LEASE MANAGEMENT

College Name: Nift-Tea Collage of knitwear fashion

College Code: 5n

TEAM ID:

TEAM MEMBERS:

Team LeaderName: S. PeerMohammed

Email: nowfilnowfil057@gmail.com

Team Member 1: M. Tamilvanan

Email: thugt1275@gmail.com

Team Member 2: S. Vikram

Email: vikramgowtham12345@gmail.com

Team Member 3: S. Narendrasrinivas

Email: prabukumar1975@gmail.com

Team Member 4: M. Sobika

Email: sobimoni2005@gmail.com

1.INTRODUCTION

1.1 Project Overview

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

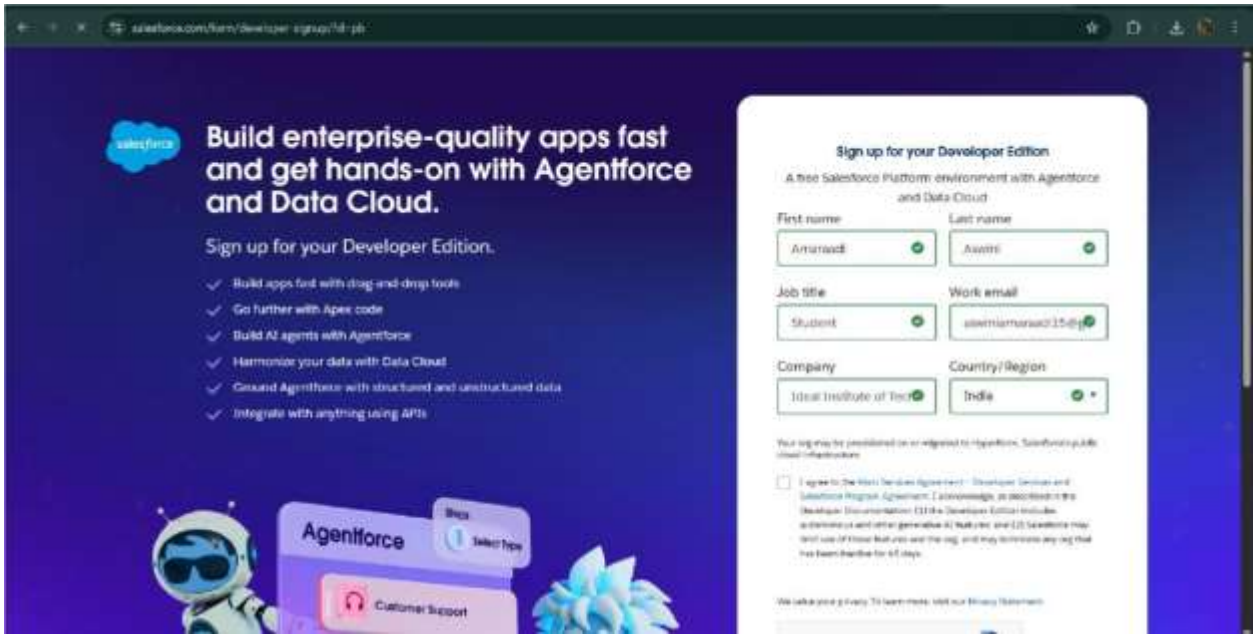
1.2 Purpose

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

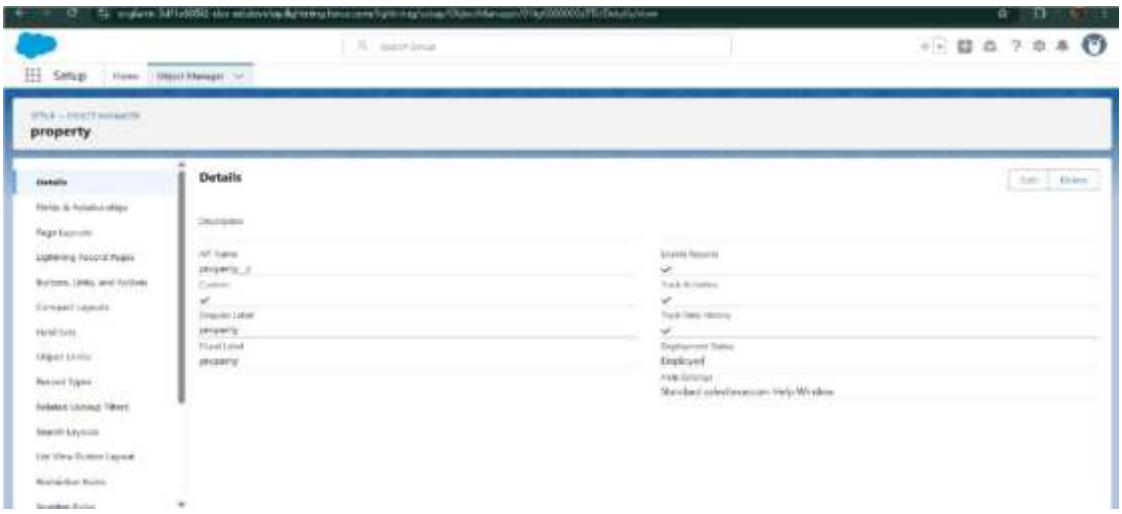
DEVELOPMENT PHASE

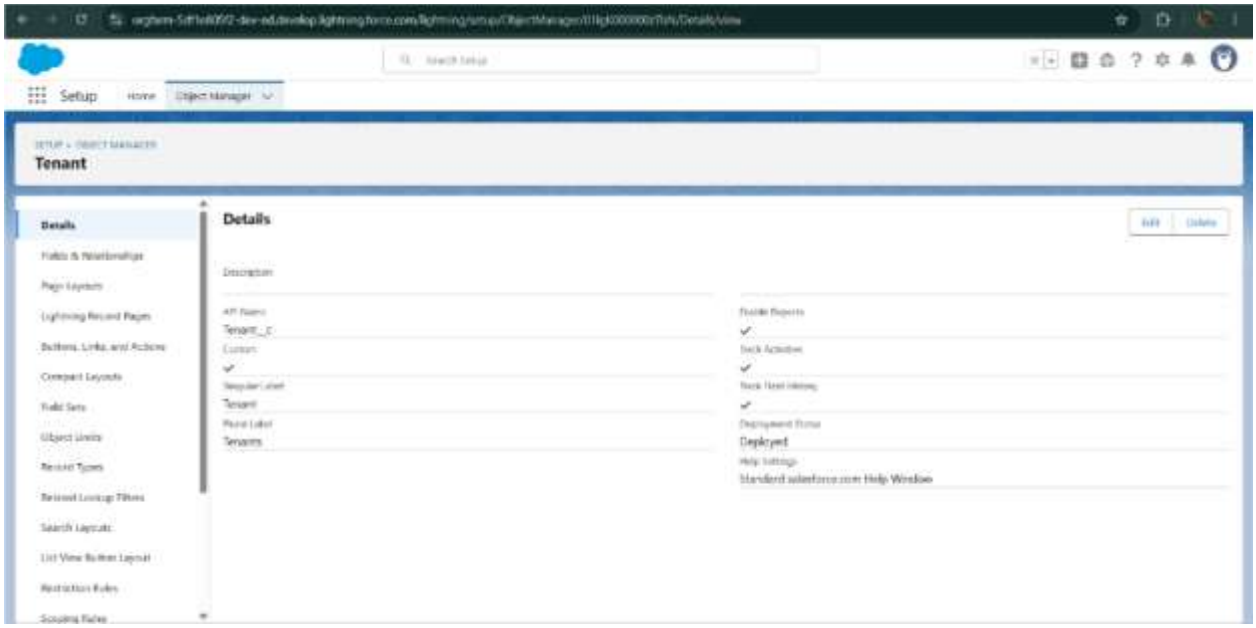
Creating Developer Account:

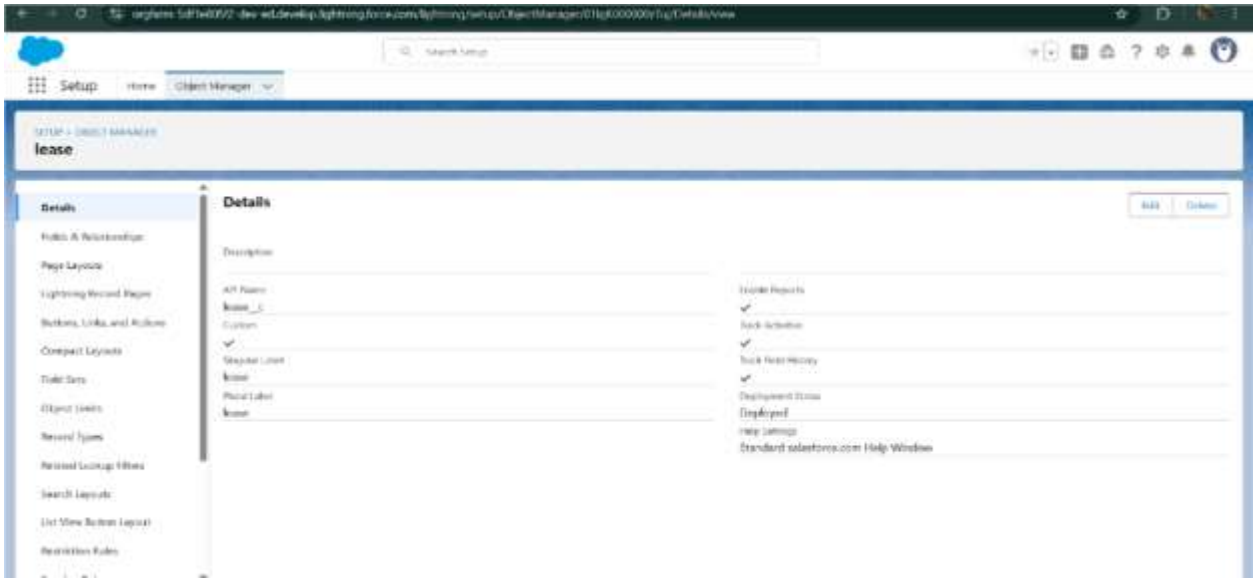
By using this URL - **https://www.salesforce.com/form/developer-signup/?d=pb**

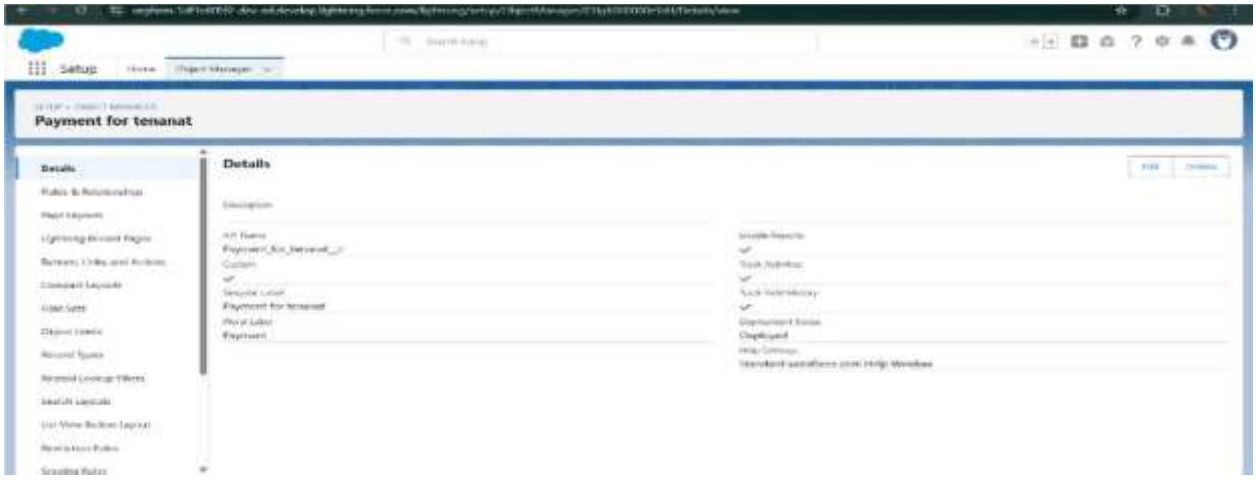


- Created objects: Property, Tenant, Lease, Payment

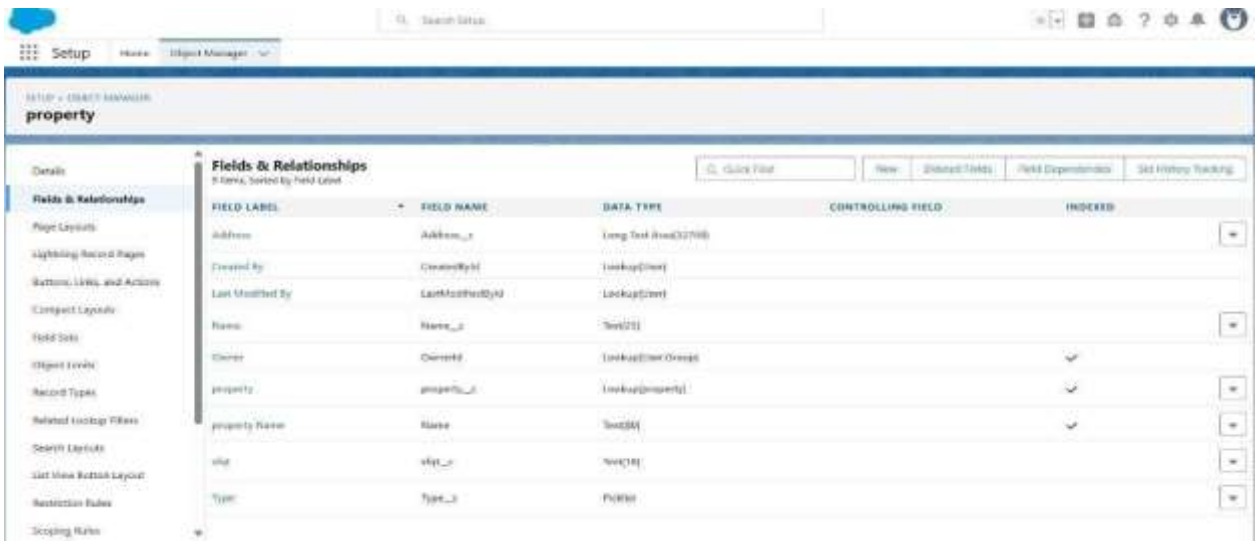


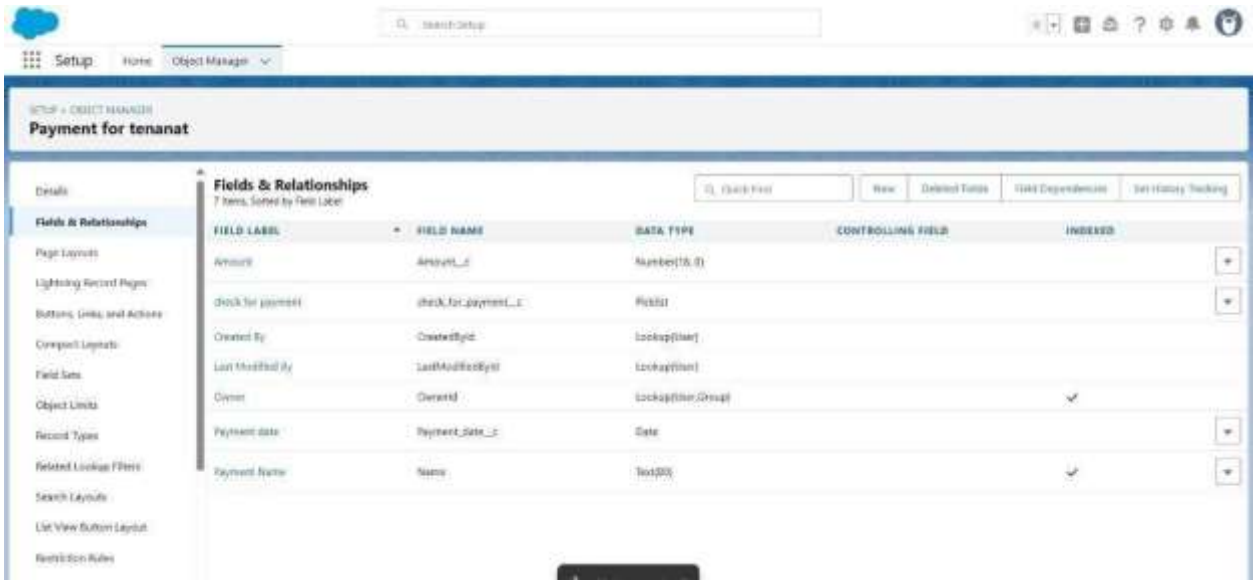

Setup
Home
Object Manager
Tenant
Details
Description
Tenant__c
Tenant
Tenants
Deployed
Standard salesforce.com Help Window

