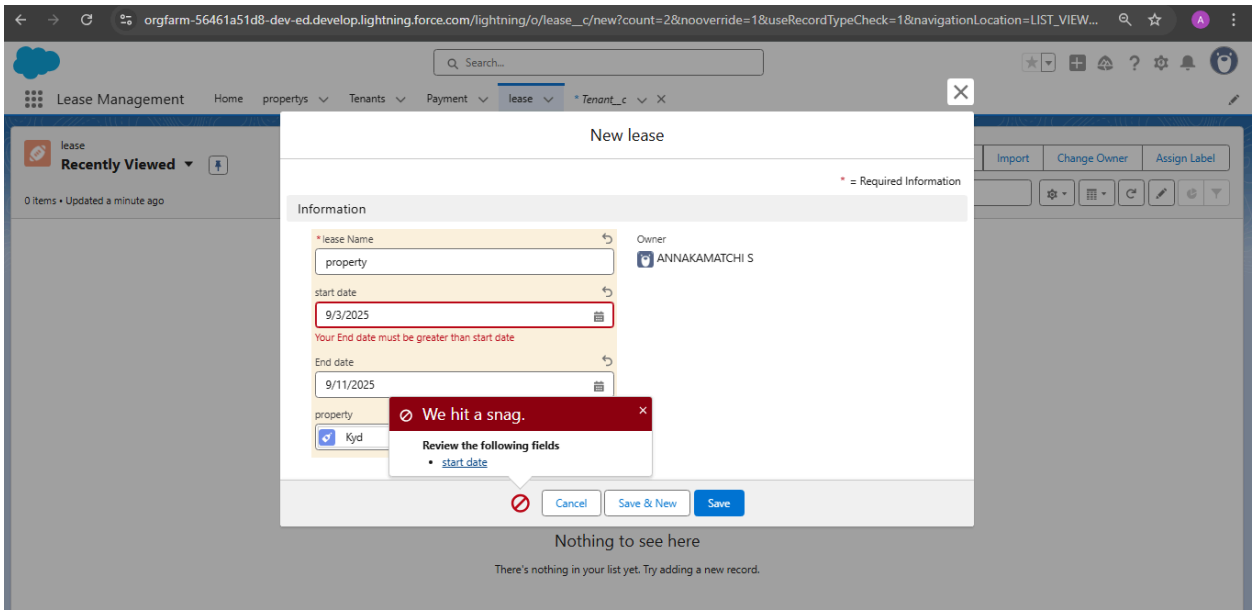
FUNCTIONAL AND PERFORMANCE TESTING

Performance Testing

