LEAST MANAGEMENT

College Name: Sri Ramalinga Sowdambigai College of Science and Commerce

College Code: bru3y

TEAM ID: NM2025TMID25501

TEAM MEMBERS: 4

Team LeaderName: Meenatchisundaram S

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Team Member: Ramesh G

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Team Member: Saravanan S

Email: saravanansaro915@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.

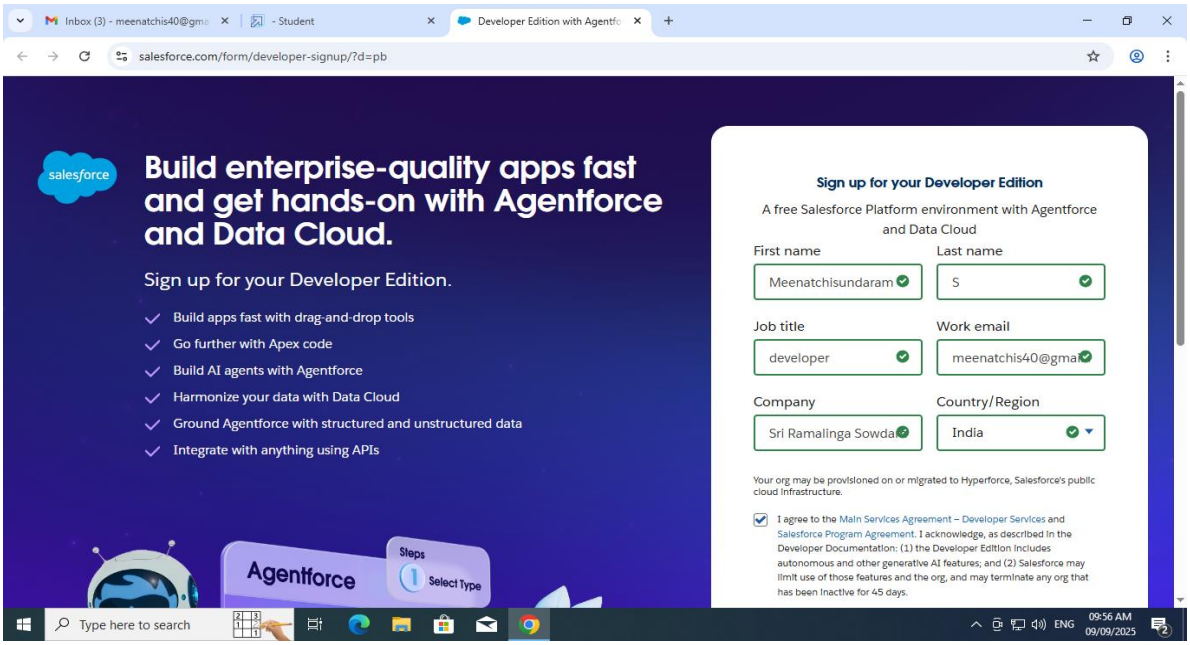
1.2 Purpose

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.

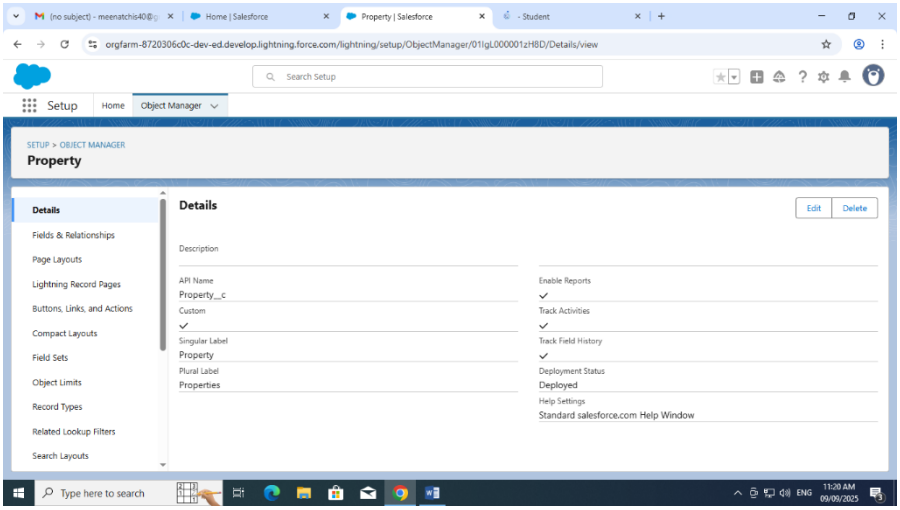
DEVELOPMENT PHASE

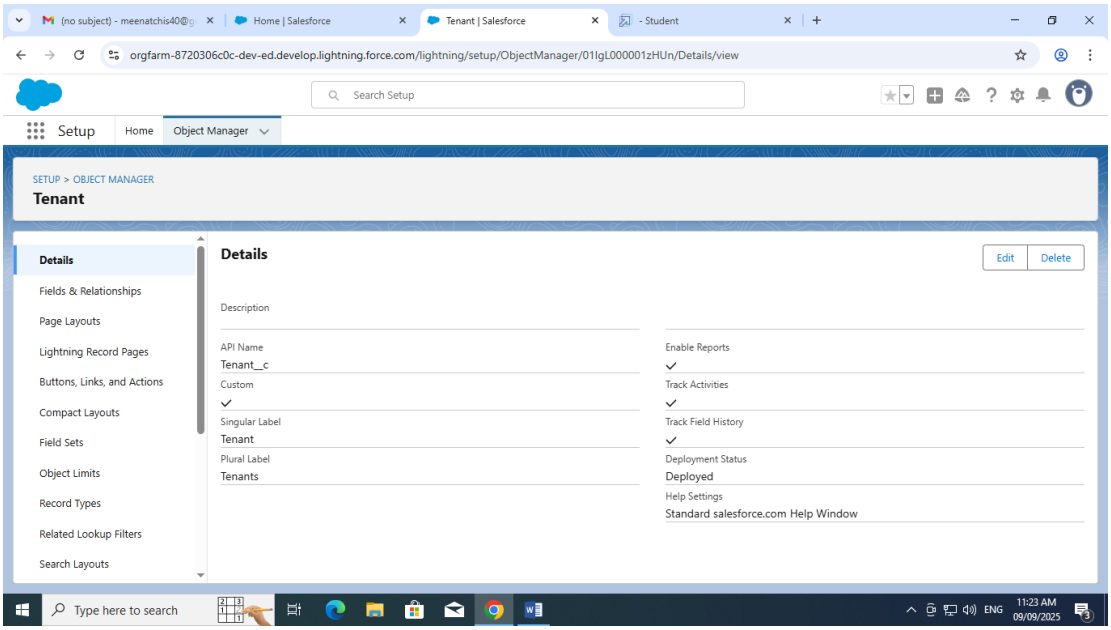
Creating Developer Account:

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



- Created objects: Property, Tenant, Lease, Payment

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Buttons, Links, and Actions
Compact Layouts
Field Sets
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Record Types
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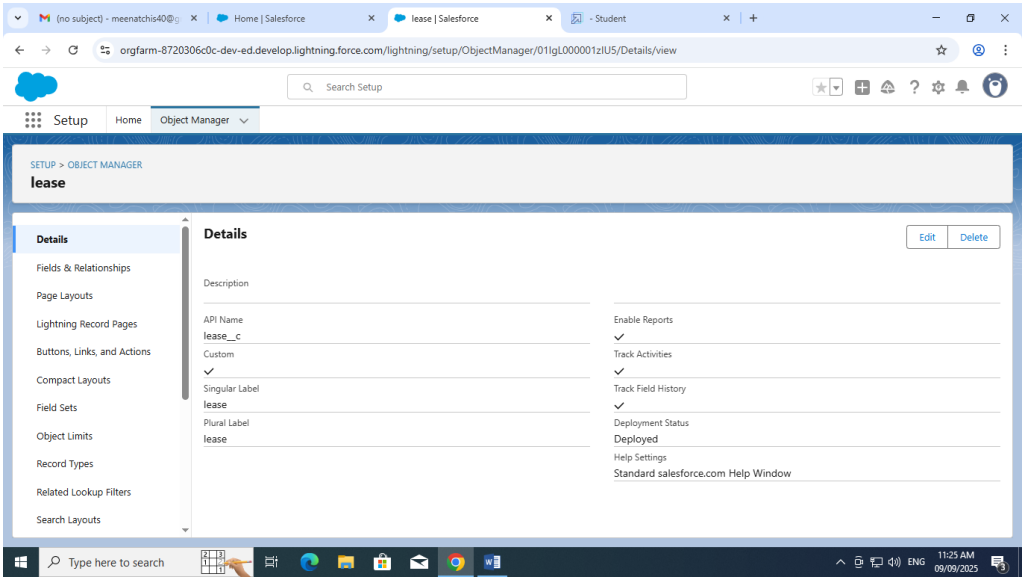
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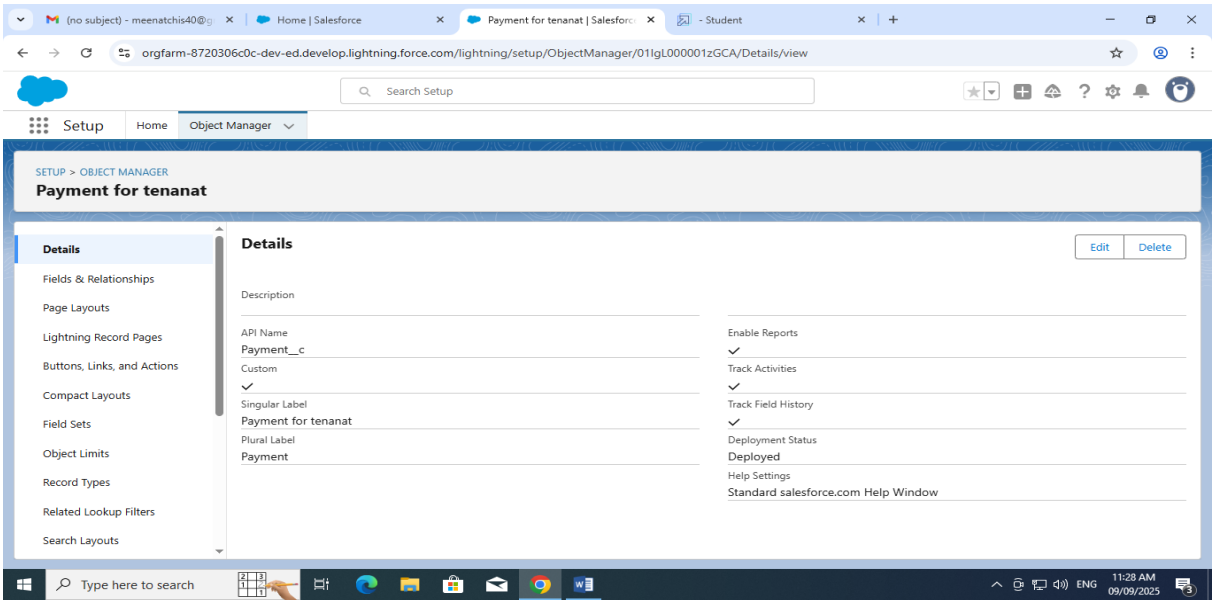
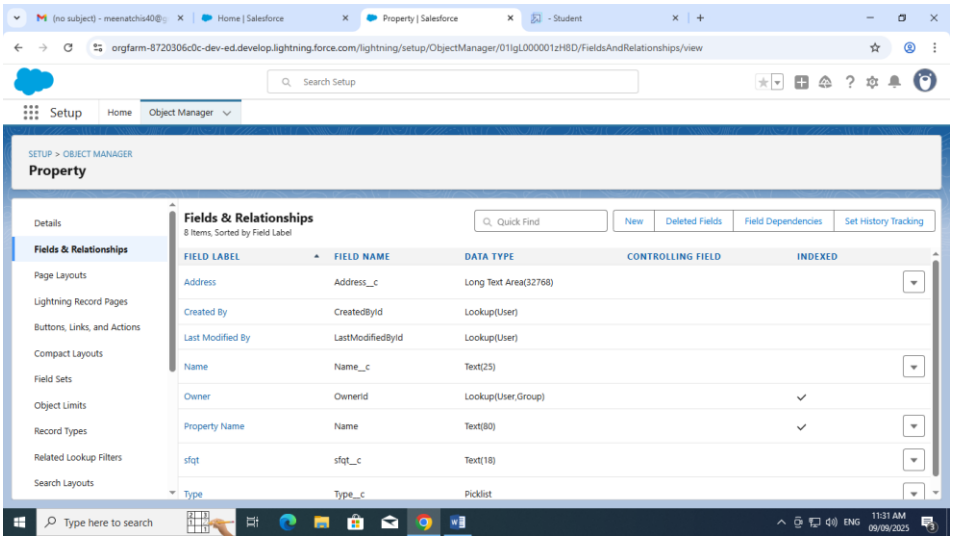