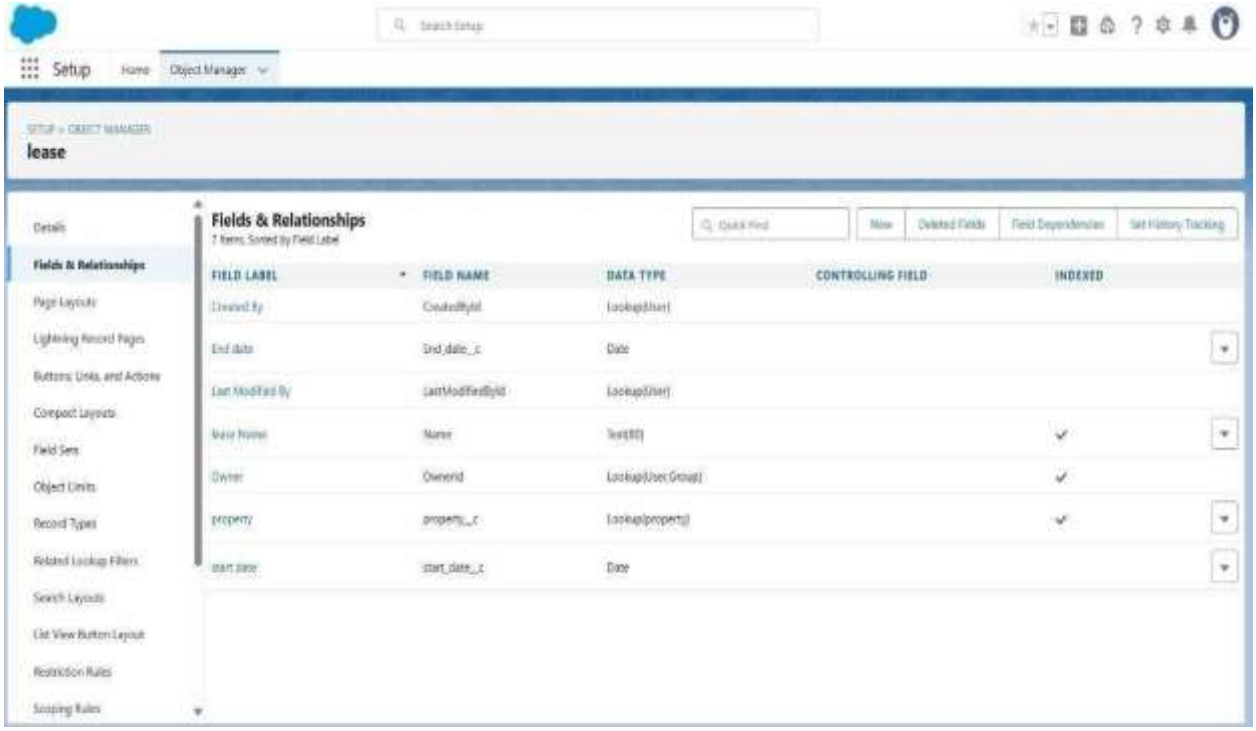

Setup
Home
Object Manager
lease
Details
Description
lease__c
lease
lease
Deployed
Standard salesforce.com Help Window

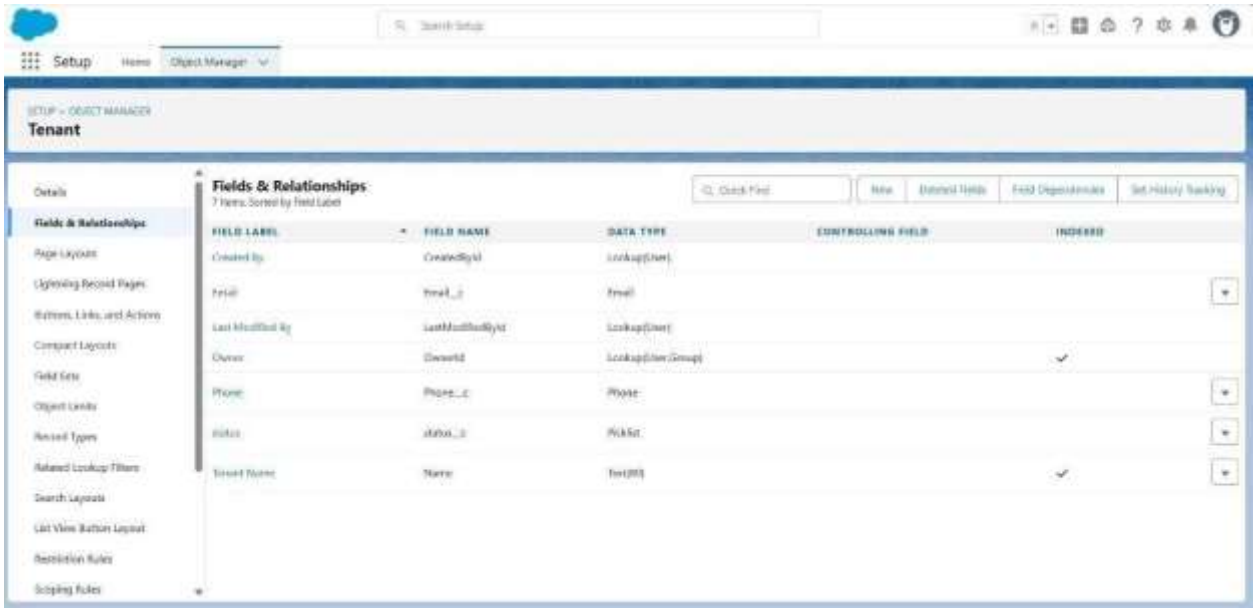


- Configured fields and relationships

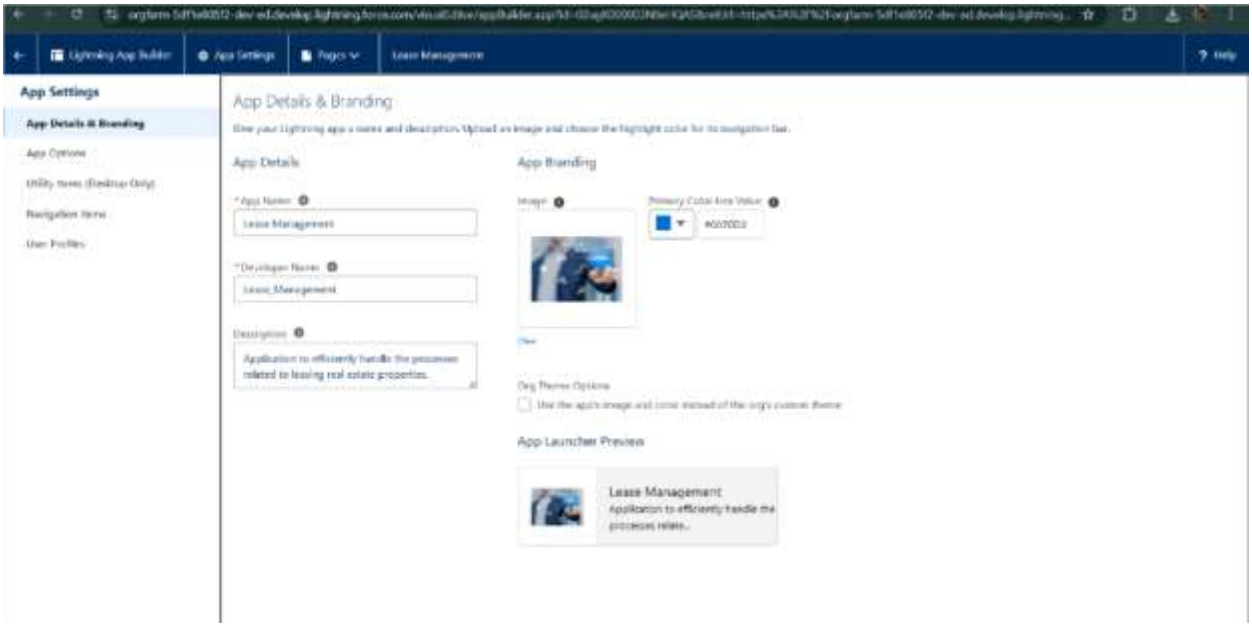


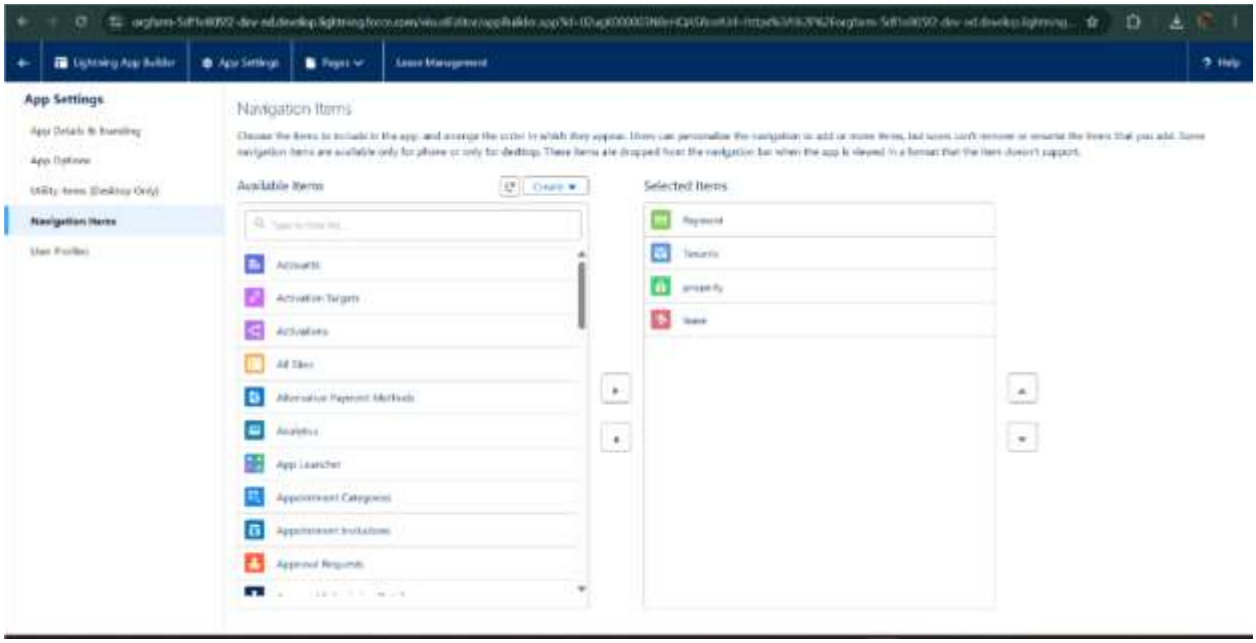

Setup
Home
Object Manager
Payment for tenanat
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Fields & Relationships
7 items, Sorted by Field Label
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)

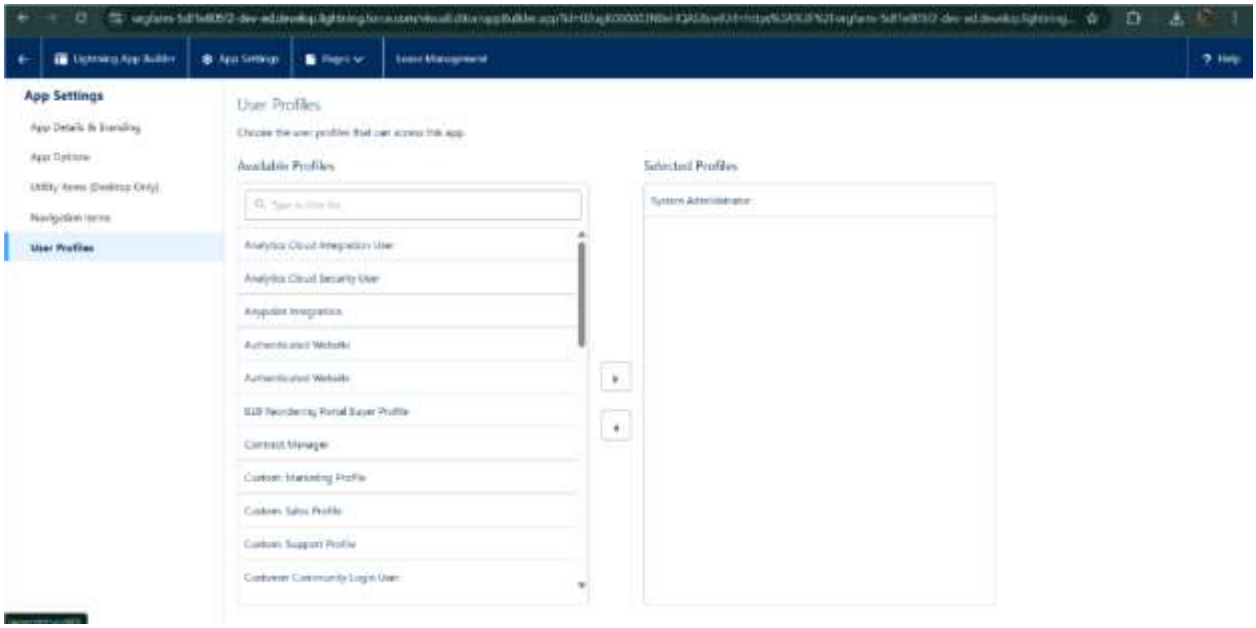

Setup
Home
Object Manager
lease
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Fields & Relationships
7 items, 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)
Owner
OwnerId
Lookup(User,Group)
property
property__c
Lookup(property)
start date
start_date__c
Date