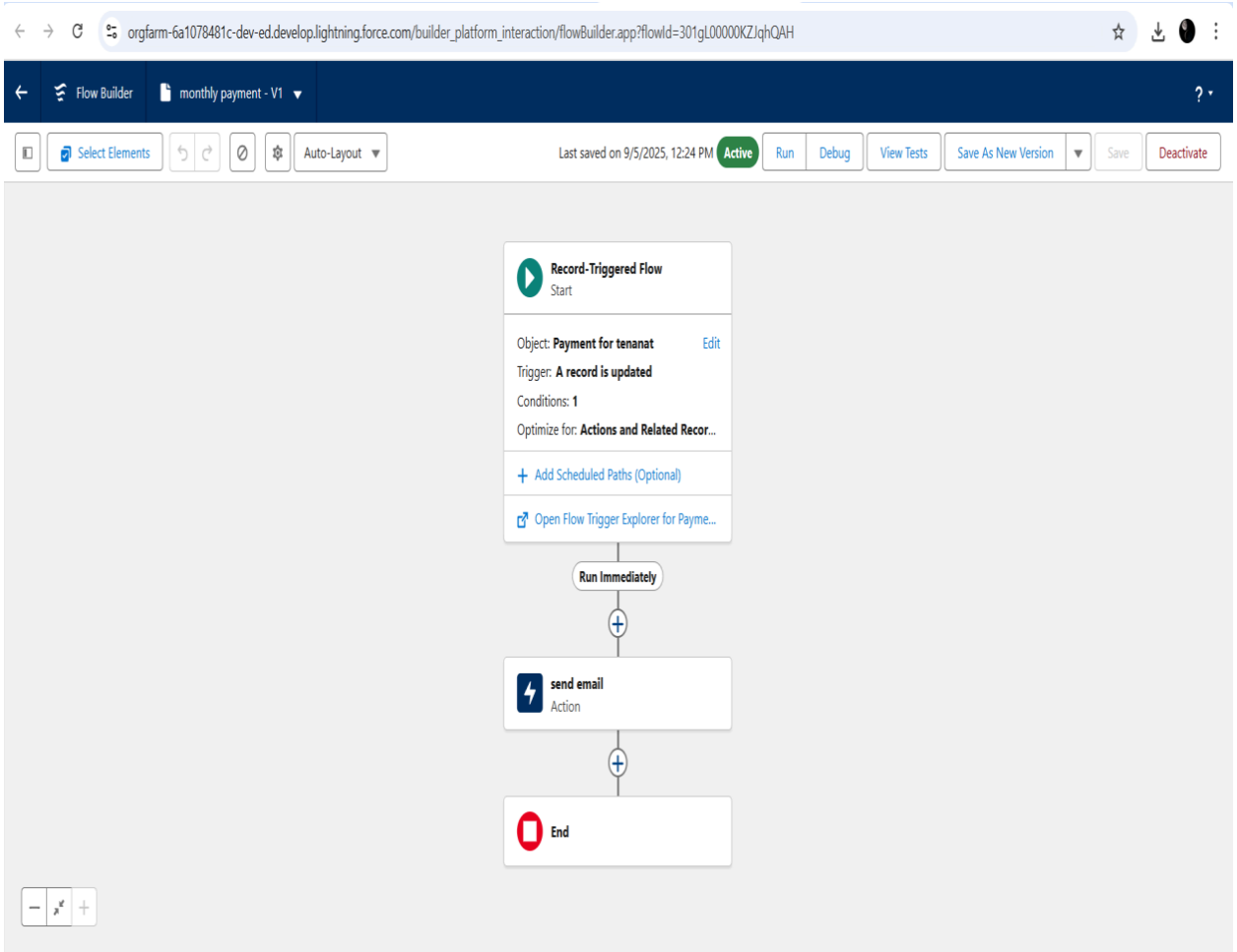
- Trigger validation by entering duplicate tenant-p roperty records