- Configured fields and relationships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Record Types
Related Lookup Filters
Search Layouts
Fields & Relationships
8 Items, Sorted by Field Label
Quick Find
New
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Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
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Address__c
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Created By
CreatedById
Lookup(User)
Last Modified By
LastModifiedById
Lookup(User)
Name
Name__c
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Owner
OwnerId
Lookup(User,Group)
Property Name
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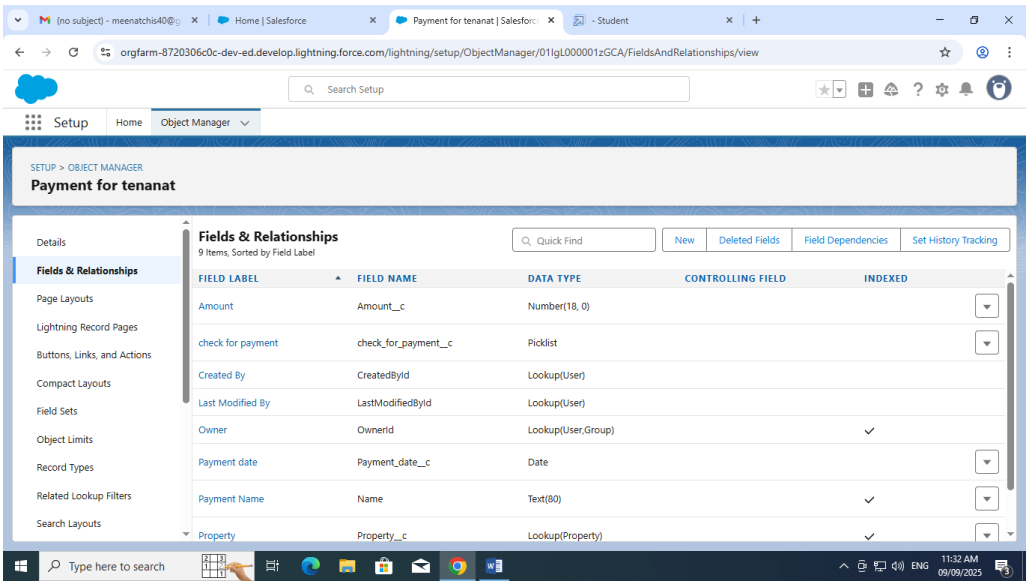
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Created By
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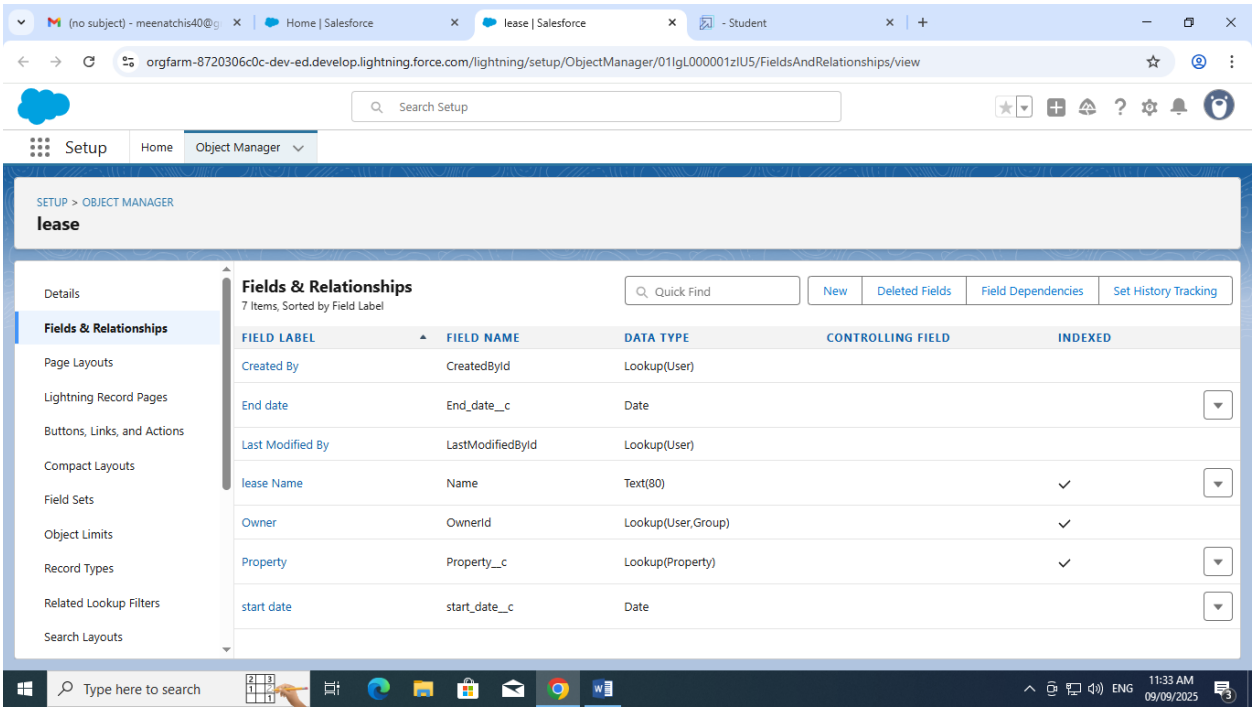
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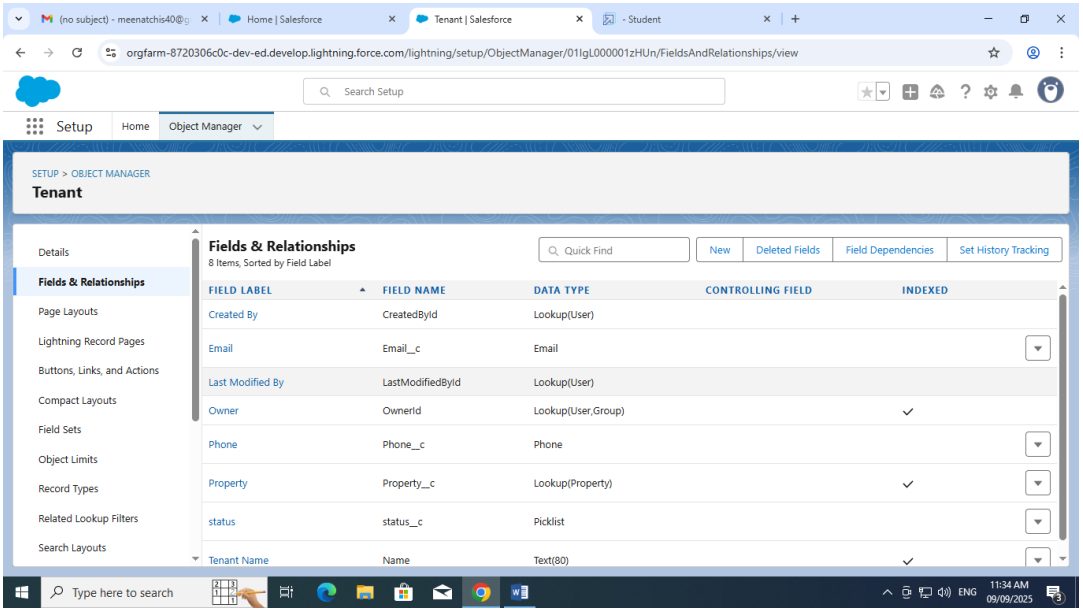
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8 Items, Sorted by Field Label
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Set History Tracking
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LastModifiedById
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Lookup(User,Group)
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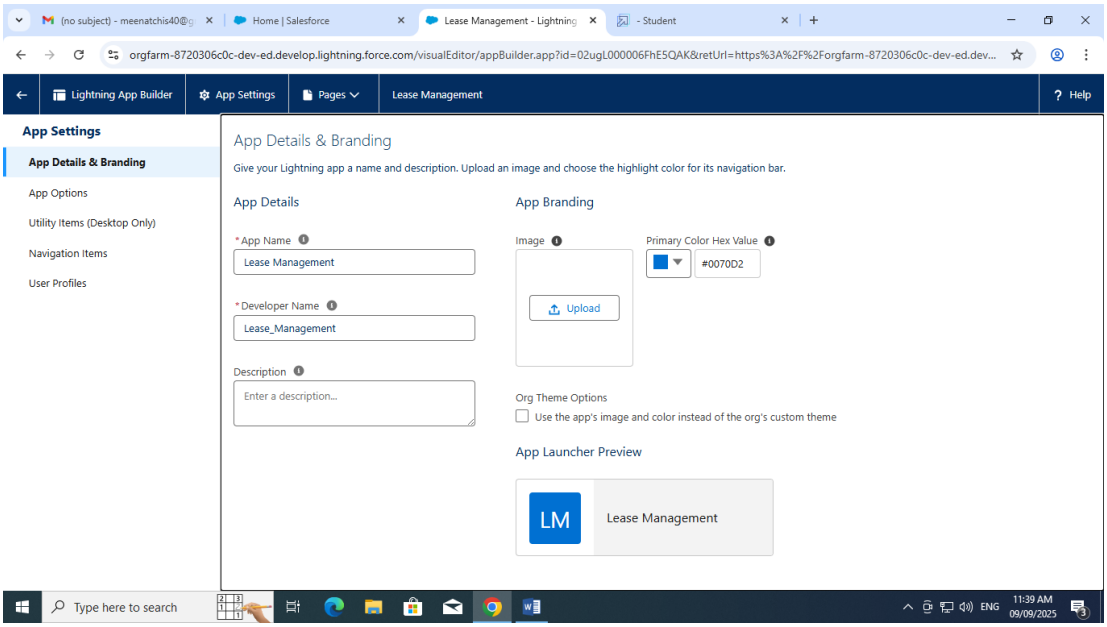
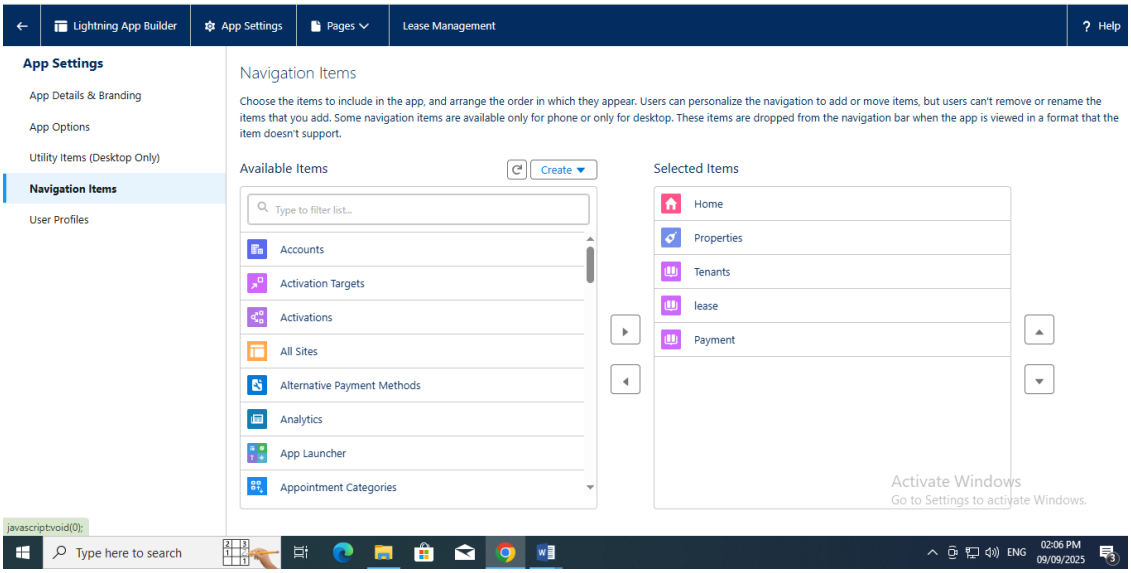
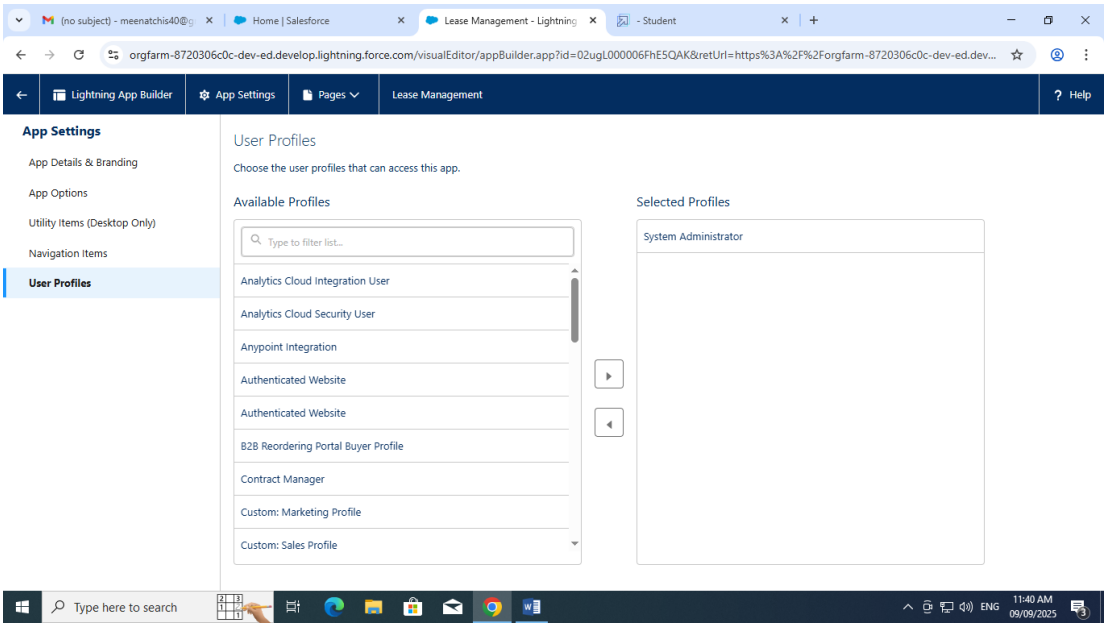
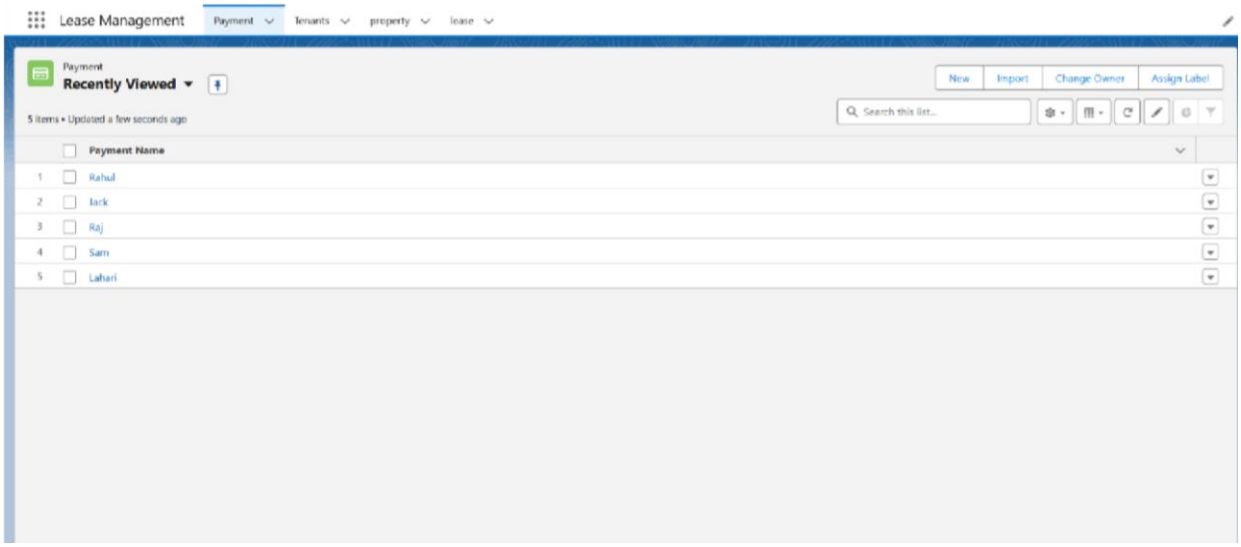
- Developed Lightning App with relevant tabs