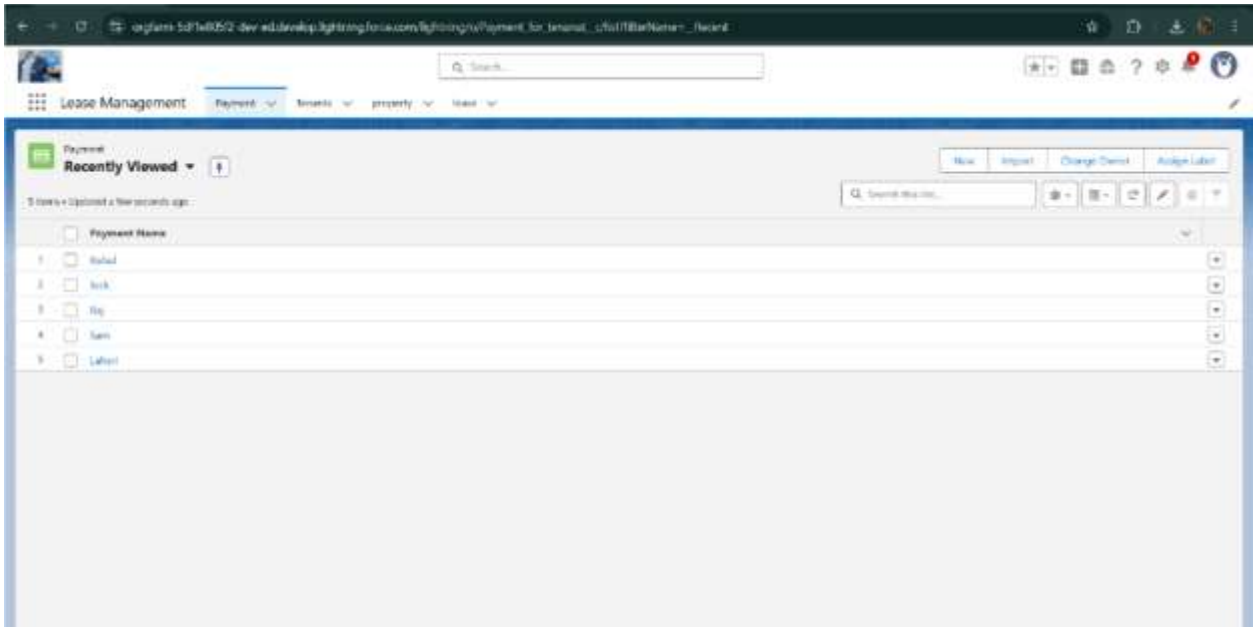


- Developed Lightning App with relevant tabs

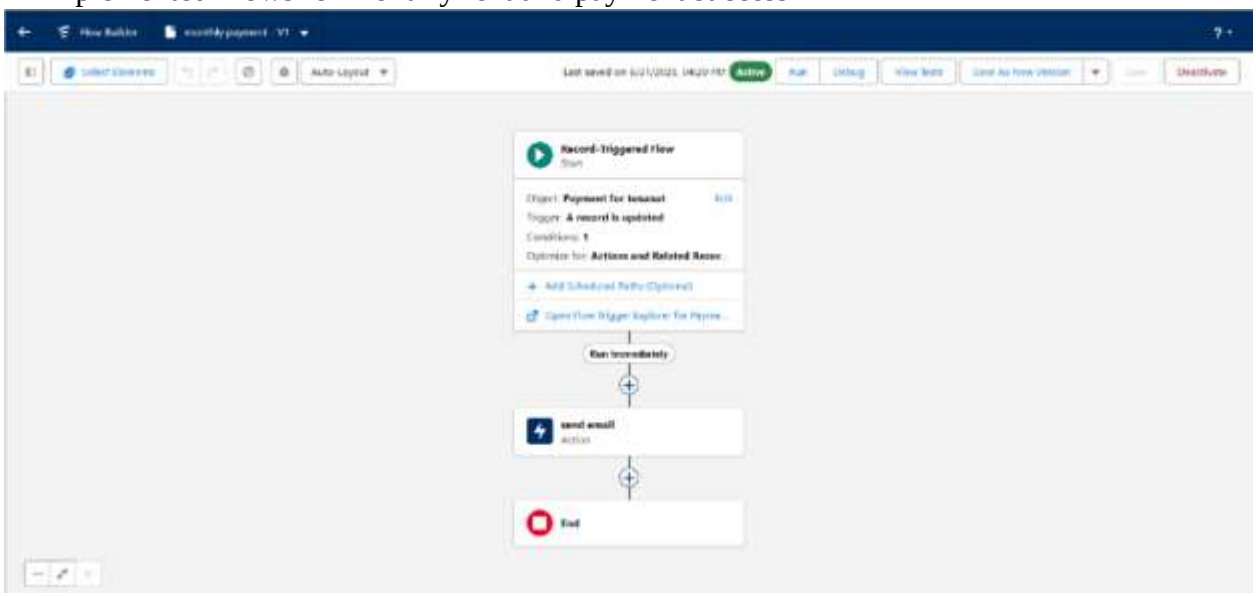



Lightning App Builder
App Settings
Pages
Lease Management
Help
App Settings
App Details & Branding
App Options
Utility Items (Desktop Only)
Navigation Items
User Profiles
Navigation Items
Available Items
Selected Items
Activities
Activation Targets
Activations
All Tiles
Alternative Payment Methods
Analytics
App Launcher
Appointment Categories
Approval Requests
Payment
Tenants
property
lease

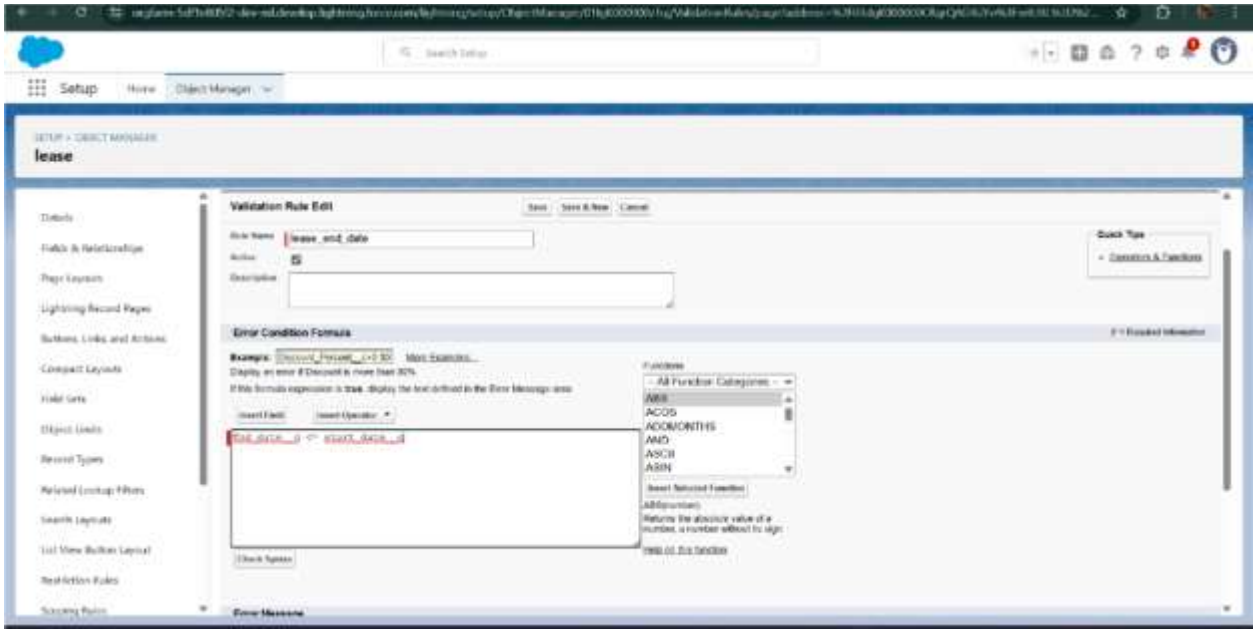

Lightning App Builder
App Settings
Pages
Lease Management
Help
App Settings
App Details & Branding
App Options
Utility Items (Desktop Only)
Navigation Items
User Profiles
User Profiles
Choose the user profiles that can access this app.
Available Profiles
Selected Profiles
System Administrator
Analytics Cloud Integration User
Analytics Cloud Security User
Anypoint Integration
Authenticated Website
Authenticated Website
B2B Reordering Portal Buyer Profile
Contract Manager
Custom: Marketing Profile
Custom: Sales Profile
Custom: Support Profile
Customer Community Login User