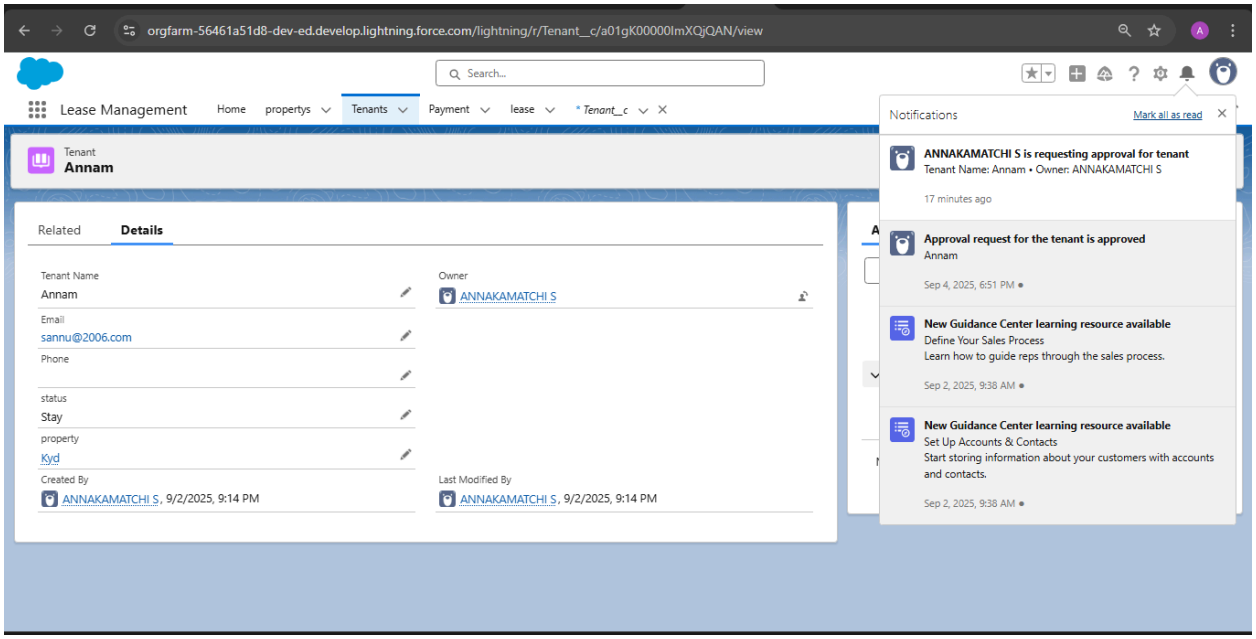
- Validation Rule checking



- Test flows on payment update



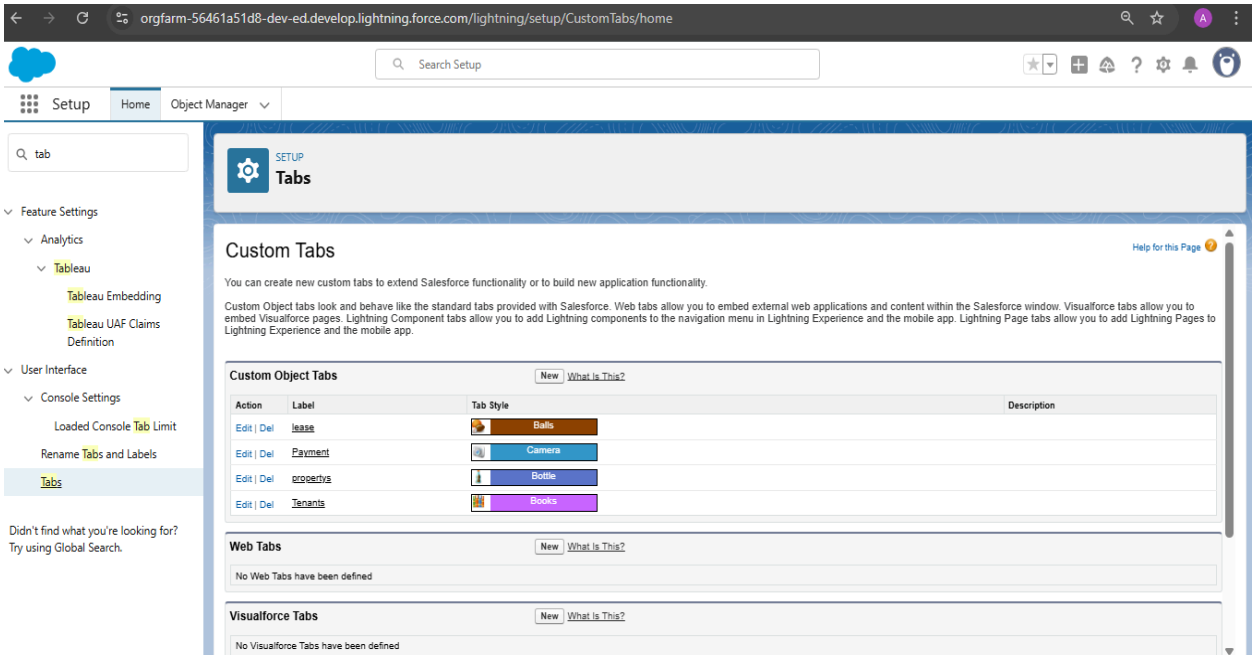
● Approval process validated through email alerts and status updates