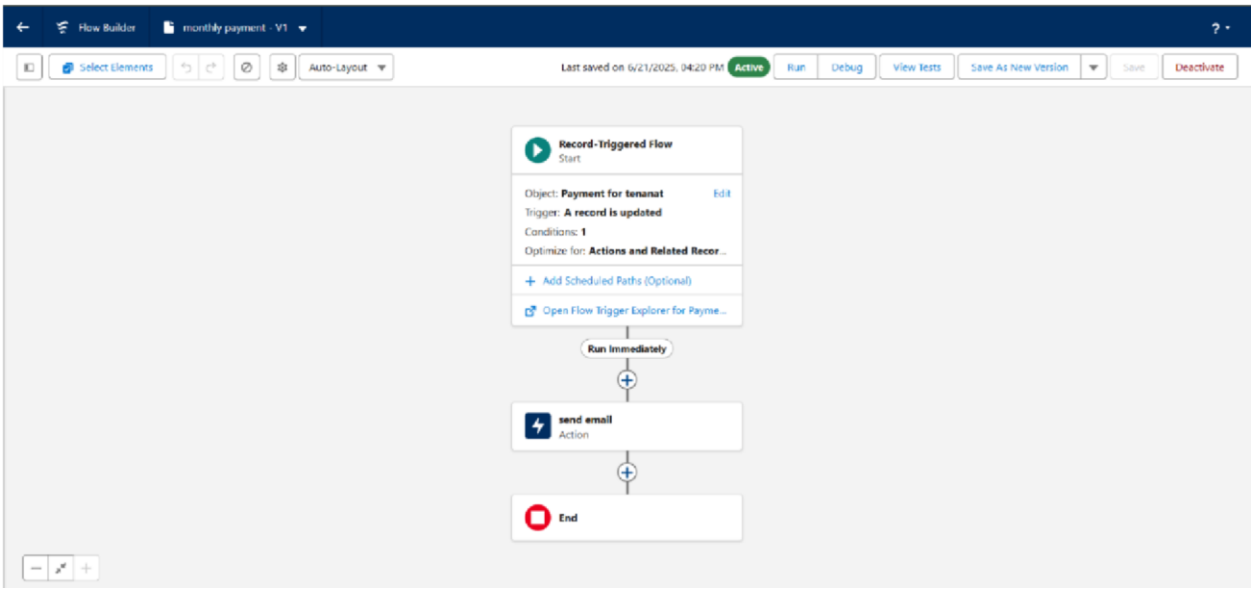




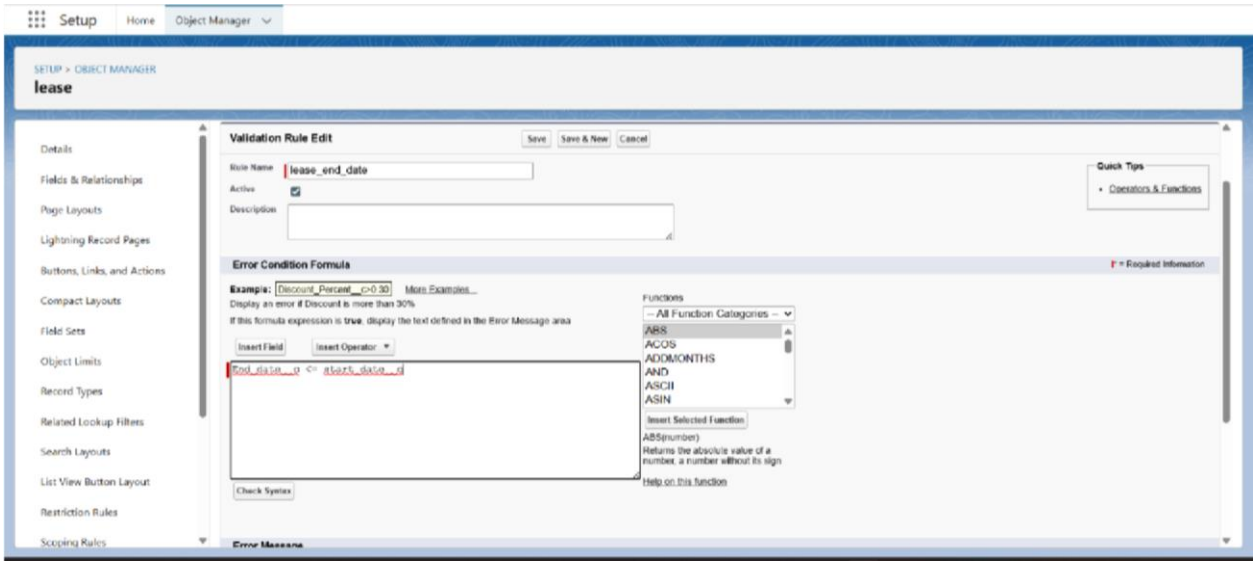


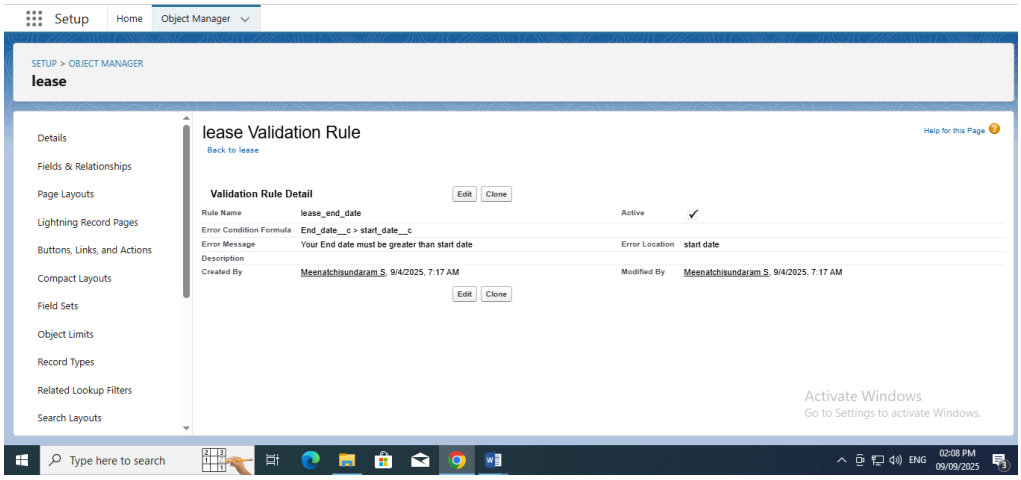


- Implemented Flows for monthly rent and payment success

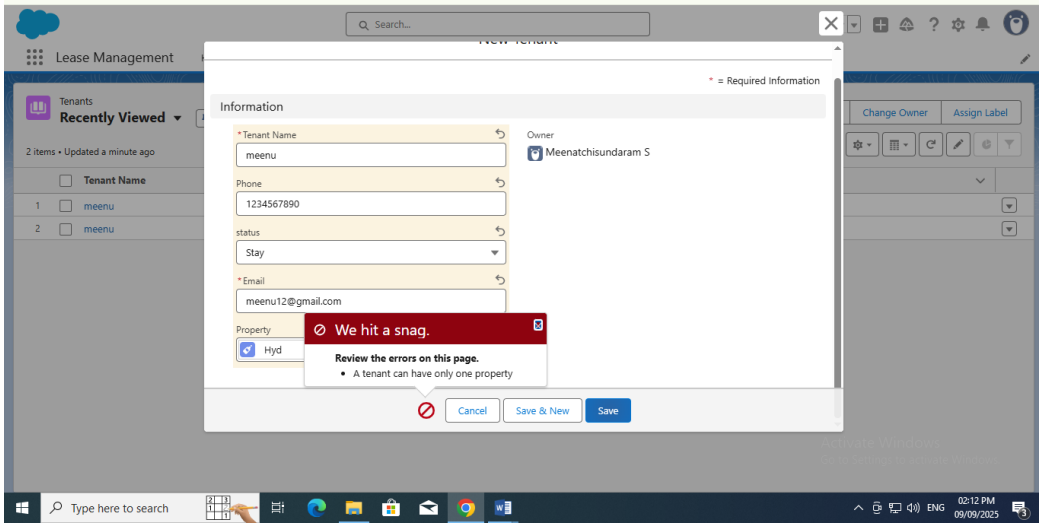


- To create a validation rule to a Lease Object

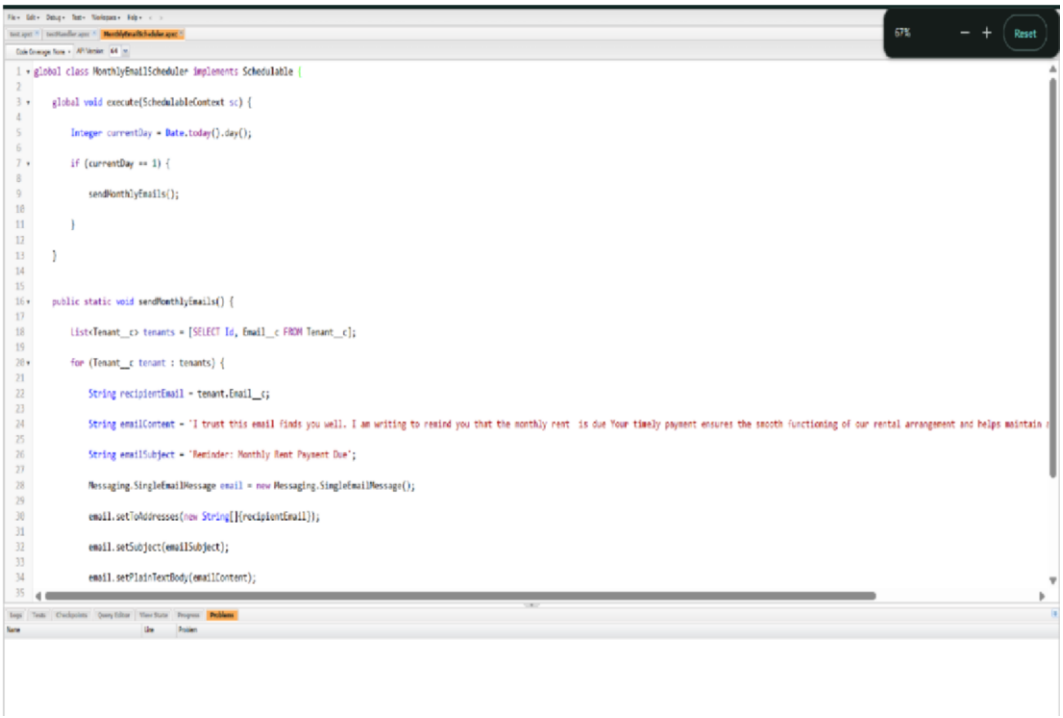




- Added Apex trigger to restrict multiple tenants per property

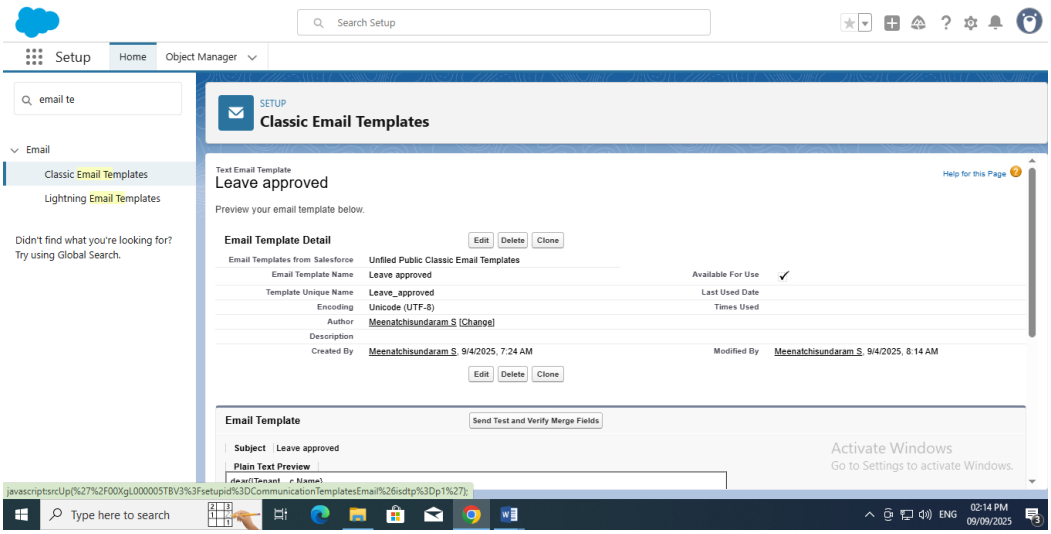


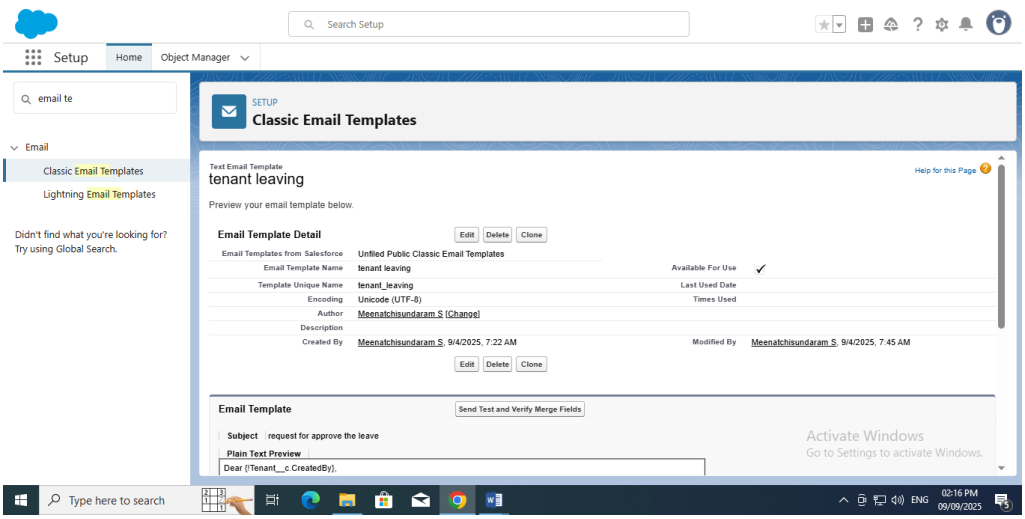
- Scheduled monthly reminder emails using Apex class



```
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

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Preview your email template below.
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Email Template
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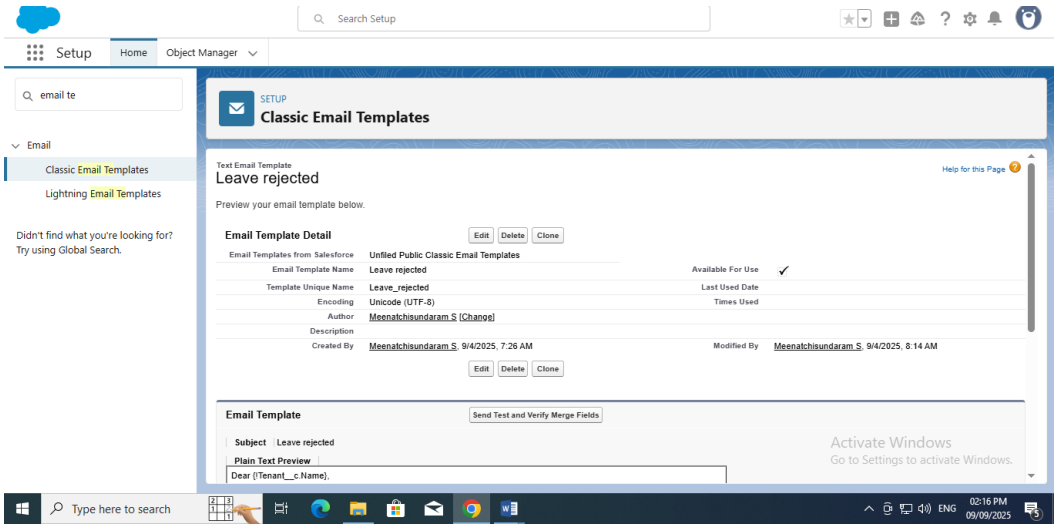