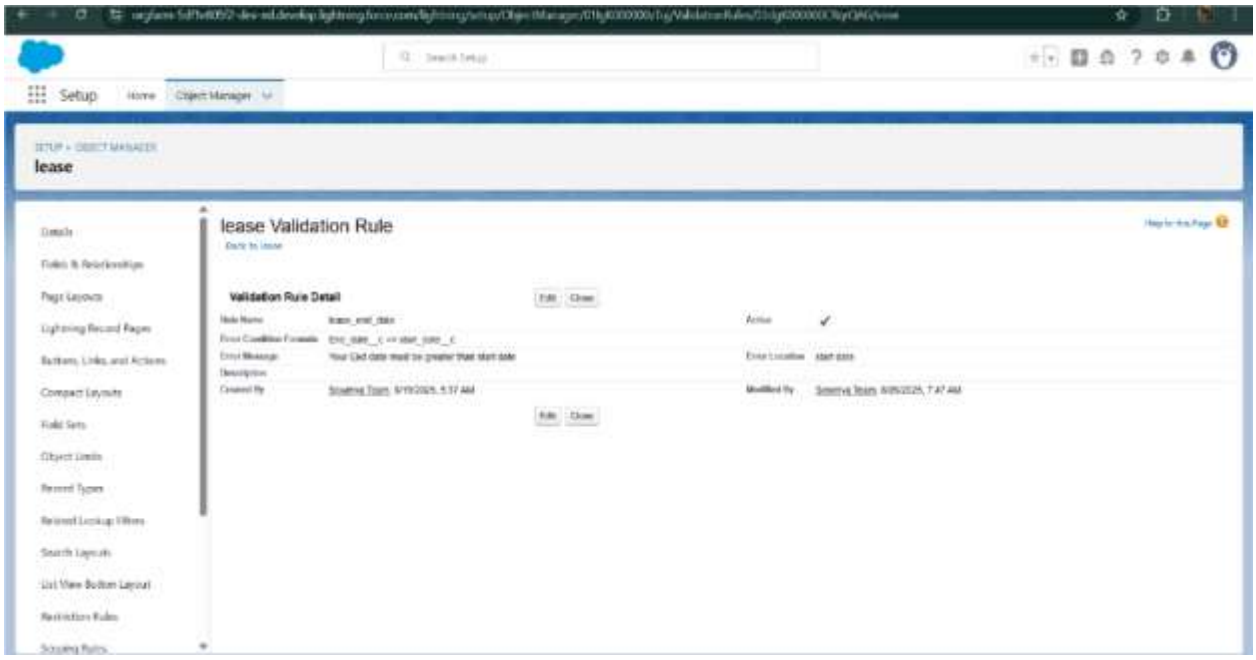


- Implemented Flows for monthly rent and payment success

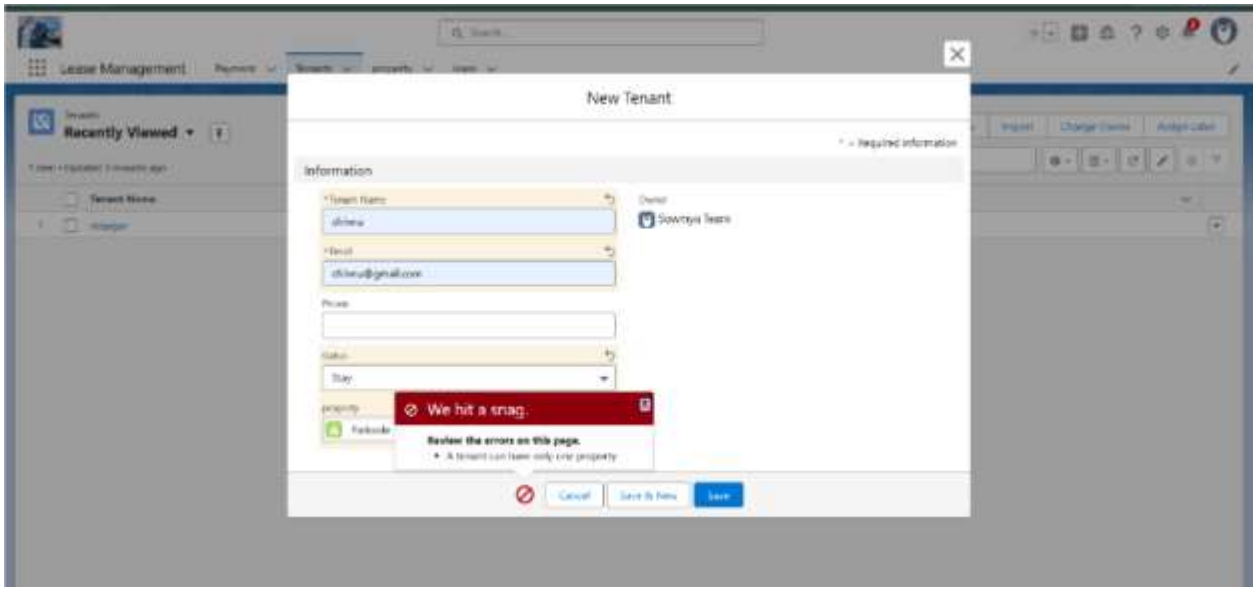


- To create a validation rule to a Lease Object

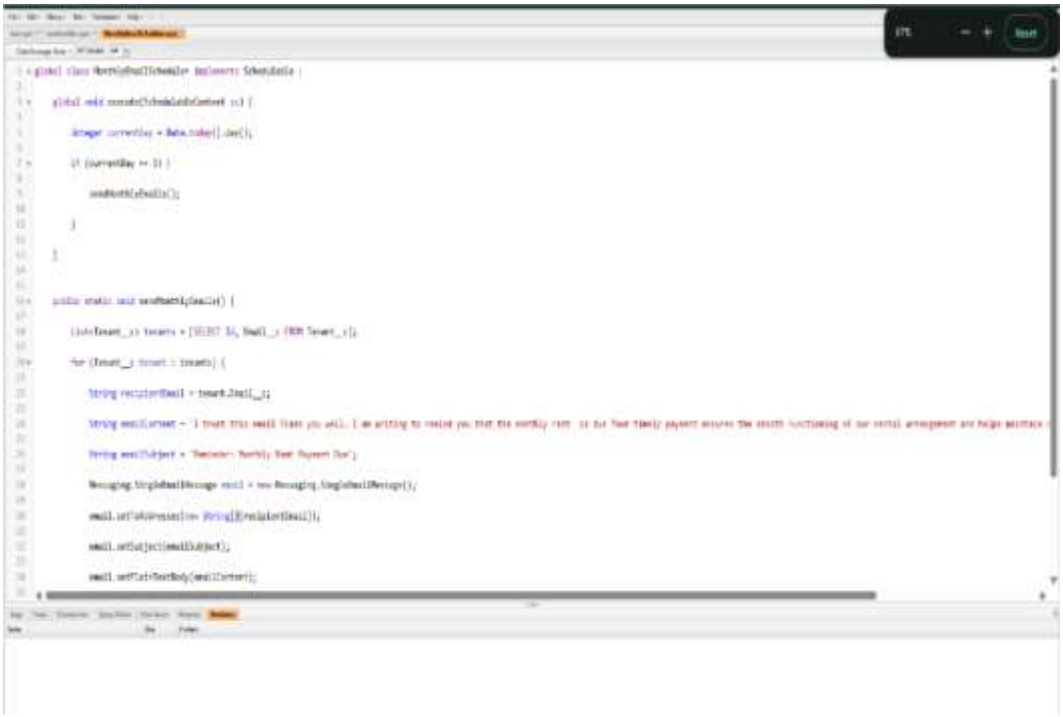




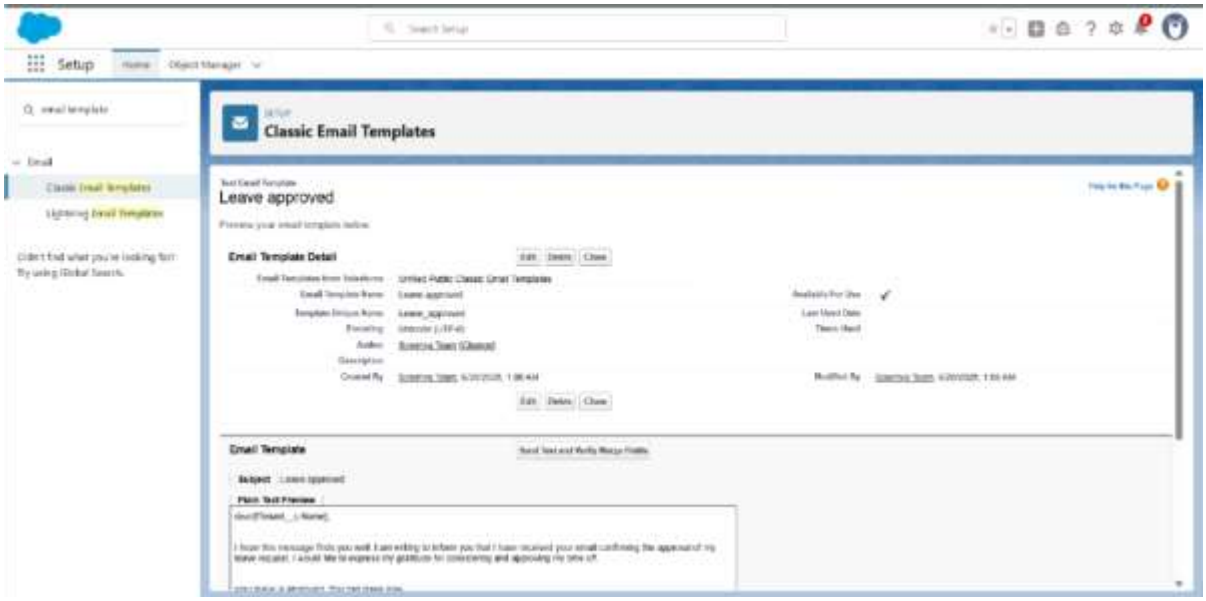
- Added Apex trigger to restrict multiple tenants per property

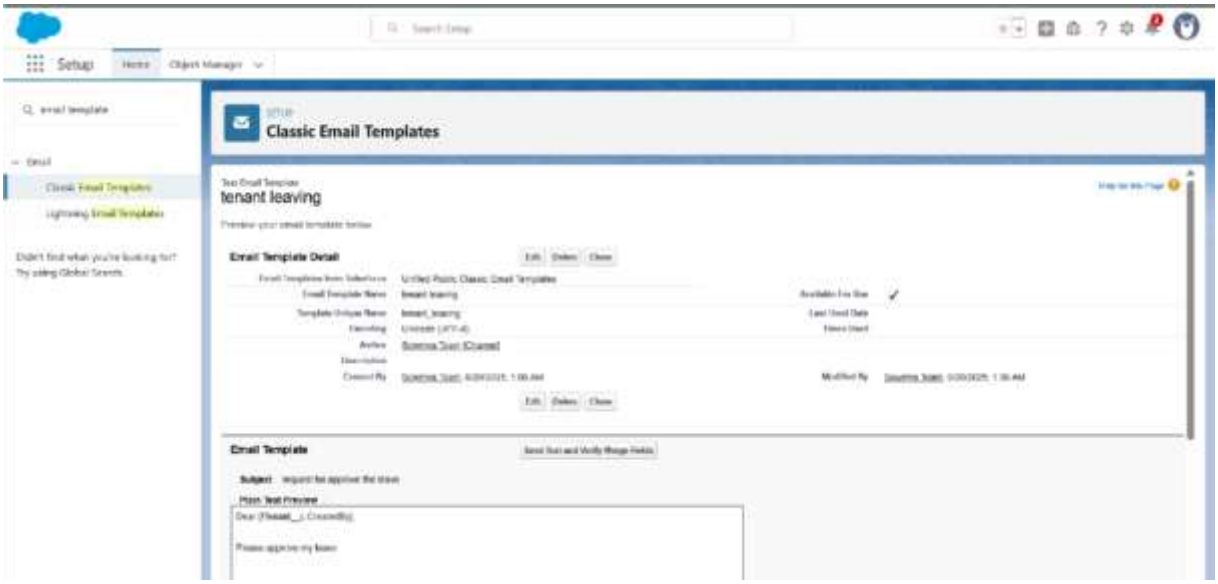


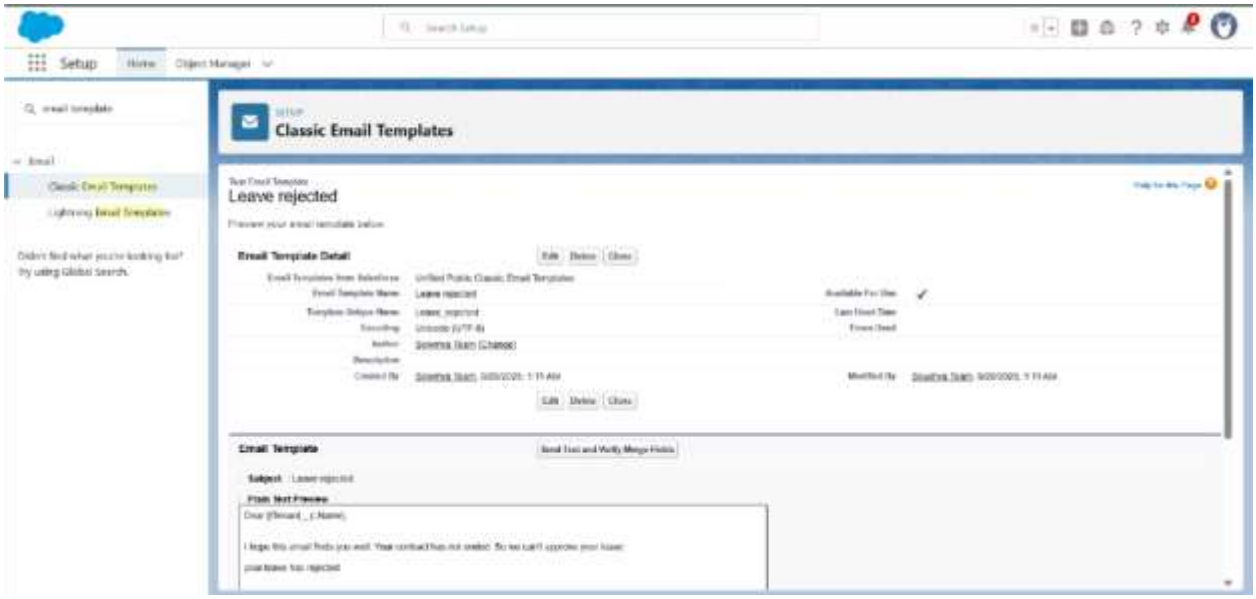
- Scheduled monthly reminder emails using Apex class

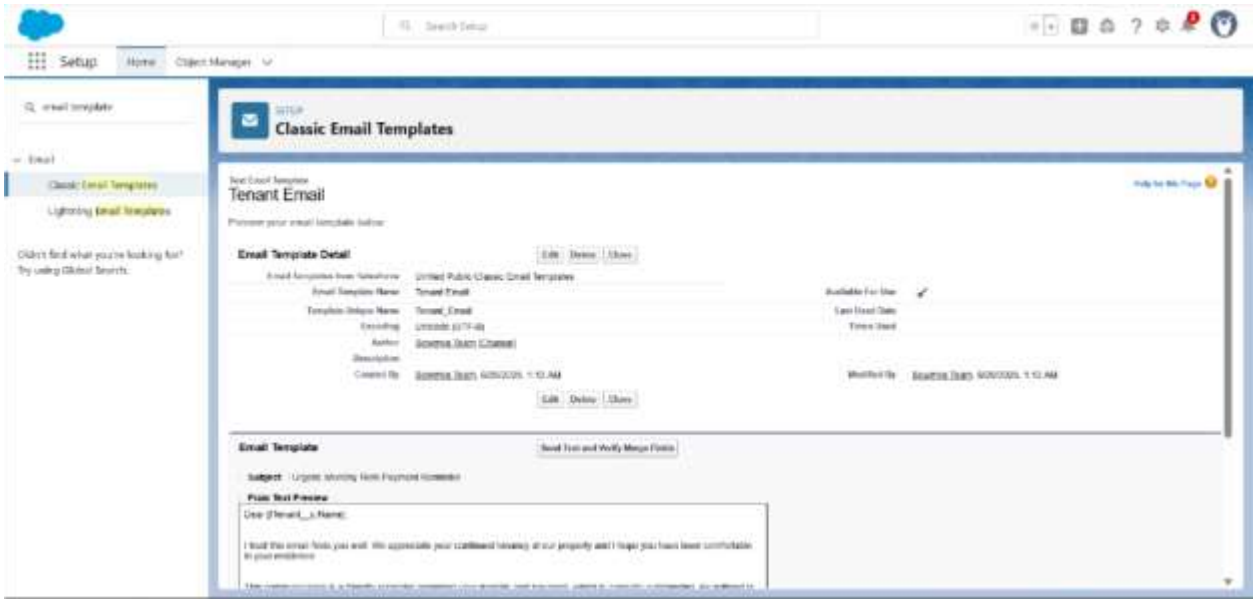


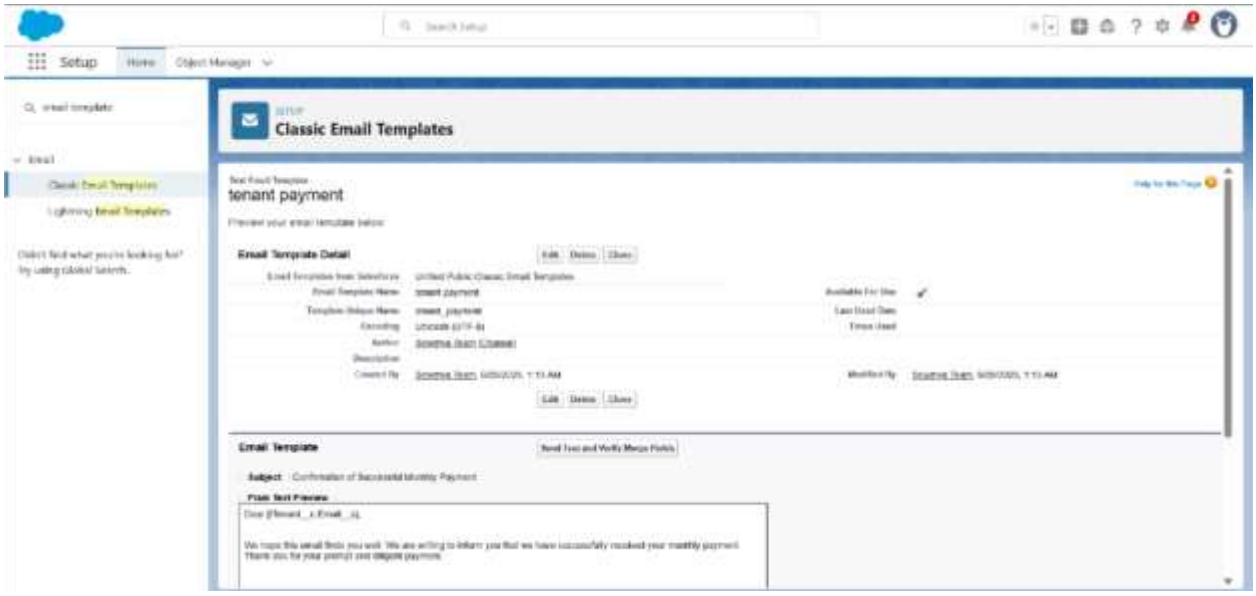
- Built and tested email templates for leave request, approval, rejection, payment, and reminders





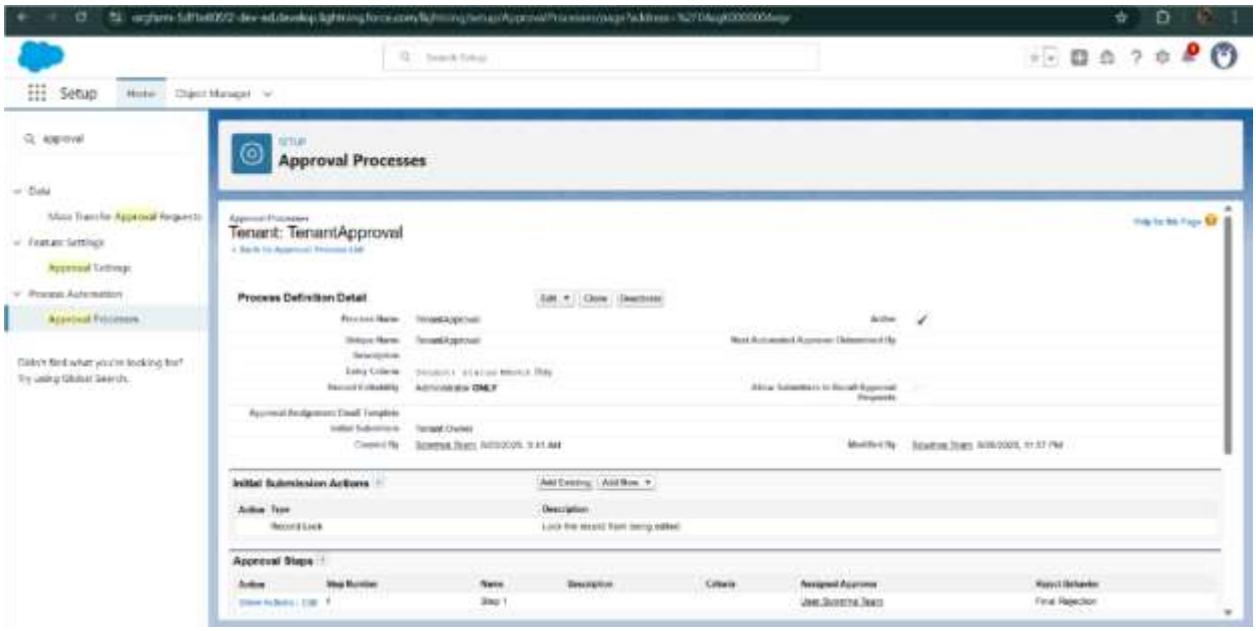

Setup
Home
Object Manager
Classic Email Templates
Leave rejected
Email Template Detail
Edit
Delete
Clone
Email Template
Subject


Setup
Home
Object Manager
Classic Email Templates
Tenant Email
Email Template Detail
Edit
Delete
Clone
Email Template
Subject