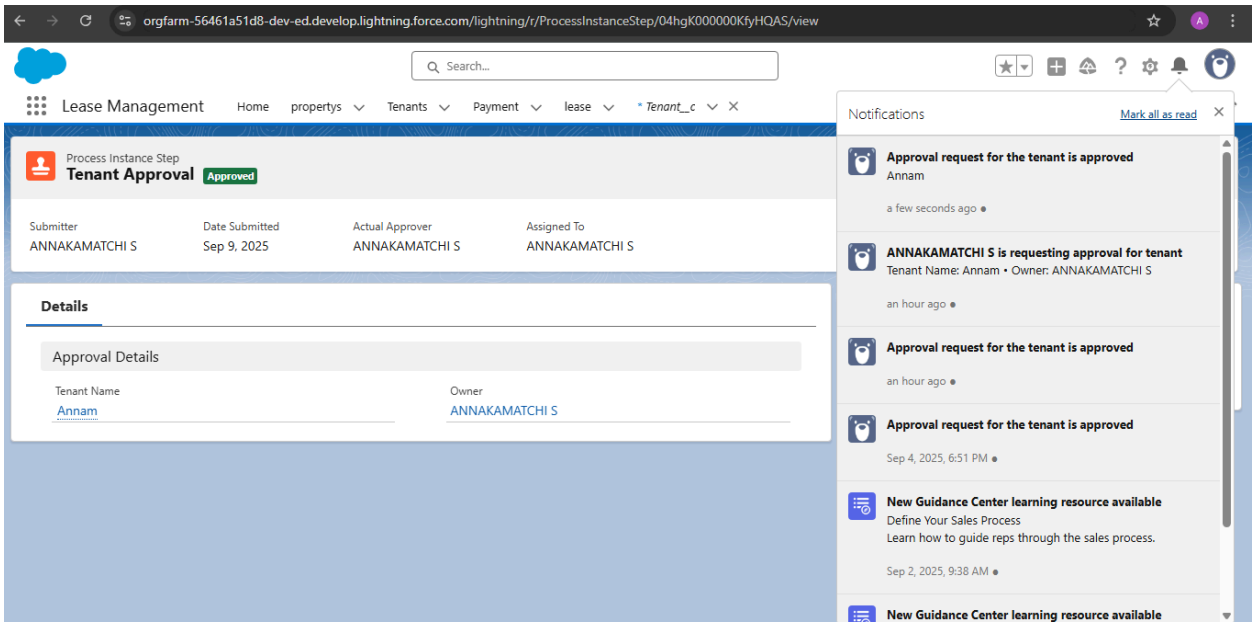
RESULTS

Output Screenshots

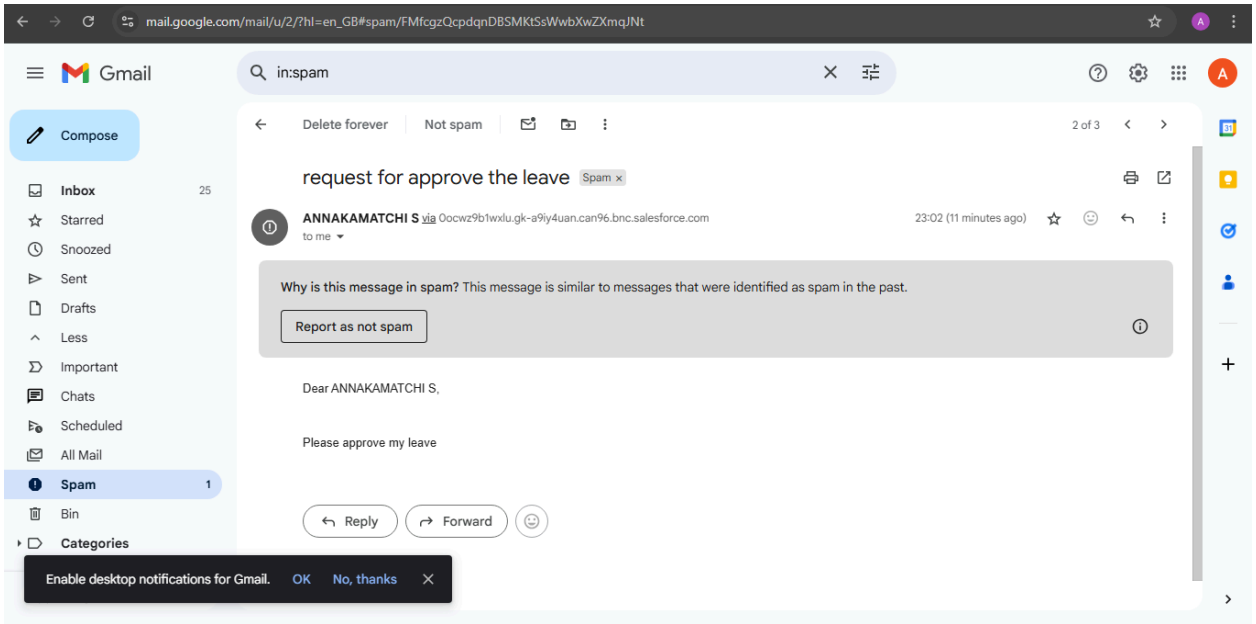
● Tabs for Property, Tenant, Lease, Payment