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Email Template
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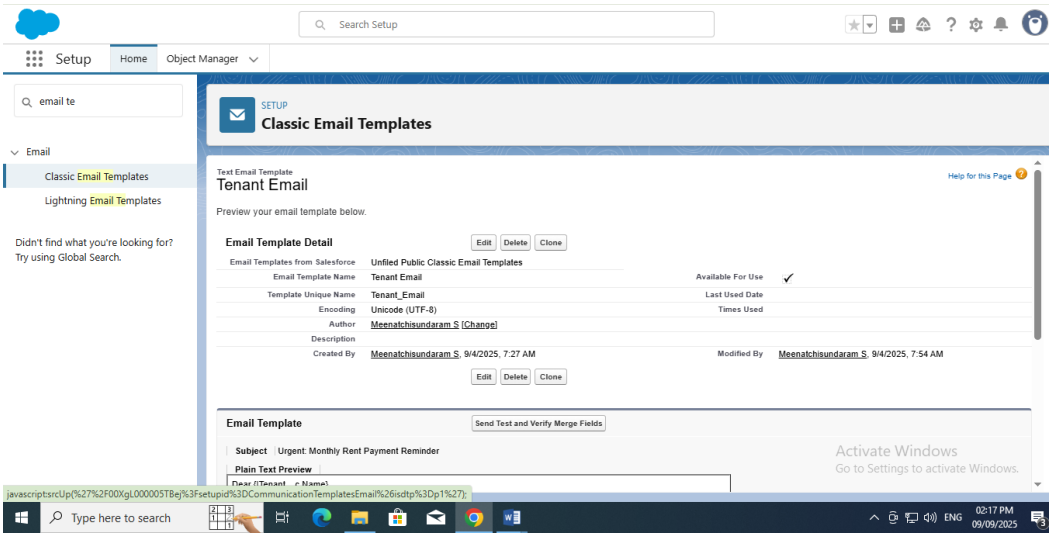
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Available For Use
Template Unique Name
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Times Used
Author
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Description
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Email Template
Send Test and Verify Merge Fields
Subject
Urgent: Monthly Rent Payment Reminder
Plain Text Preview
Dear {!Tenant__c.Name},
Activate Windows
Go to Settings to activate Windows.
javascript:srcUp('%27%2F00XgL000005TBej%3Fsetupid%3DCommunicationTemplatesEmail%26isdtp%3Dp1%27');
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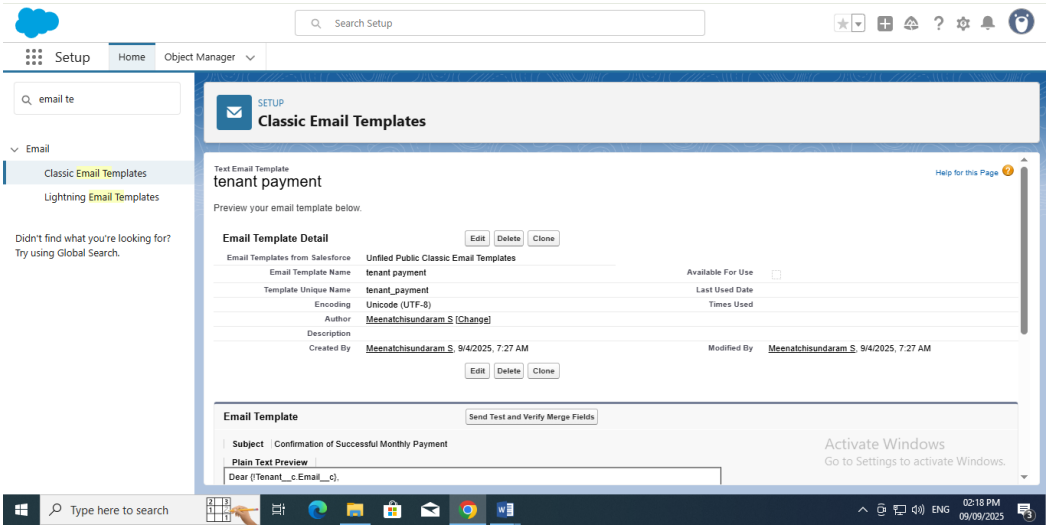
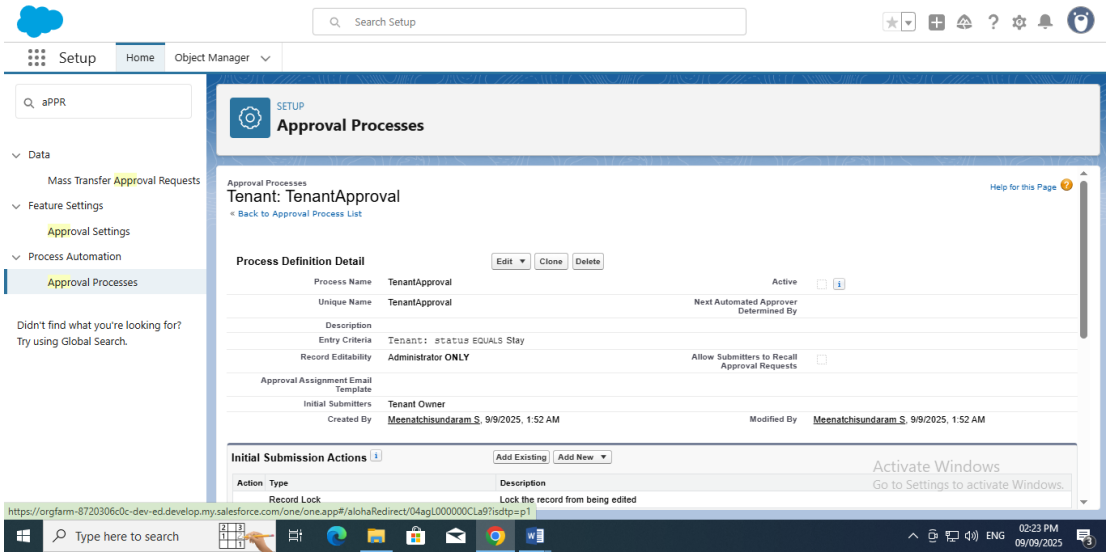