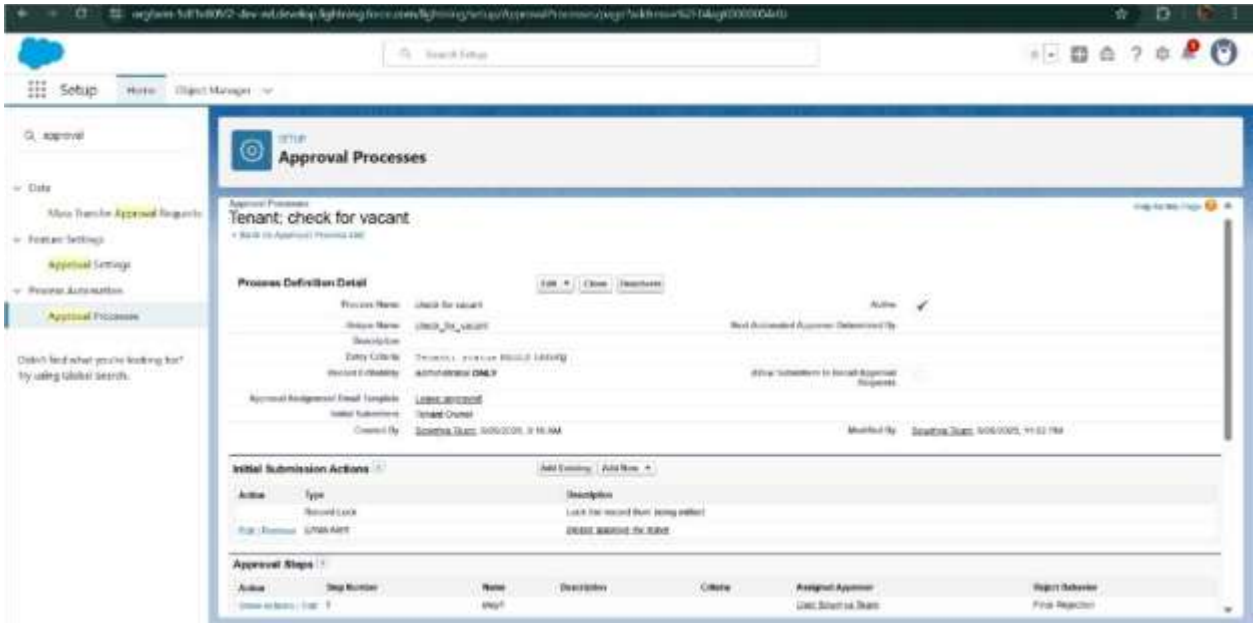


- Approval Process creation

For Tenant Leaving:

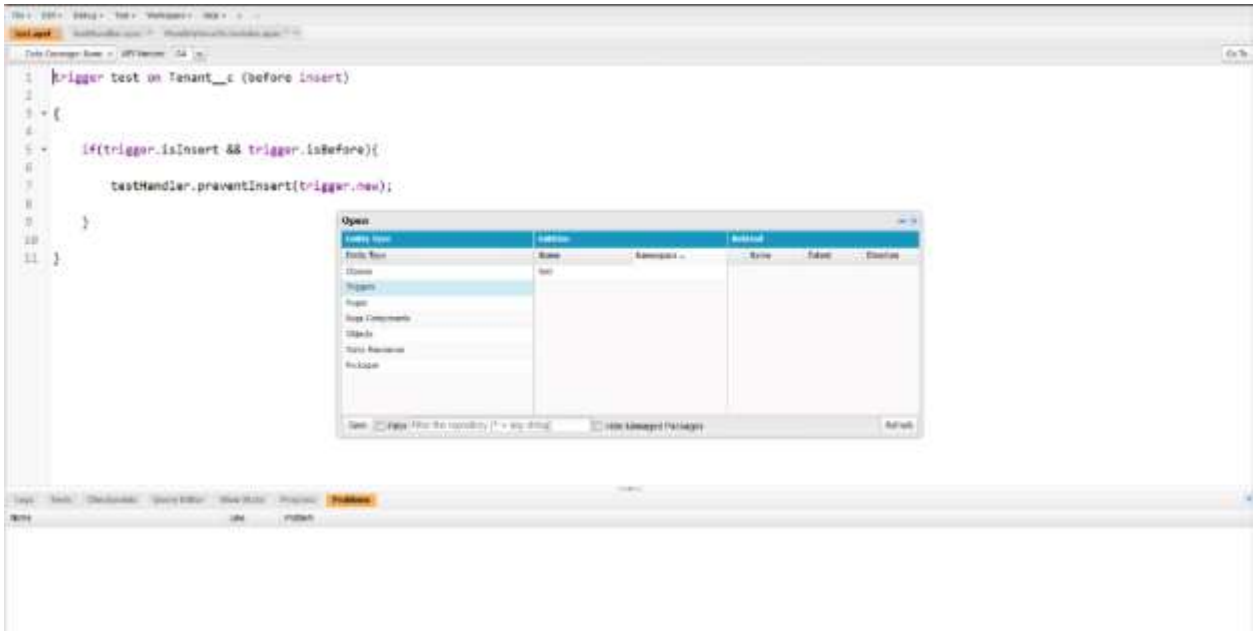


For Check for Vacant:



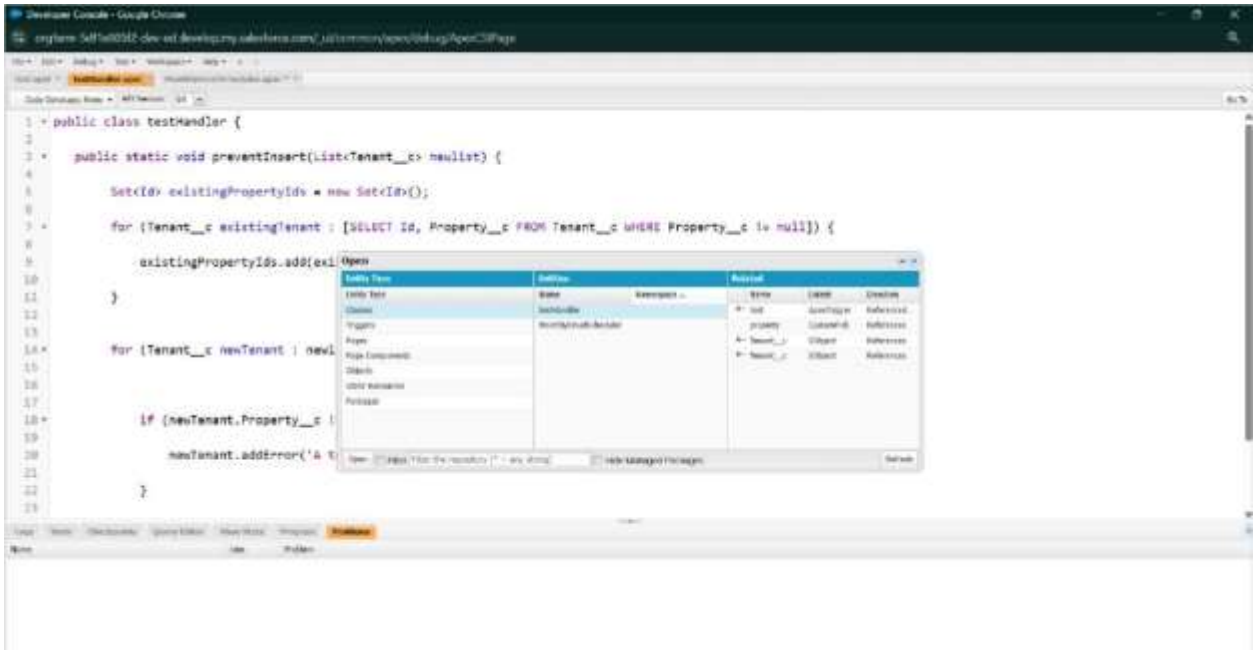
- Apex Trigger

  Create an Apex Trigger



```
trigger test on Tenant__c (before insert)

{

    if(trigger.isInsert && trigger.isBefore){

        testHandler.preventInsert(trigger.new);

    }

}
```

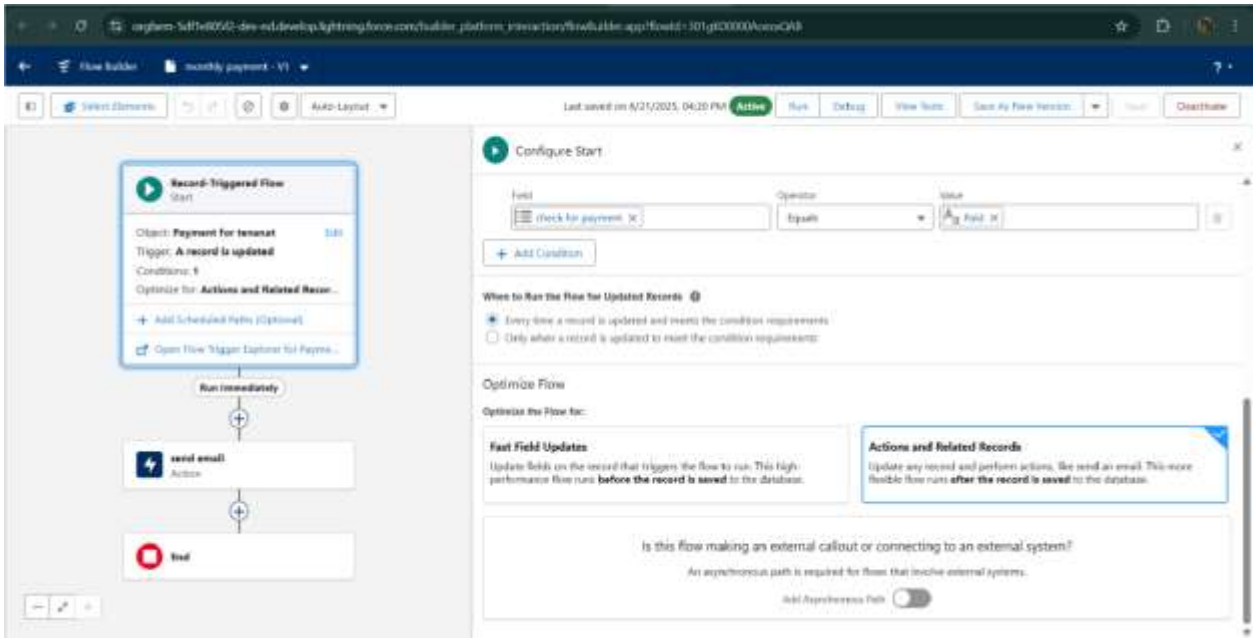
Create an Apex Handler class

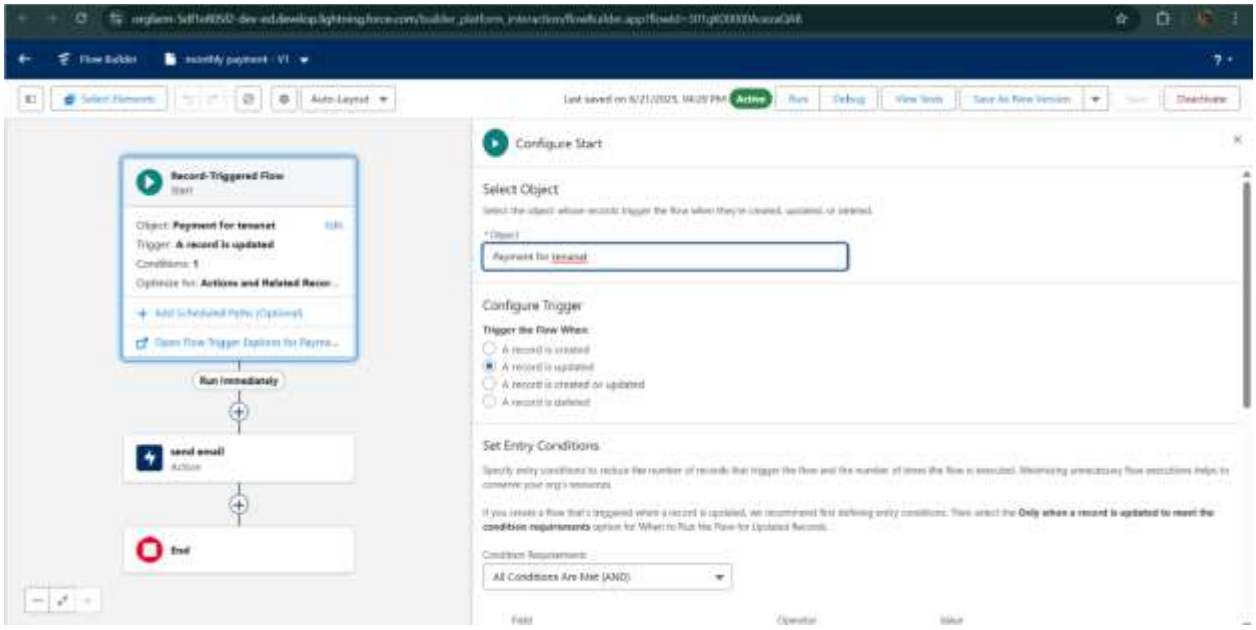


```
public class testHandler {

    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

            }
```

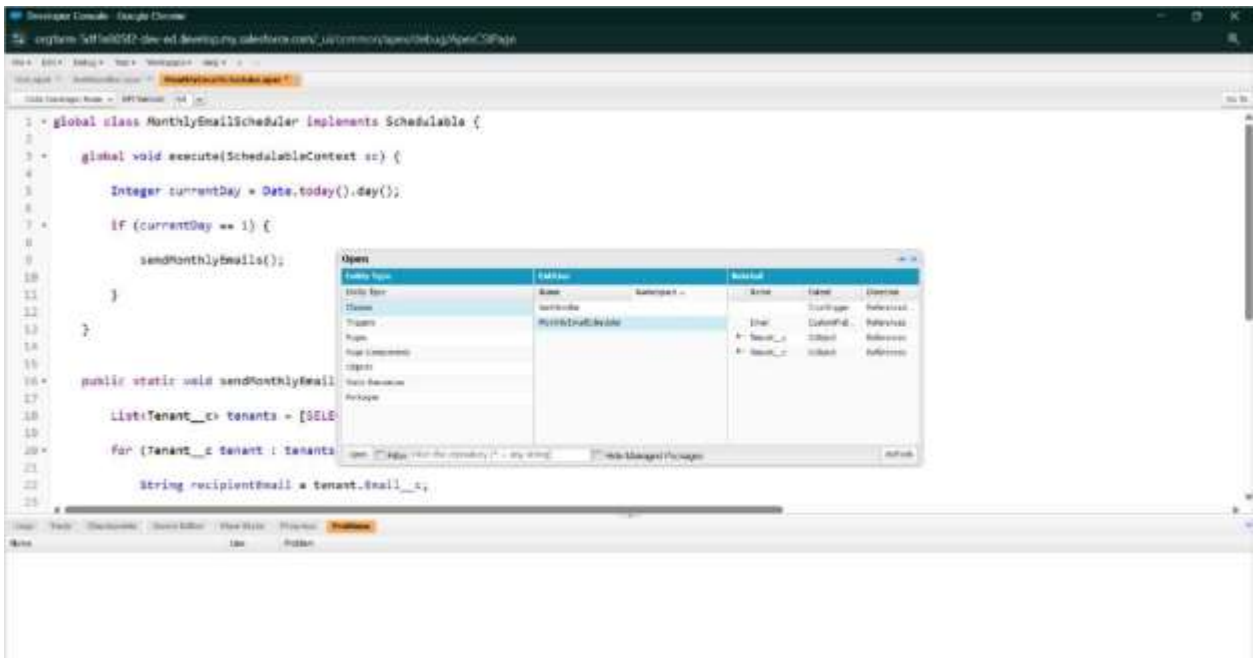
```
public class testHandler {

    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');

            }
```