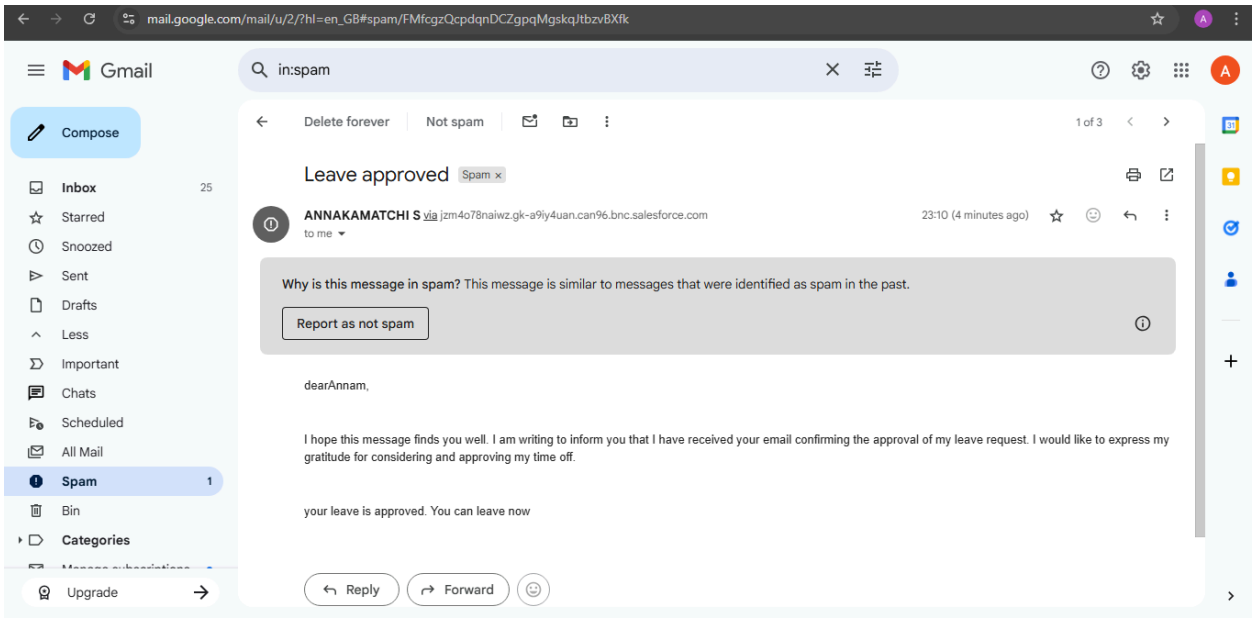
● Email alerts



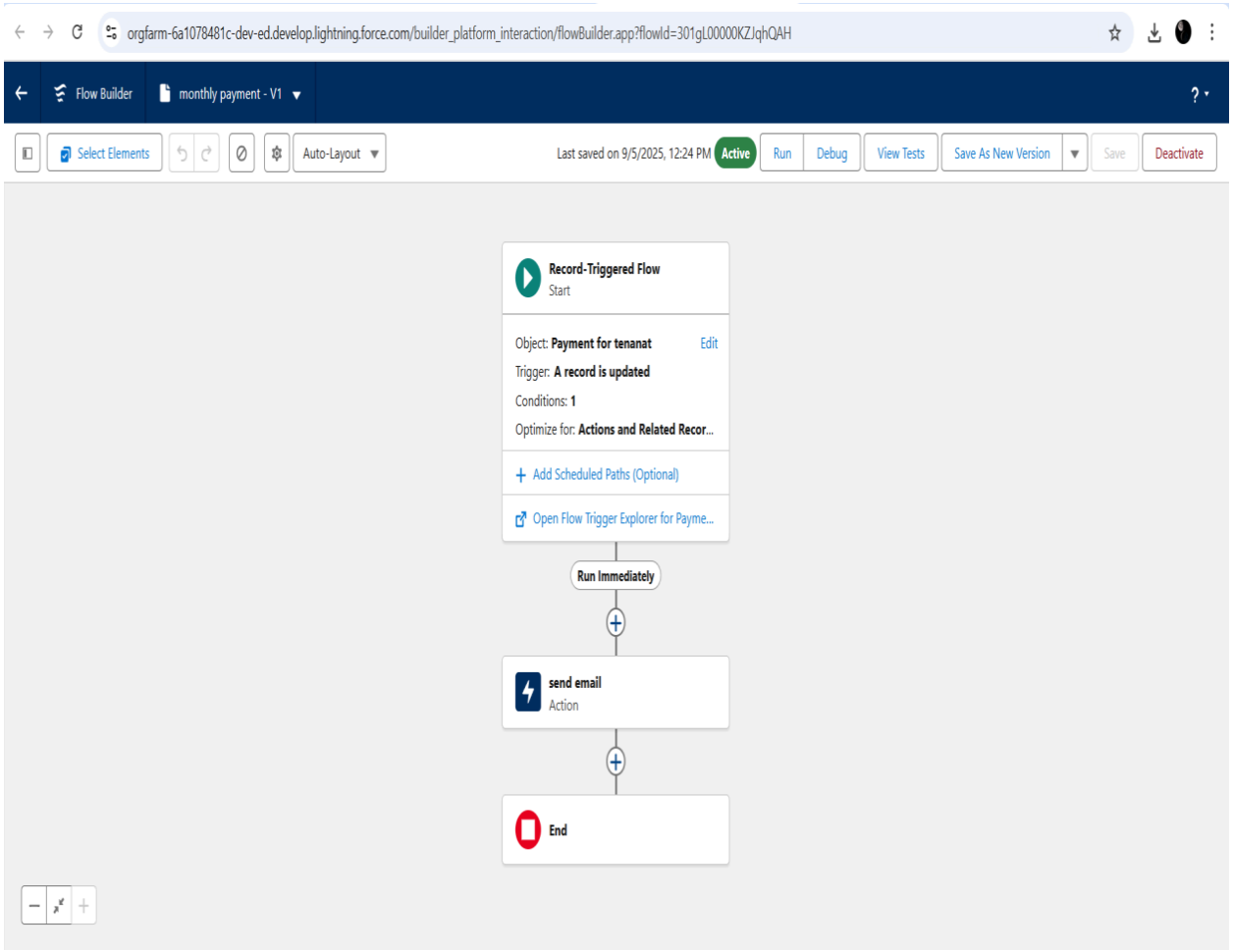
- Request for approve the leave



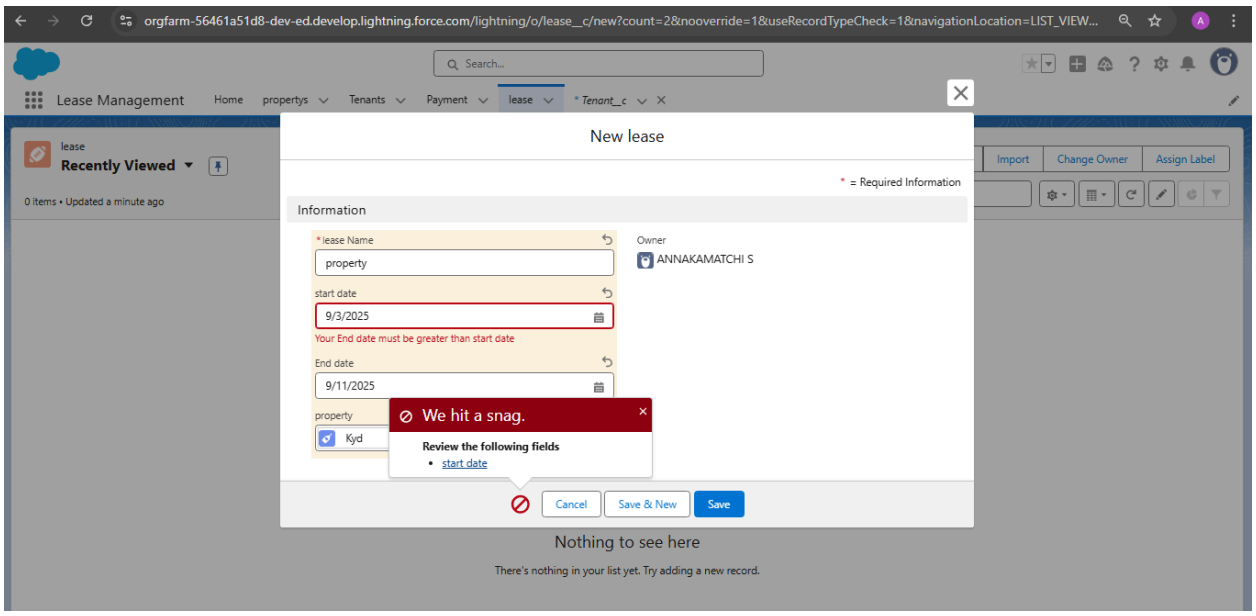
- Leave Approved


mail.google.com/mail/u/2/?hl=en_GB#spam/FMfcgzQcpdqnDCZgpqMgskqJtbzvBXfk
Gmail
in:spam
Compose
Inbox 25
Starred
Snoozed
Sent
Drafts
Less
Important
Chats
Scheduled
All Mail
Spam 1
Bin
Categories
Upgrade
Delete forever
Not spam
1 of 3
Leave approved
Spam ×