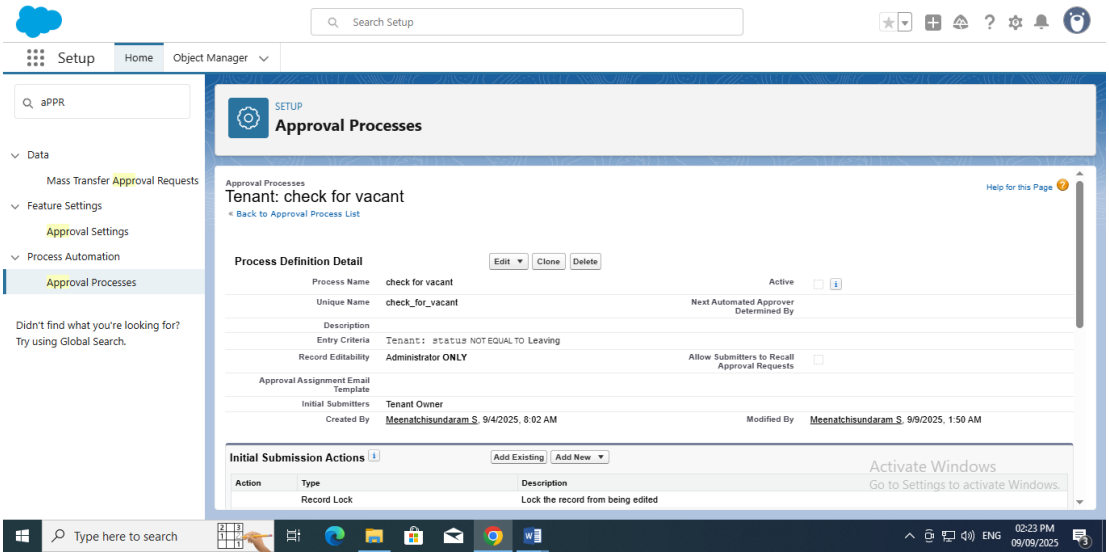


- Approval Process creation

For Tenant Leaving:

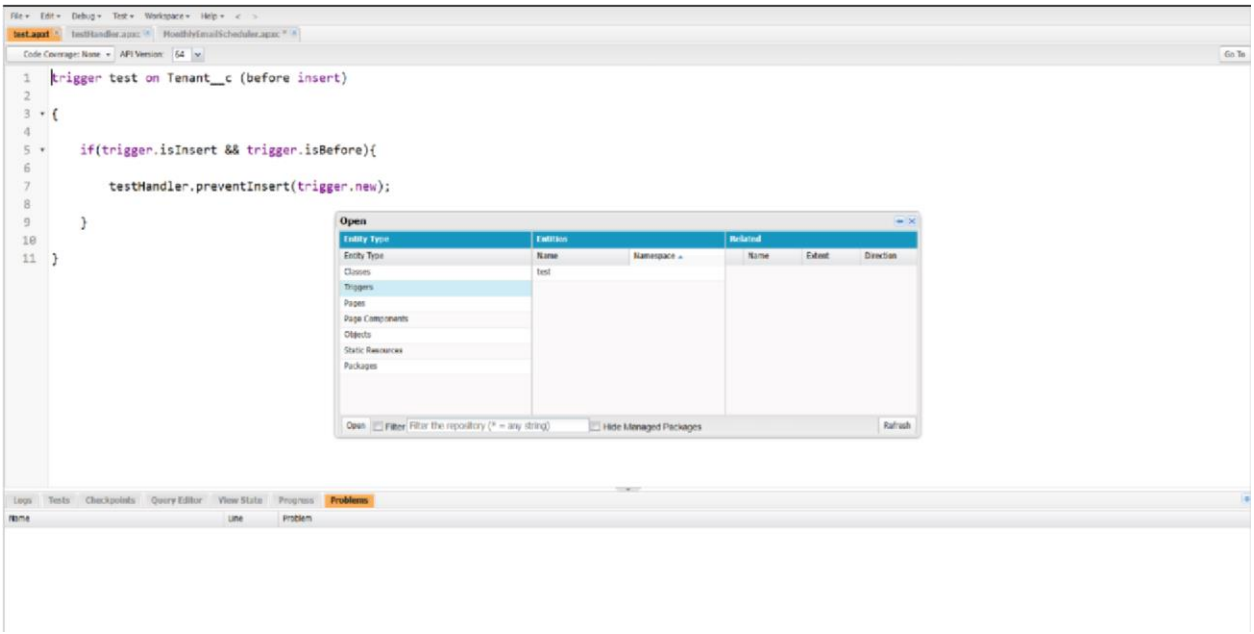


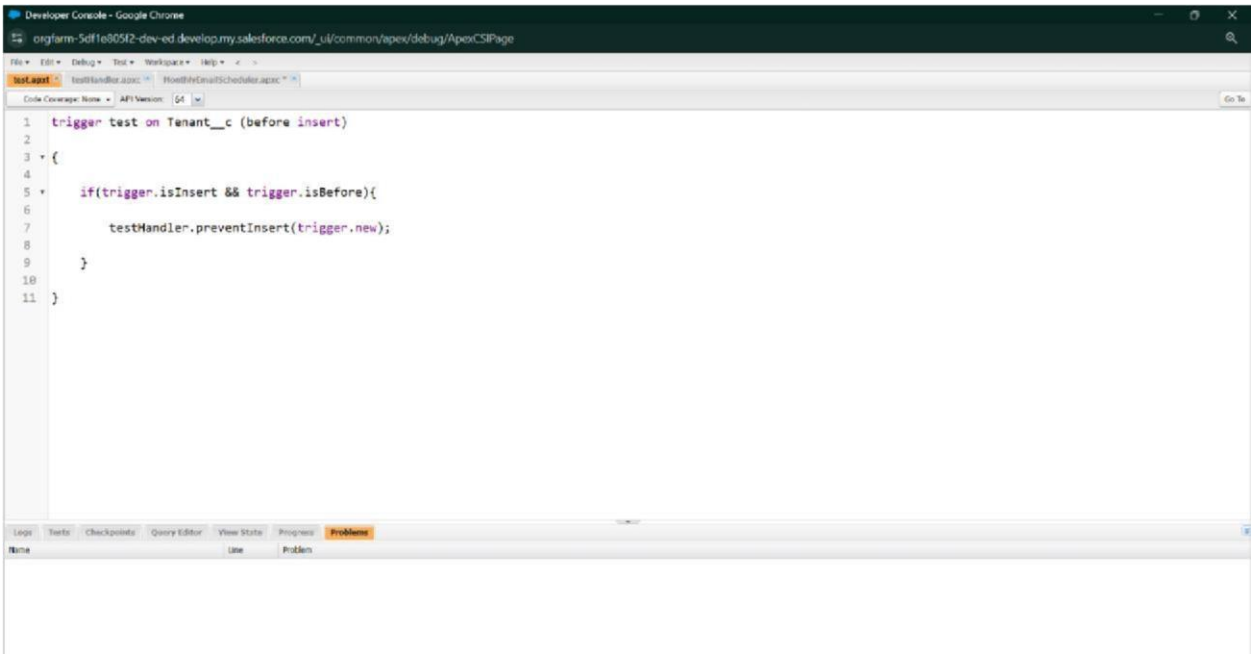
For Check for Vacant:



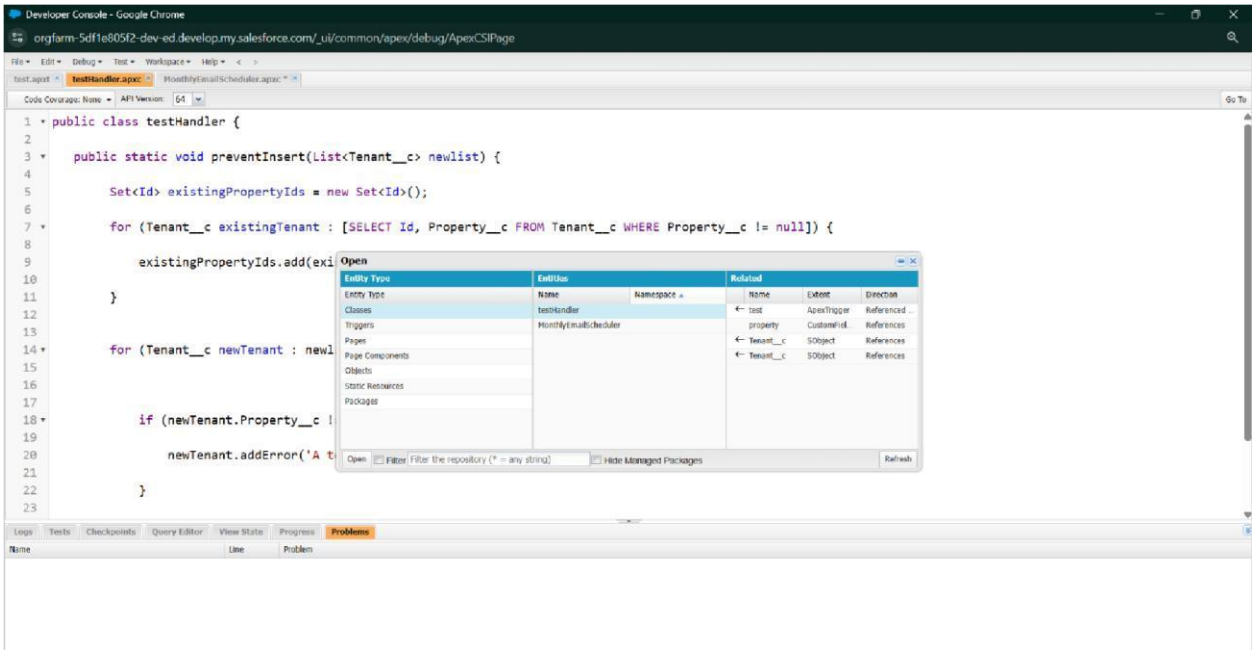
- Apex Trigger

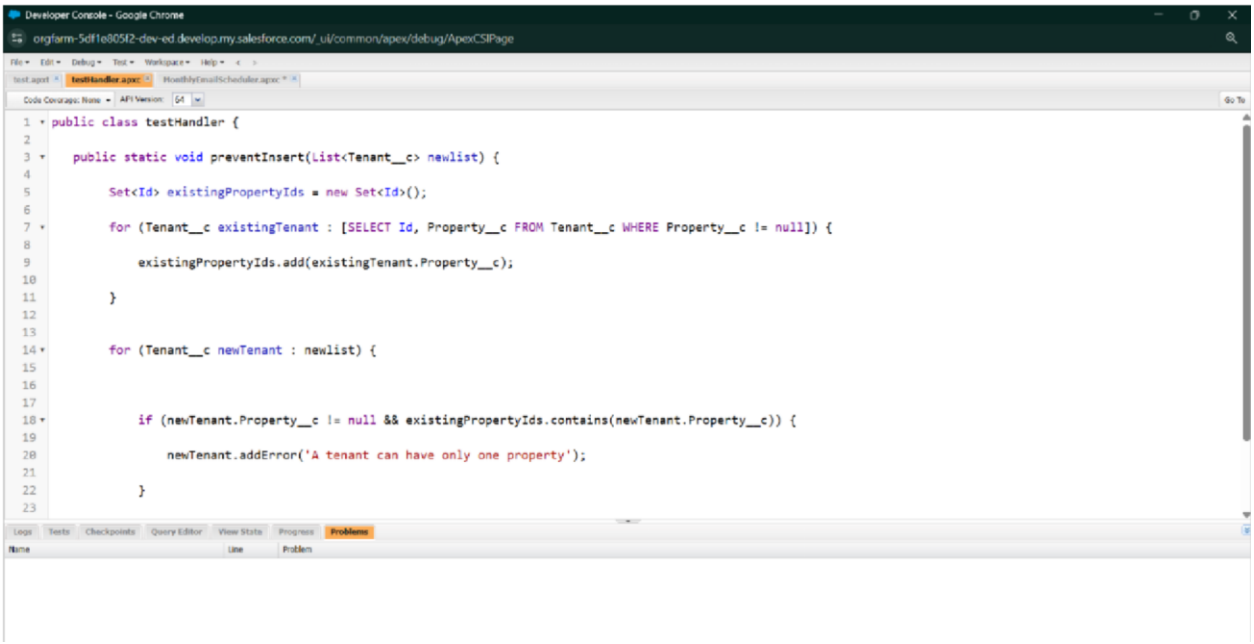
  Create an Apex Trigger



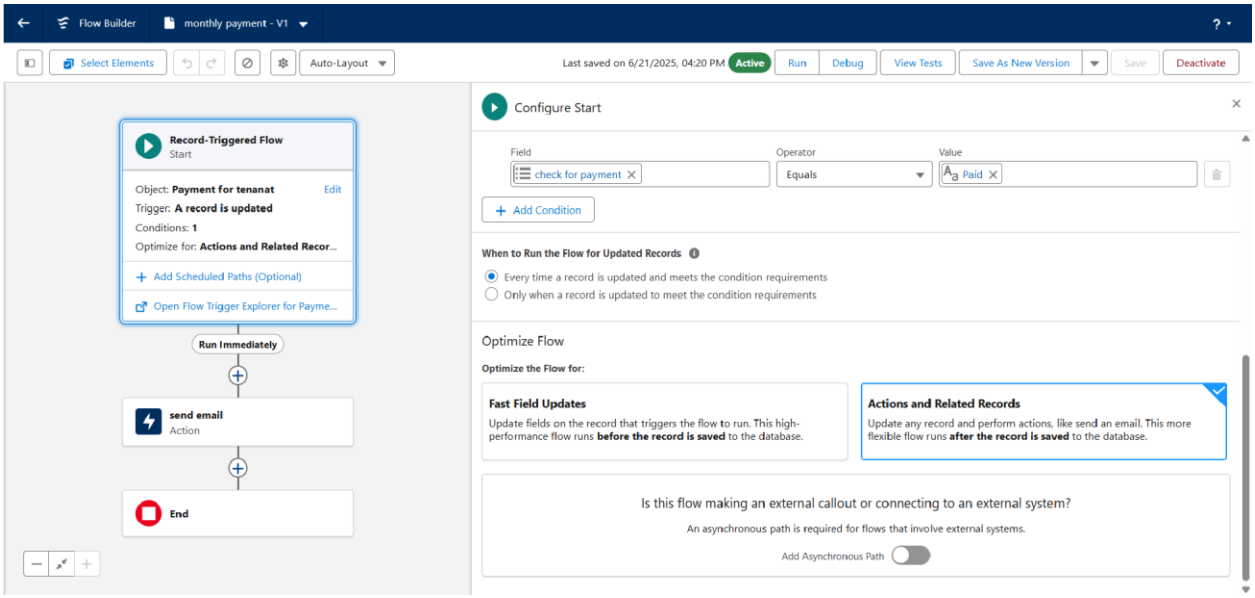


Create an Apex Handler class




Developer Console - Google Chrome
orgfarm-5df1e805f2-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
testHandler.apxc
MonthlyEmailScheduler.apxc
Code Coverage: None
API Version: 64
Go To
1 public class testHandler {
2
3 public static void preventInsert(List<Tenant__c> newlist) {
4
5 Set<Id> existingPropertyIds = new Set<Id>();
6
7 for (Tenant__c existingTenant : [SELECT Id, Property__c FROM Tenant__c WHERE Property__c != null]) {