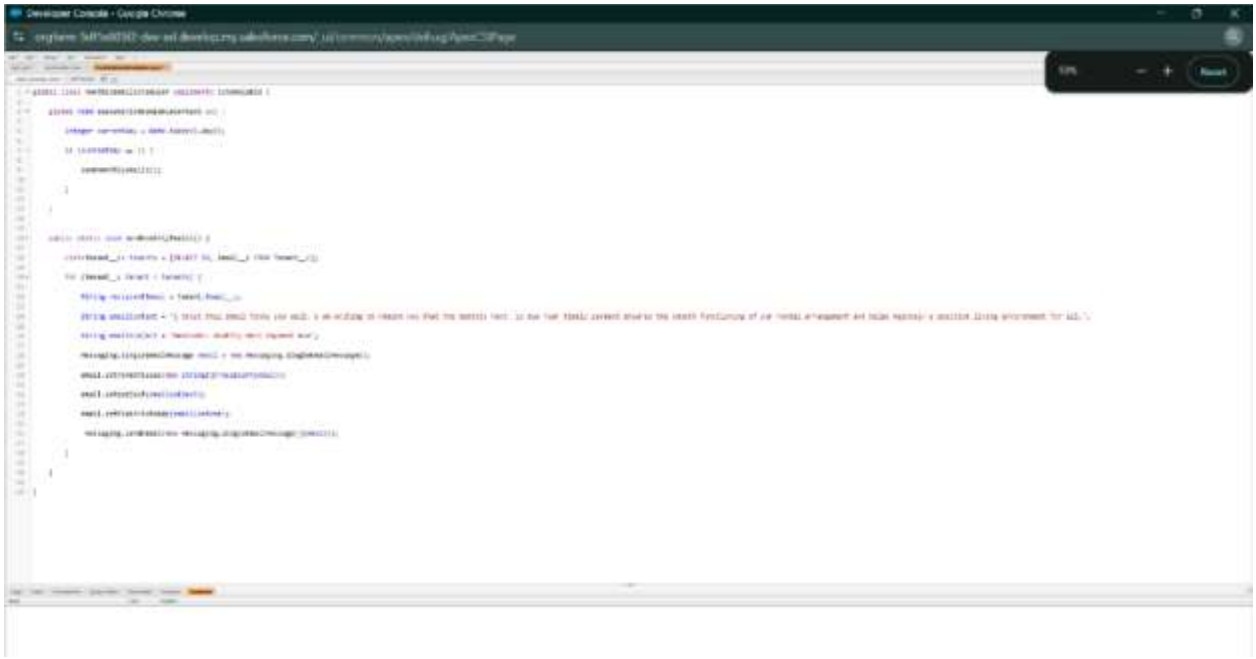
- FLOWS



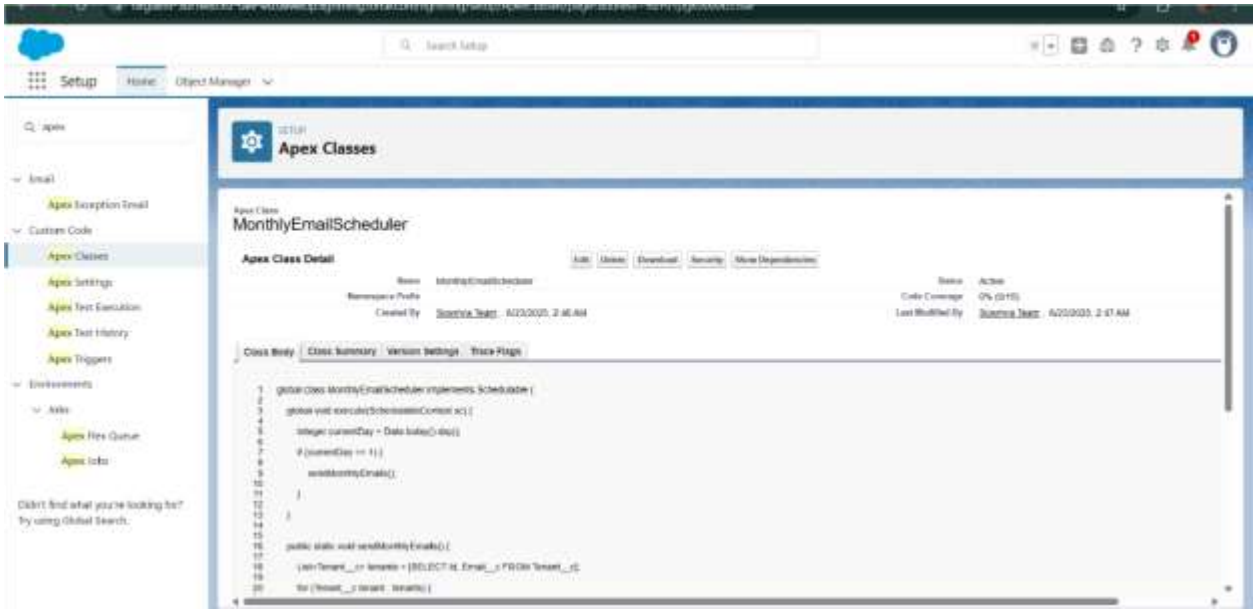


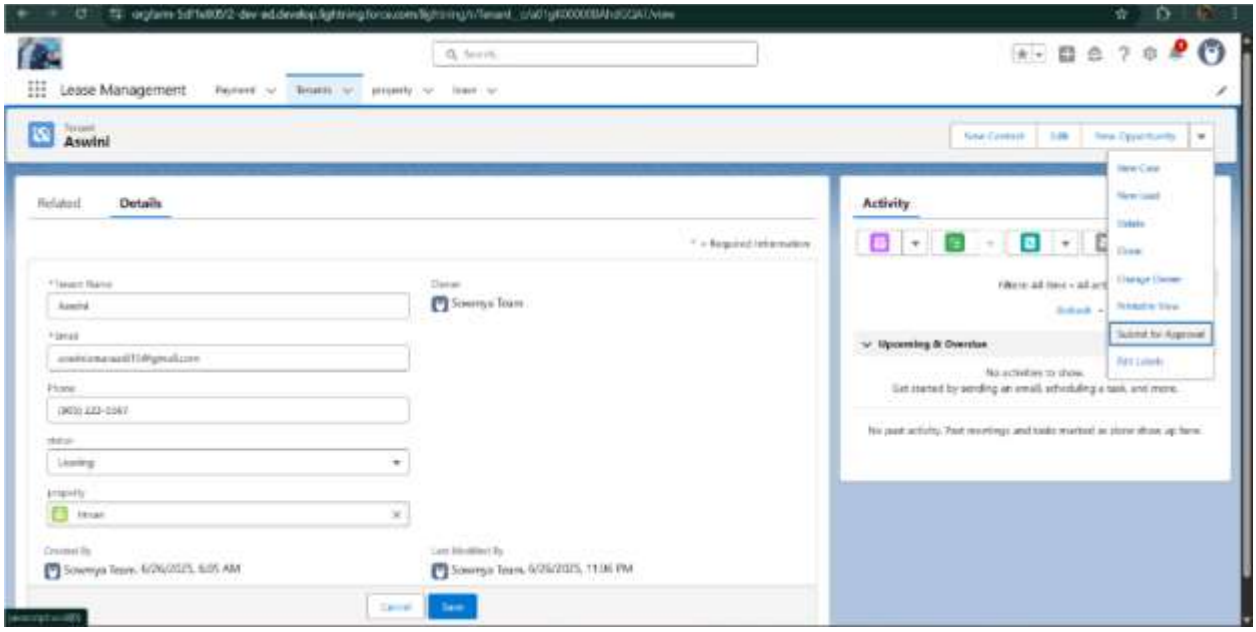
- Schedule class:
  Create an Apex Class

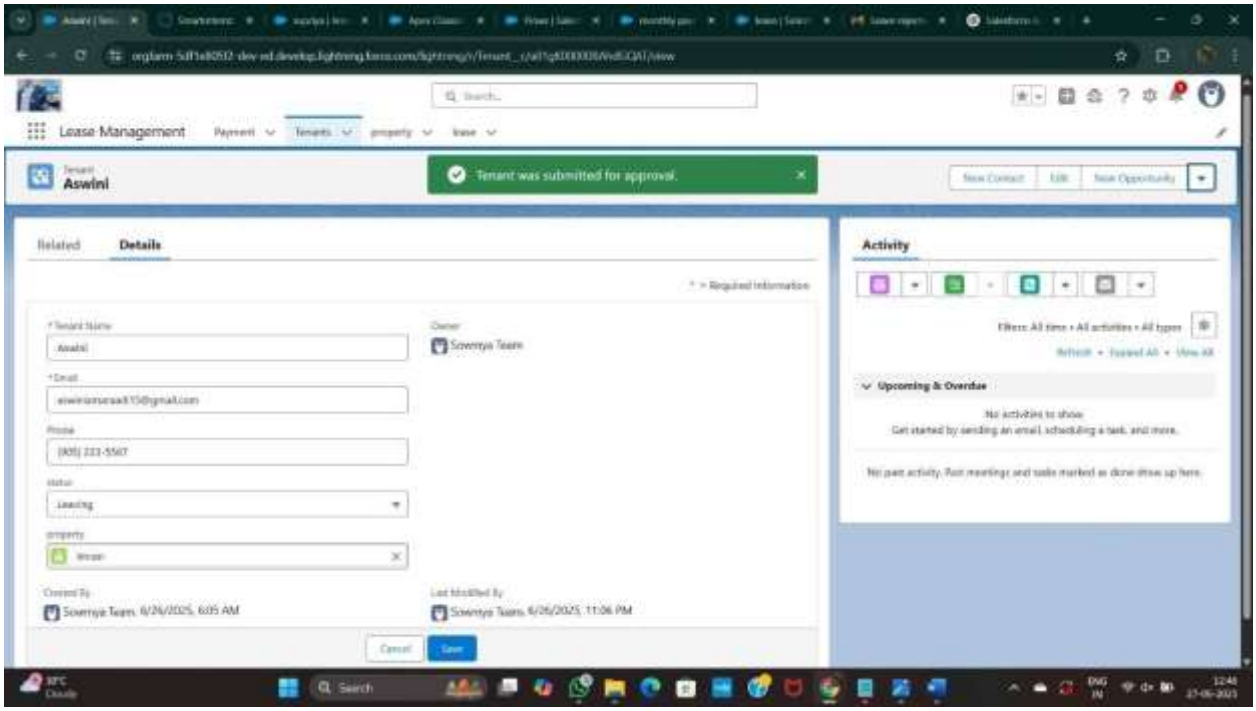


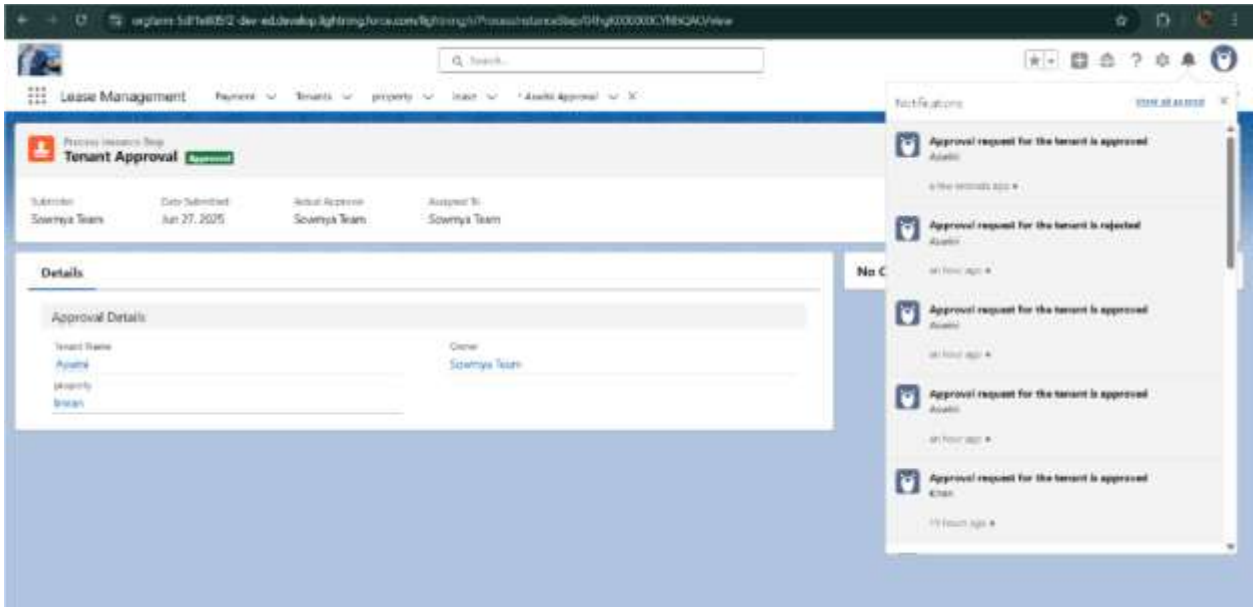


Schedule Apex class




Lease Management
Payment
Tenants
property
lease
Aswini
Related
Details
Activity
Submit for Approval
Upcoming & Overdue
No activities to show.
Get started by sending an email, scheduling a task, and more.
Owner
Sowmya Team
Cancel
Save

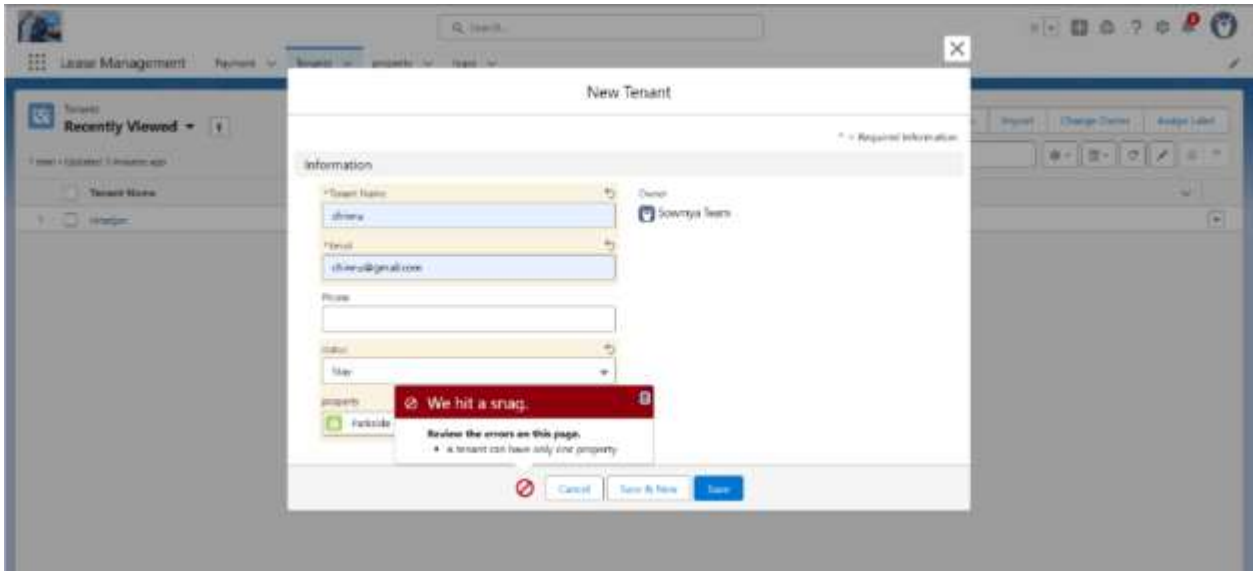

Lease Management
Payment
Tenants
property
lease
Aswini
Tenant was submitted for approval.
Related
Details
Activity
Upcoming & Overdue
No activities to show.
Get started by sending an email, scheduling a task, and more.
Owner
Sowmya Team
Cancel
Save