ANNAKAMATCHI S via jzm4o78naiwz.gk-a9iy4uan.can96.bnc.salesforce.com
to me
23:10 (4 minutes ago)
Why is this message in spam? This message is similar to messages that were identified as spam in the past.
Report as not spam
dearAnnam,
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
Reply
Forward

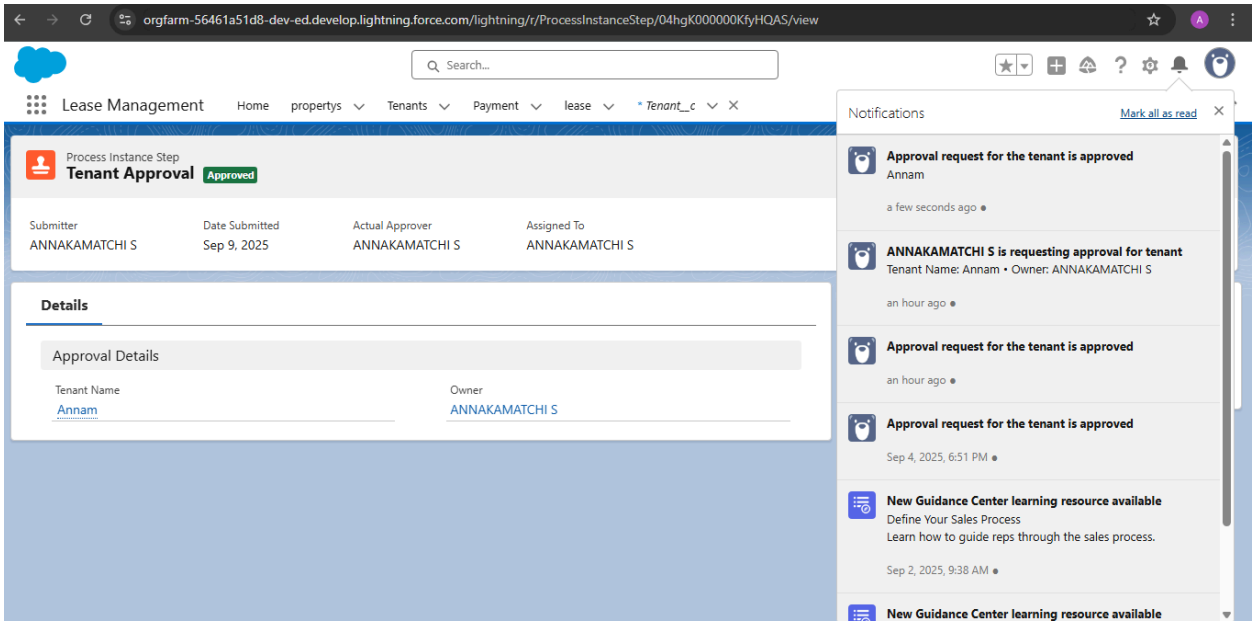
- Flow runs



- Trigger error messages



● Approval process notifications



CONCLUSION :

The Lease Management system simplifies and automates all leasing processes, ensuring accuracy, compliance, and transparency. It enhances communication between landlords and tenants while reducing manual effort. With this system, organizations can efficiently track lease agreements, payments, and renewals, leading to better decision-making and improved operational efficiency.

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});
        }
    }
}
```