8
9 existingPropertyIds.add(existingTenant.Property__c);
10
11 }
12
13
14 for (Tenant__c newTenant : newlist) {
15
16
17
18 if (newTenant.Property__c != null && existingPropertyIds.contains(newTenant.Property__c)) {
19
20 newTenant.addError('A tenant can have only one property');
21
22 }
23
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
Name
Line
Problem

- FLOWS


Flow Builder
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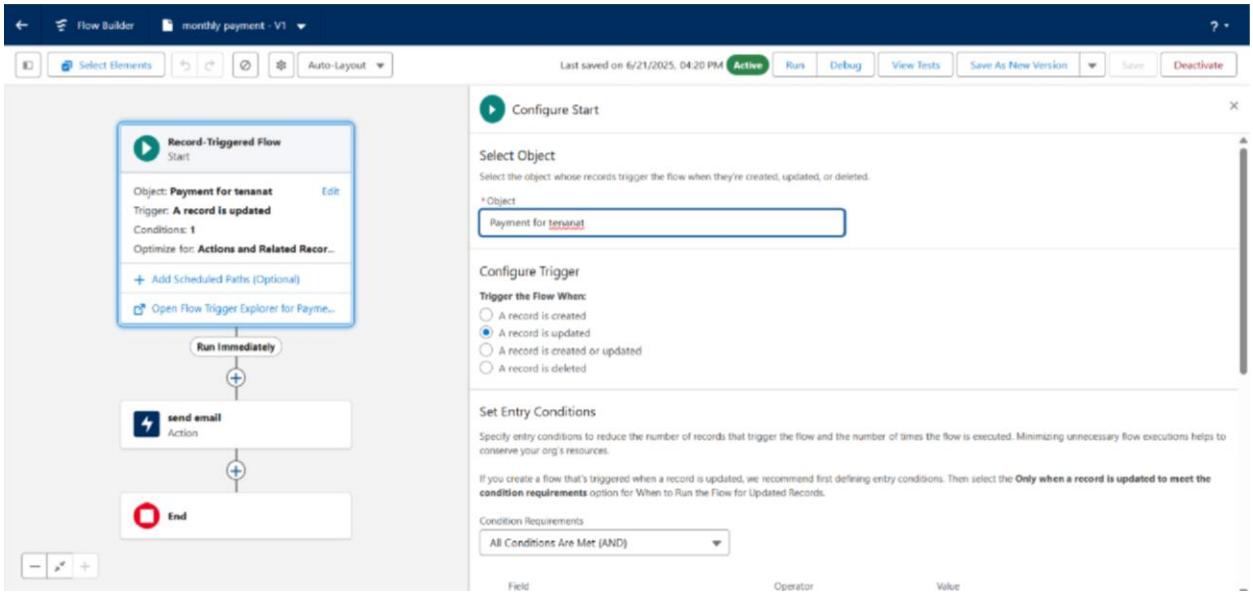
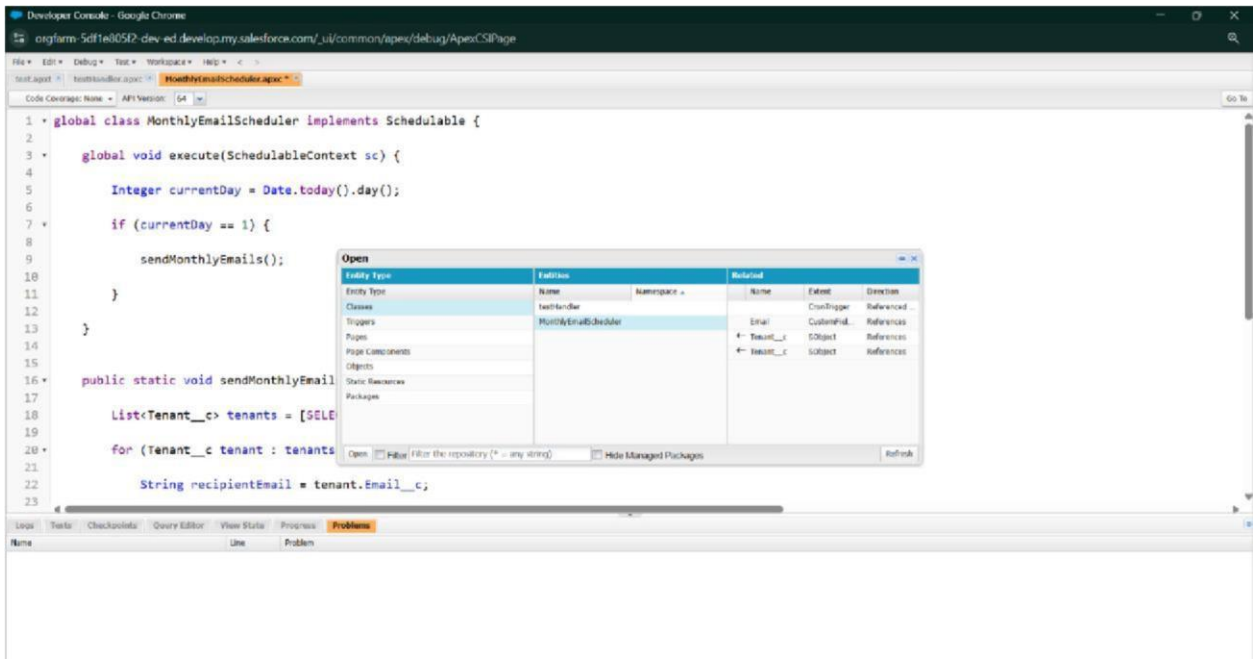
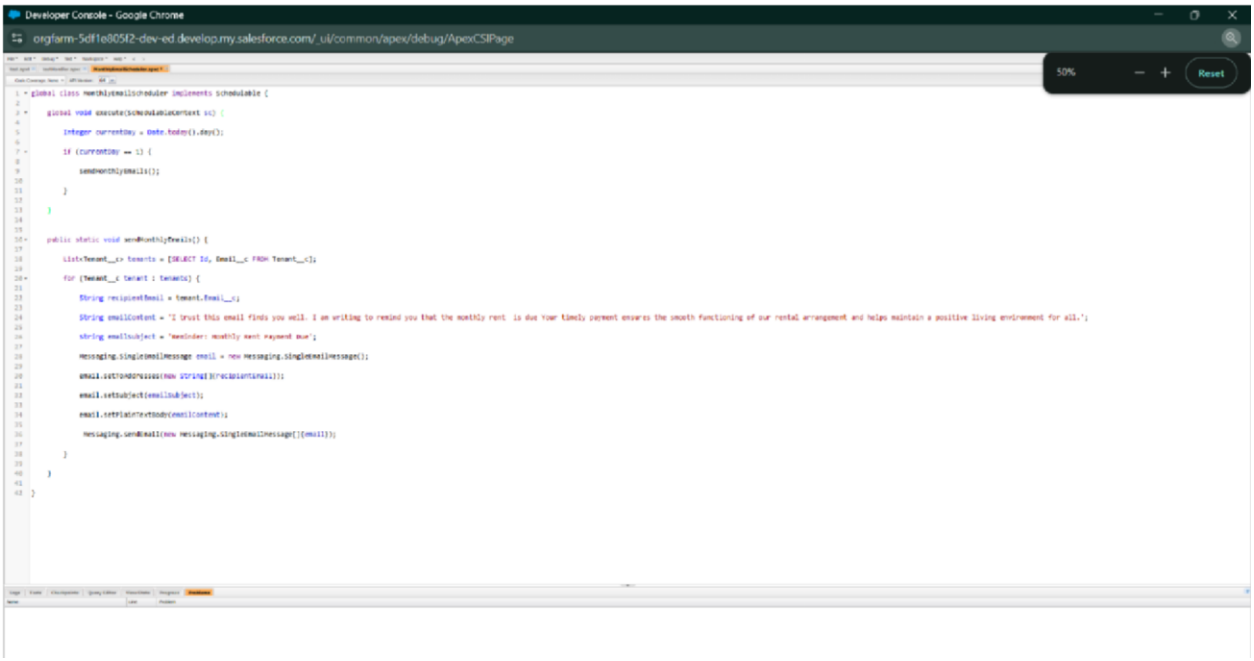
Optimize for: Actions and Related Recor...
Add Scheduled Paths (Optional)
Open Flow Trigger Explorer for Payme...
Run Immediately
send email
Action
End
Configure Start
Field
Operator
Value
check for payment
Equals
Paid
Add Condition
When to Run the Flow for Updated Records