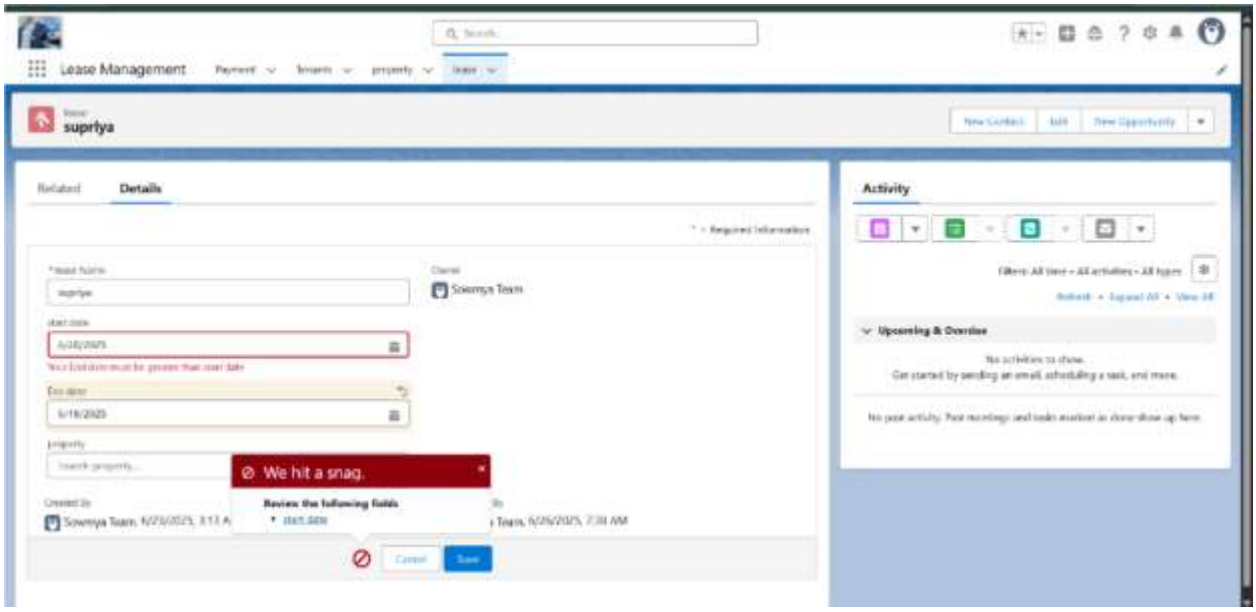
FUNCTIONAL AND PERFORMANCE TESTING

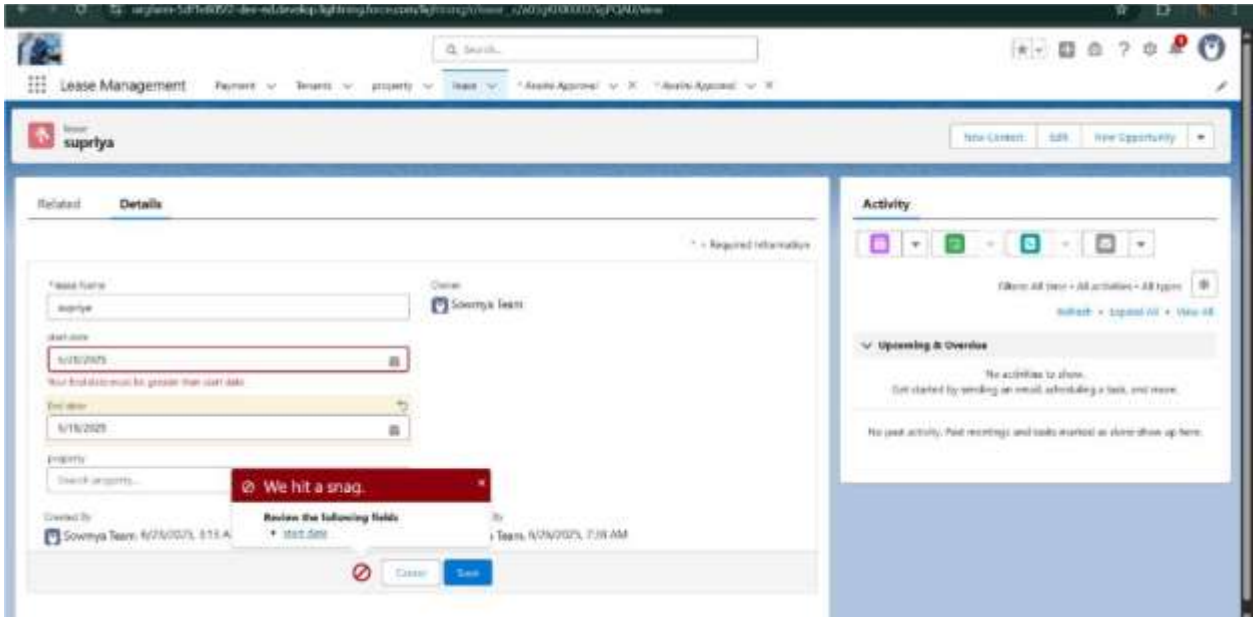
Performance Testing

- Trigger validation by entering duplicate tenant-property records

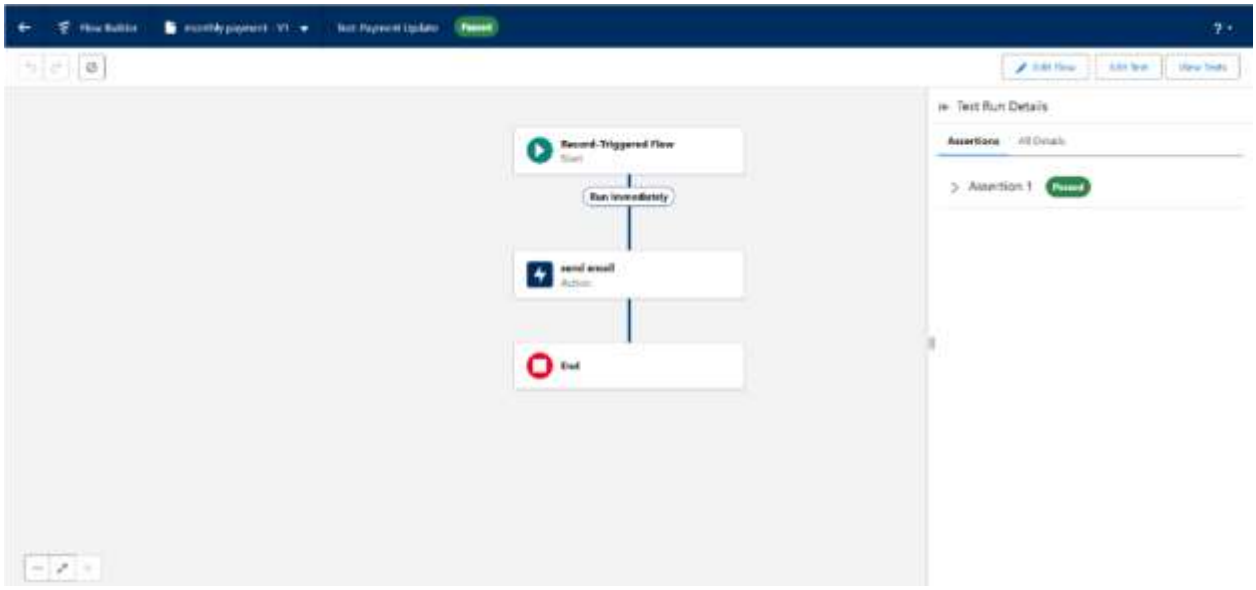


- Validation Rule checking

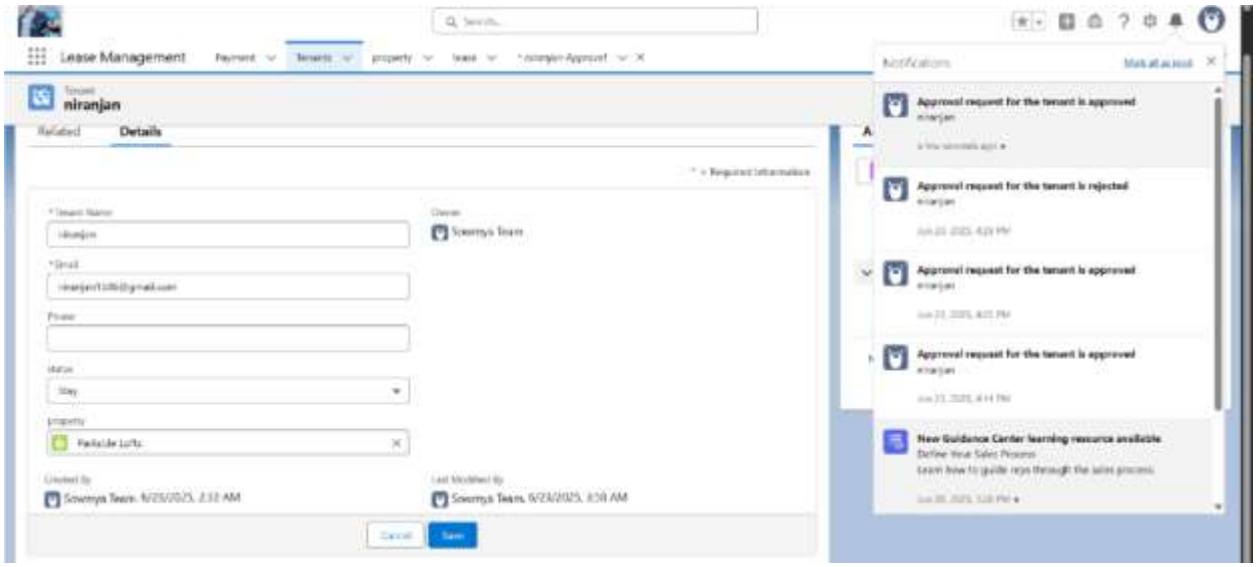


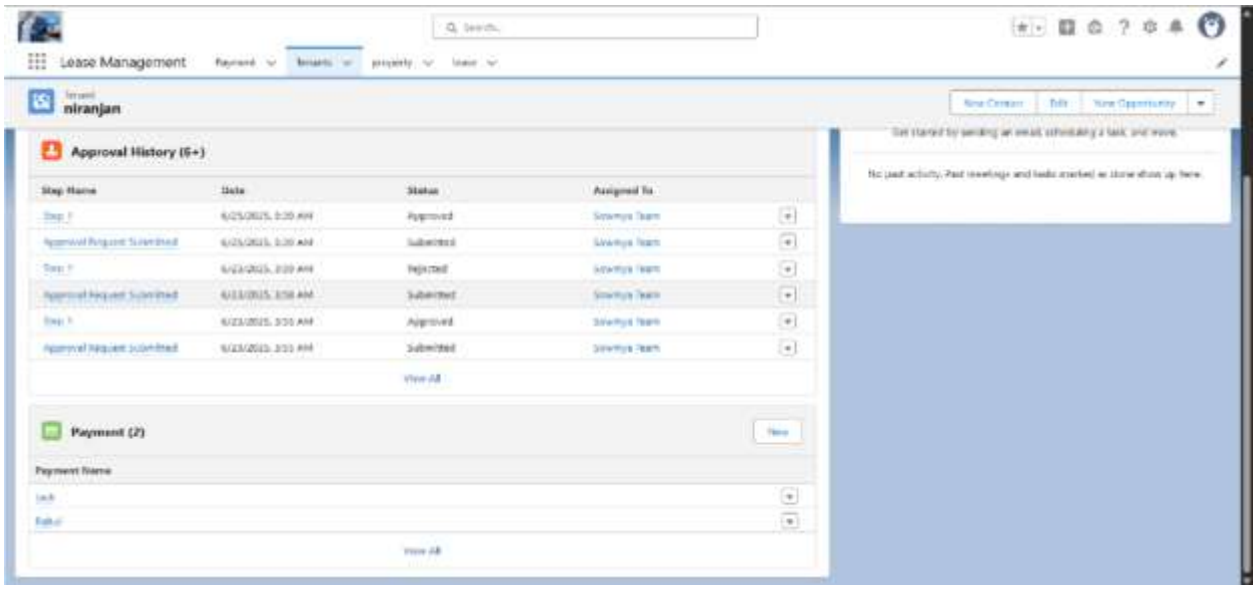


- Test flows on payment update



- Approval process validated through email alerts and status updates

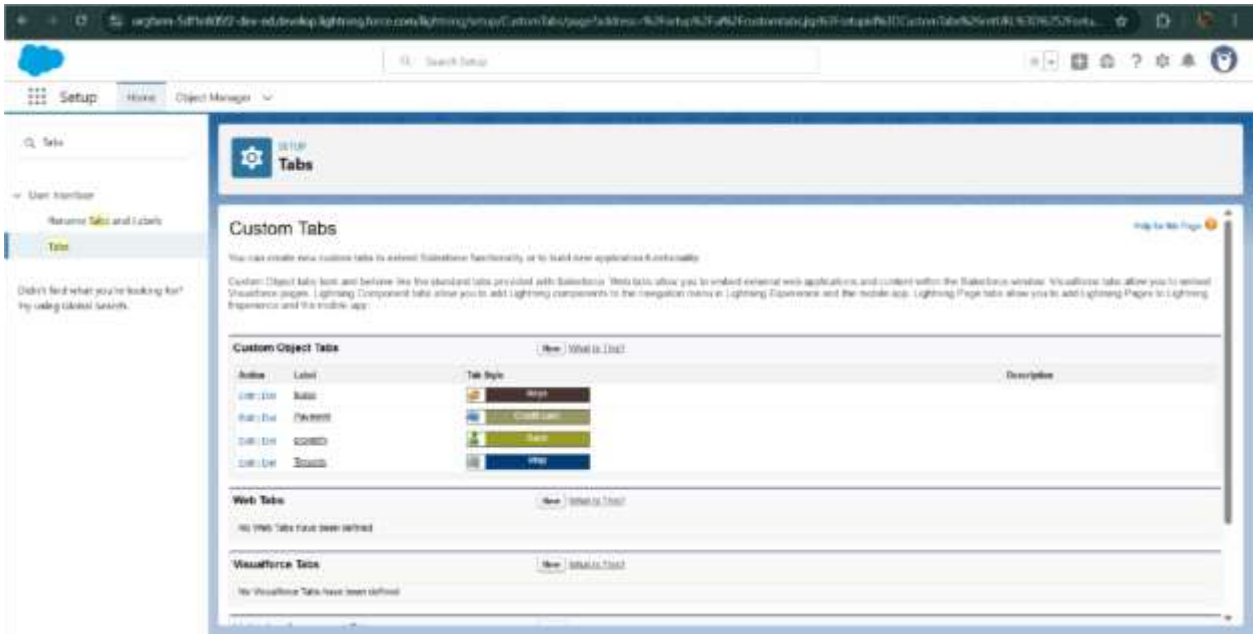

Lease Management
niranjan
Related
Details
Approval request for the tenant is approved
Approval request for the tenant is rejected
Approval request for the tenant is approved
Approval request for the tenant is approved
New Guidance Center learning resource available


Lease Management
niranjan
Approval History (6+)
Payment (2)