Every time a record is updated 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



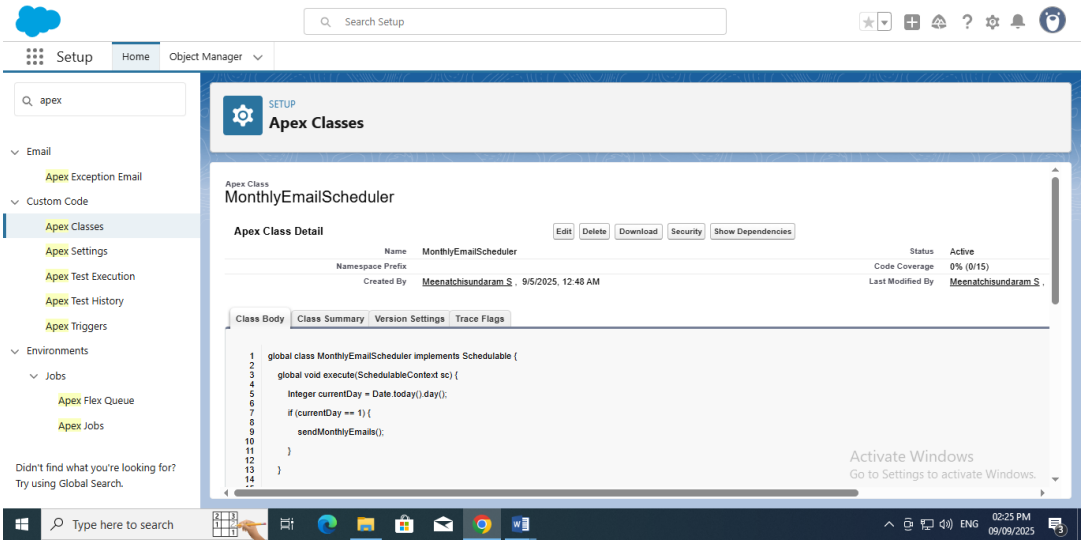
- Schedule class:

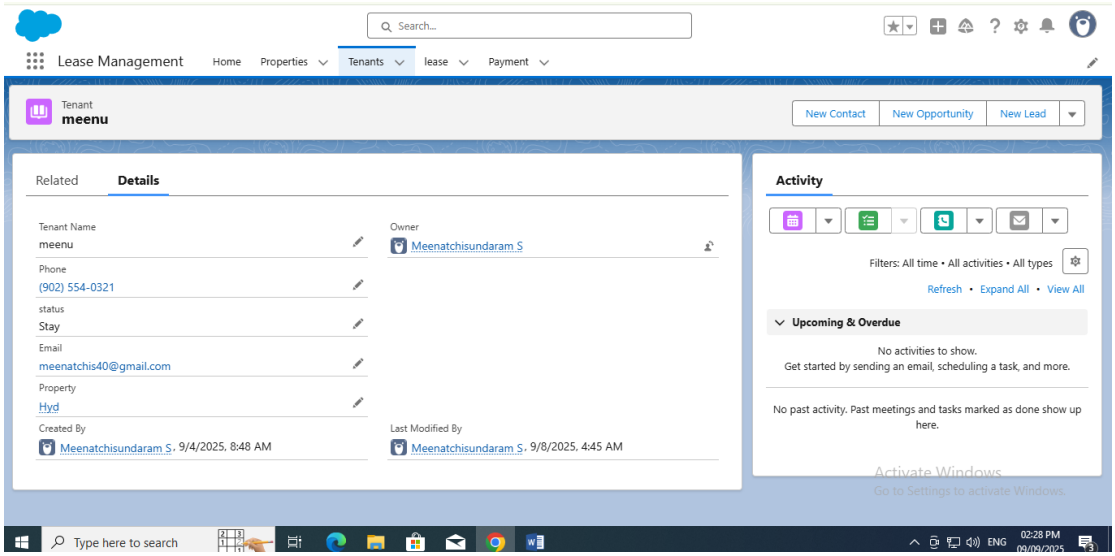
  Create an Apex Class

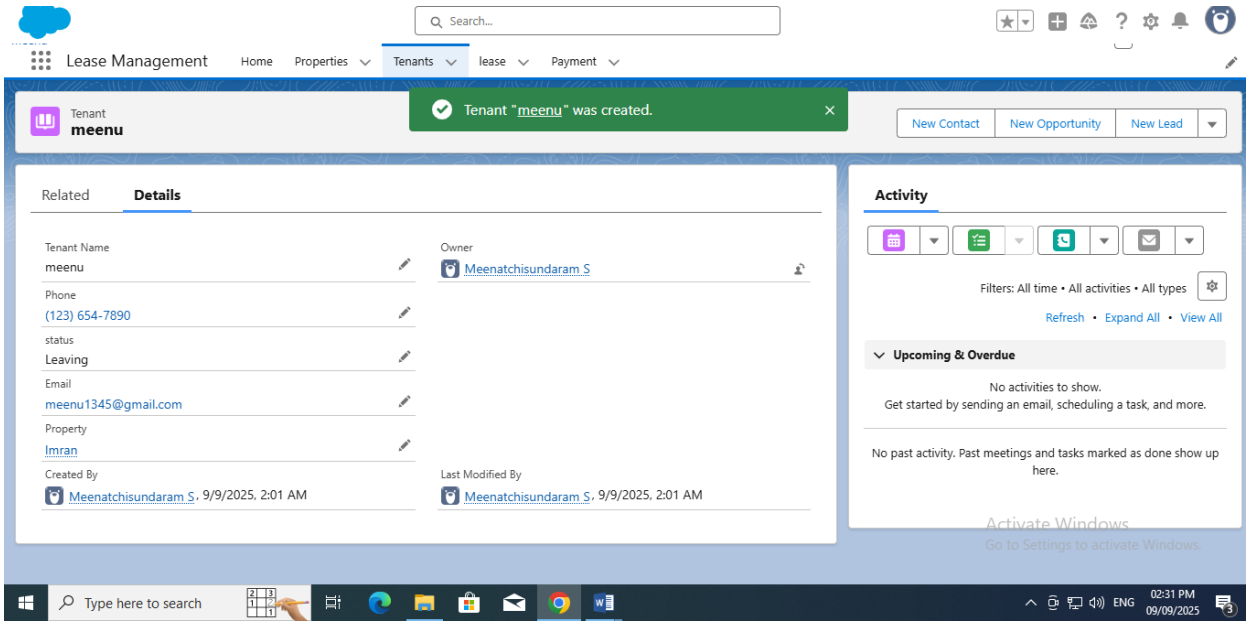


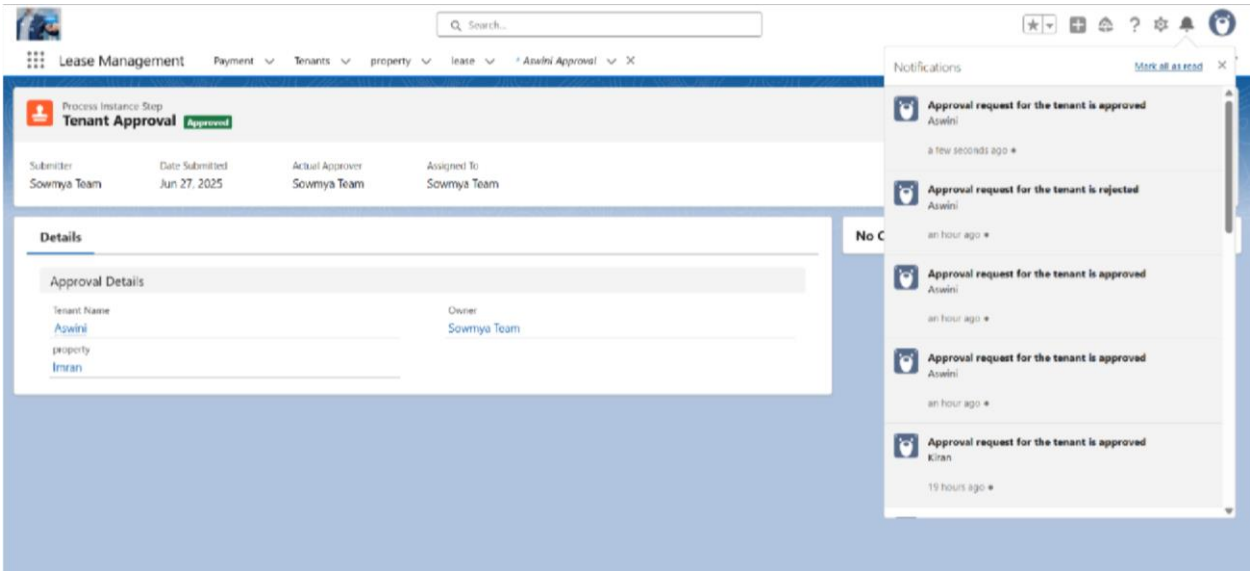


Schedule Apex class




Search...
Lease Management
Home
Properties
Tenants
lease
Payment
Tenant
meenu
New Contact
New Opportunity
New Lead
Related
Details
Tenant Name
meenu
Owner
Meenatchisundaram S
Phone
(902) 554-0321
status
Stay
Email
meenatchis40@gmail.com
Property
Hyd
Created By
Meenatchisundaram S, 9/4/2025, 8:48 AM
Last Modified By
Meenatchisundaram S, 9/8/2025, 4:45 AM
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.
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
02:28 PM
09/09/2025

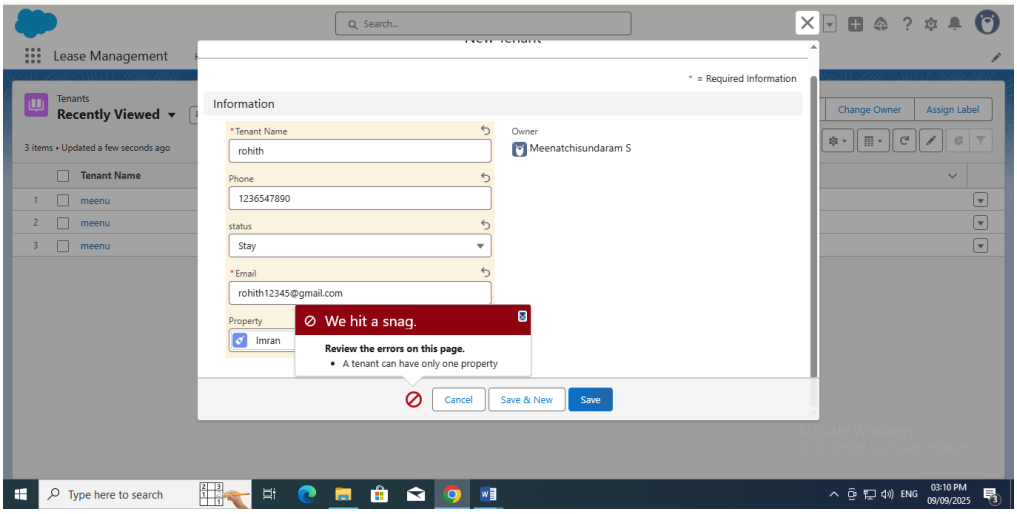