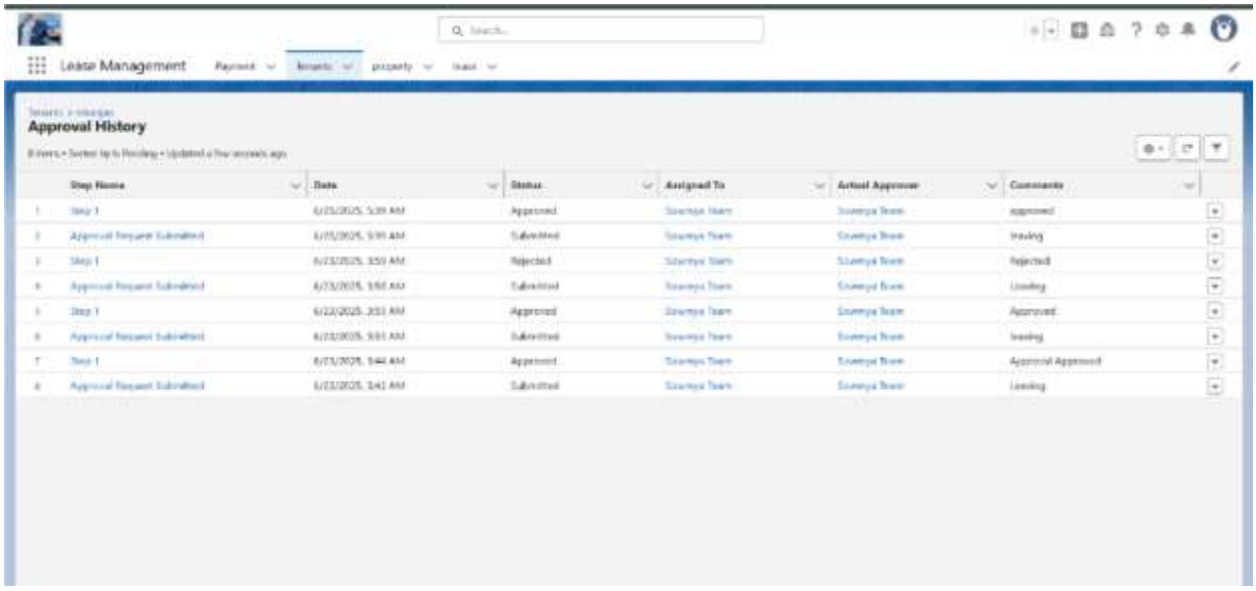
RESULTS

Output Screenshots

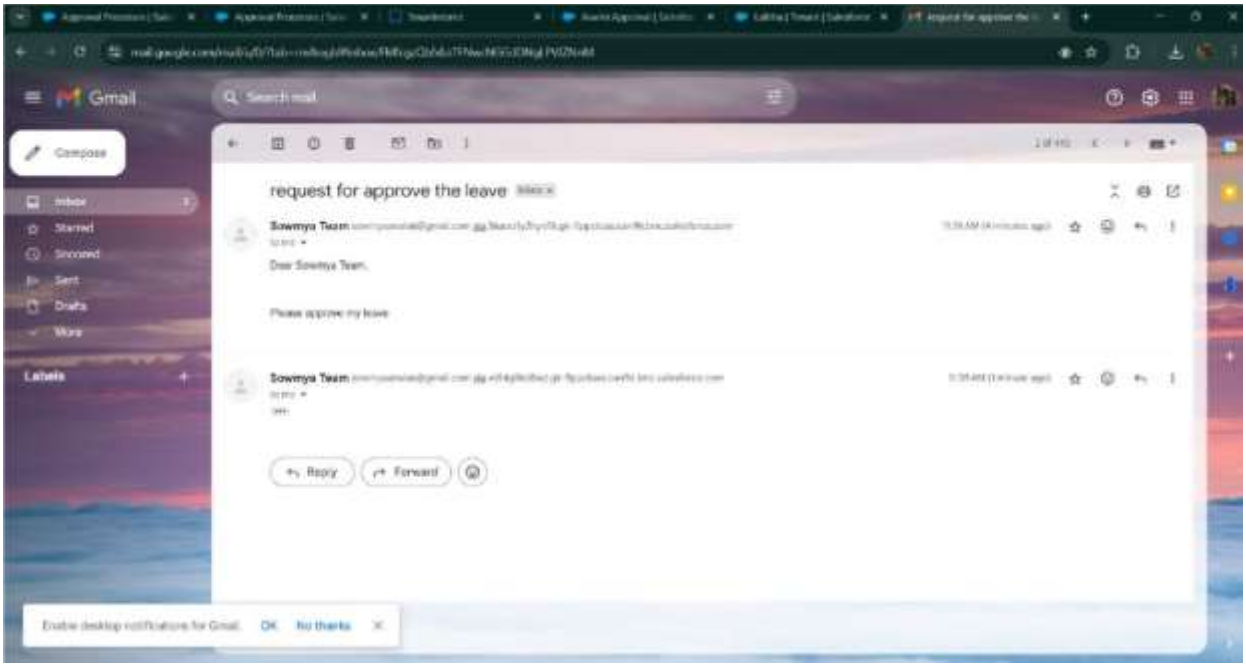
- Tabs for Property, Tenant, Lease, Payment



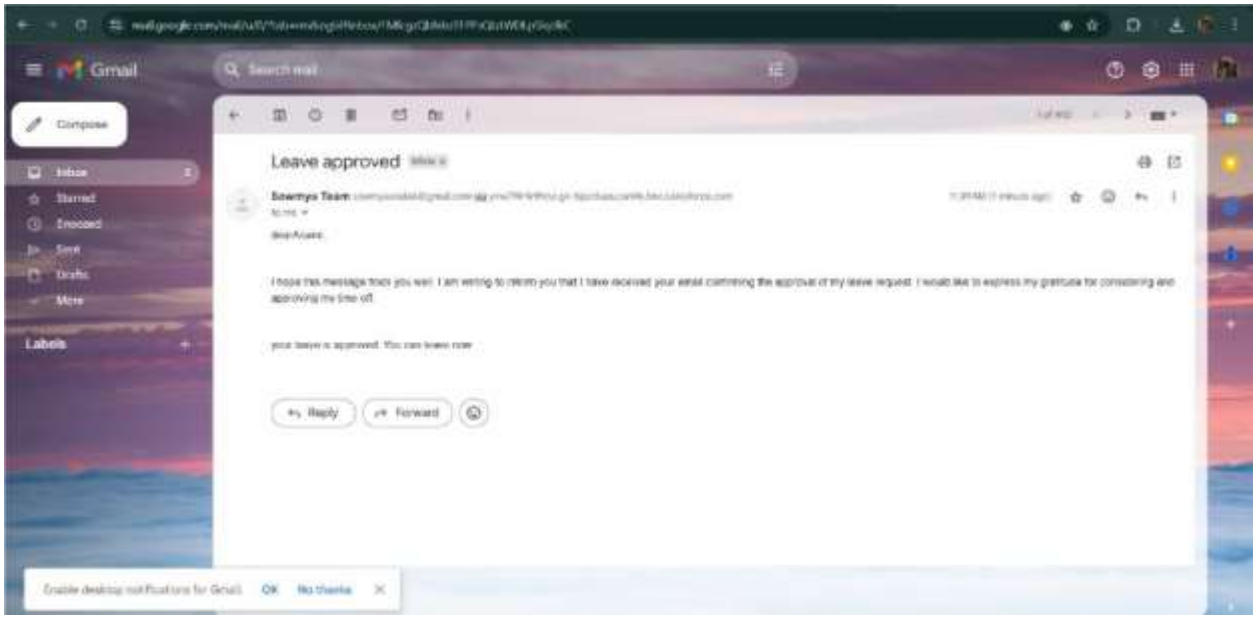
- Email alerts



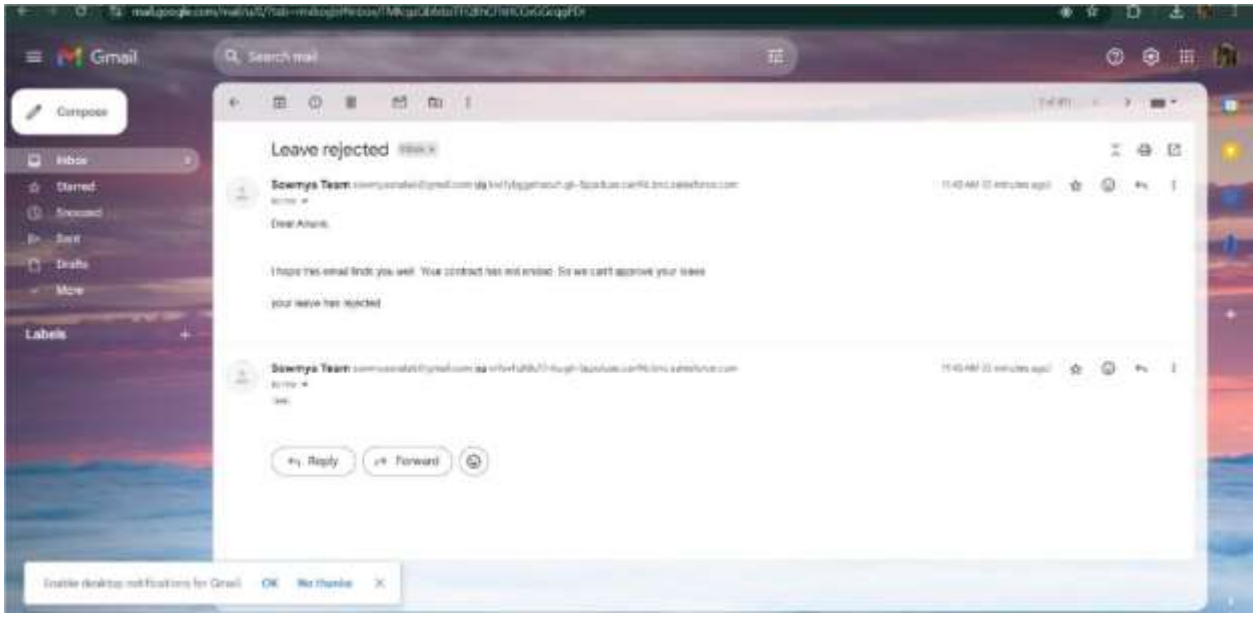
- Request for approve the leave



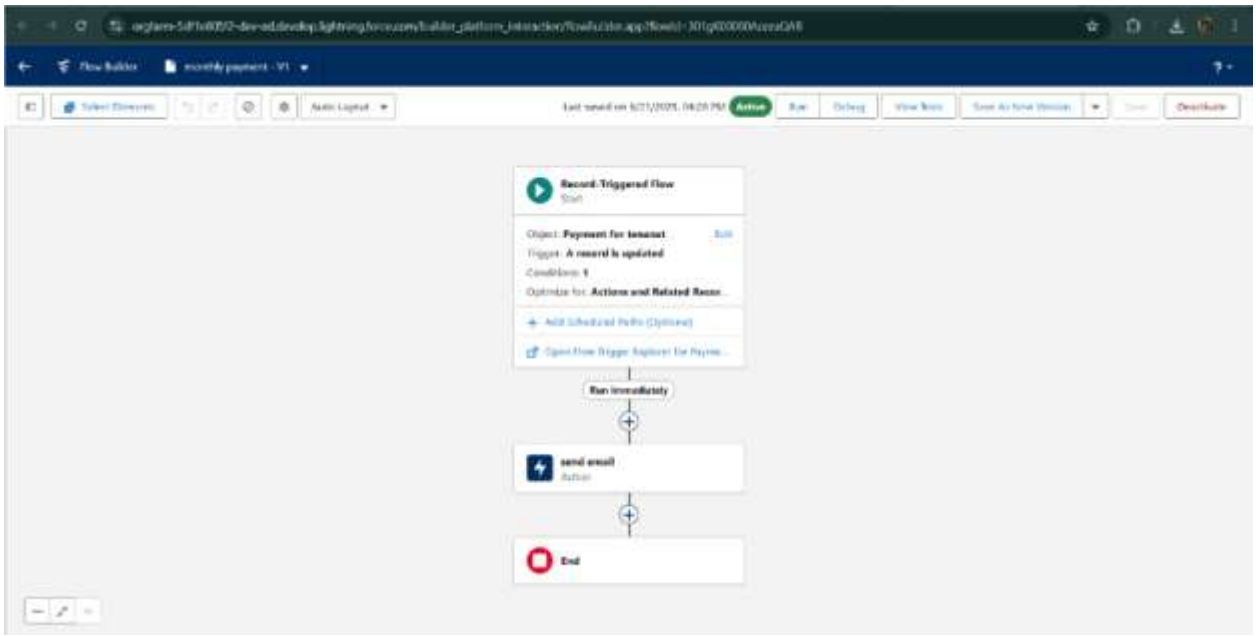
- Leave approved



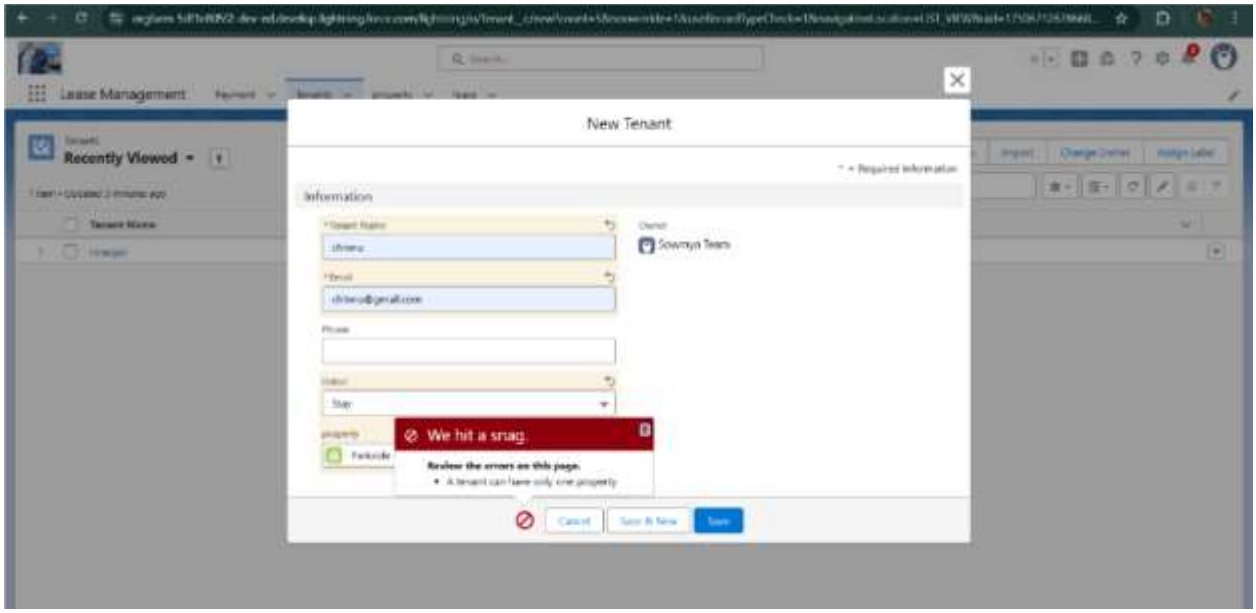
- Leave rejected



- Flow runs



- Trigger error messages



- Approval process notifications

ADVANTAGES & DISADVANTAGES

.

CONCLUSION

The Lease Management System successfully streamlines the operations of leasing through a structured, automated Salesforce application. It improves efficiency, communication, and data accuracy for both admins and tenants.

APPENDIX

- **Source Code:** Provided in Apex Classes and Triggers

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});
        }
    }
}
```