Search...
Lease Management
Home
Properties
Tenants
lease
Payment
Tenant
meenu
Tenant "meenu" was created.
New Contact
New Opportunity
New Lead
Related
Details
Tenant Name
meenu
Owner
Meenatchisundaram S
Phone
(123) 654-7890
status
Leaving
Email
meenu1345@gmail.com
Property
Imran
Created By
Meenatchisundaram S, 9/9/2025, 2:01 AM
Last Modified By
Meenatchisundaram S, 9/9/2025, 2:01 AM
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.
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
02:31 PM
09/09/2025



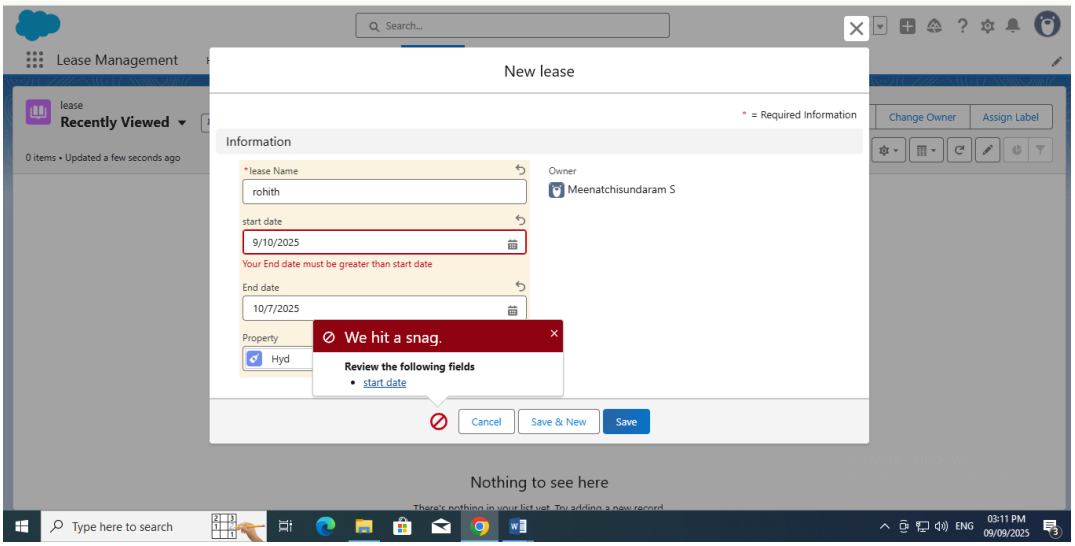
FUNCTIONAL AND PERFORMANCE TESTING

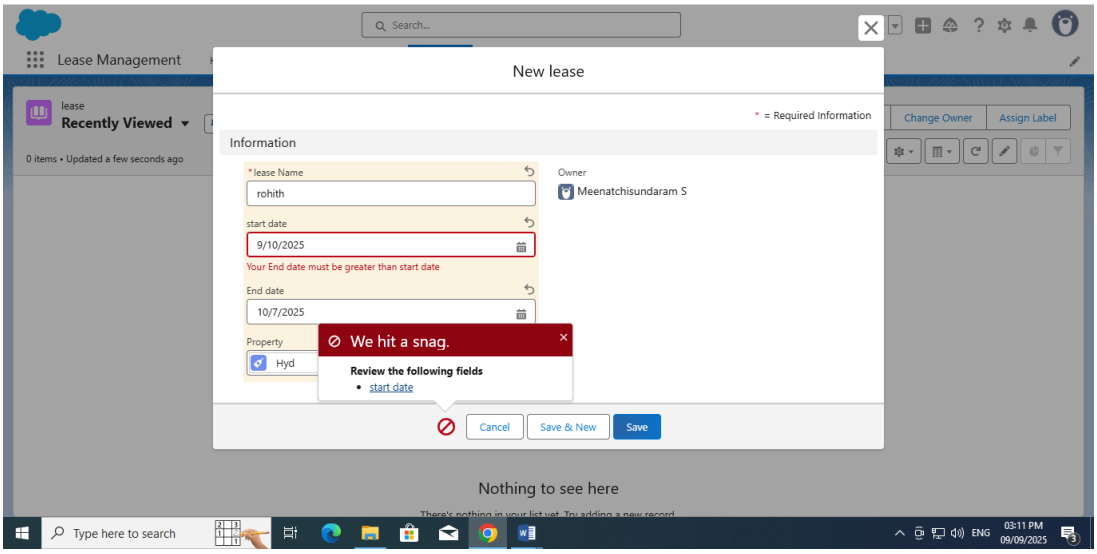
Performance Testing

- Trigger validation by entering duplicate tenant-property records

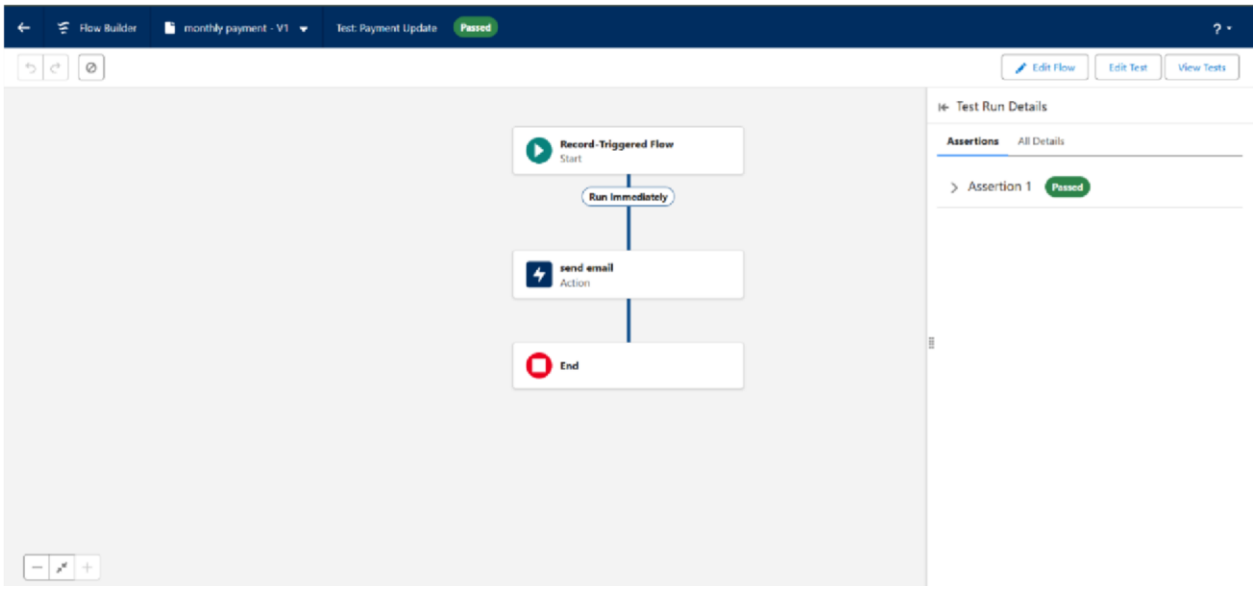


- Validation Rule checking

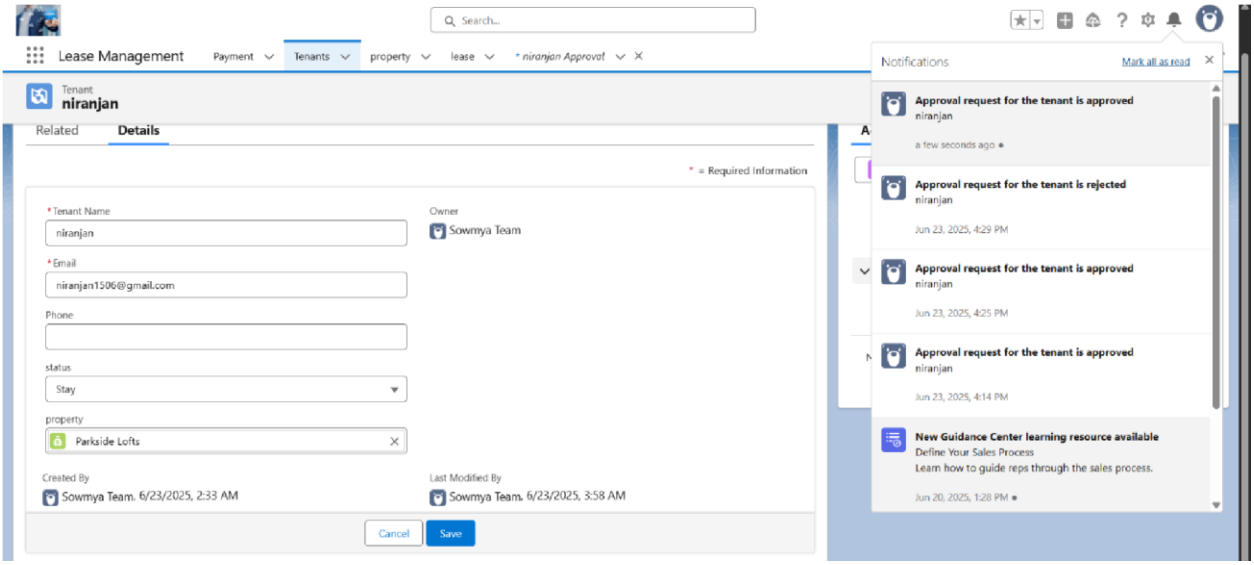


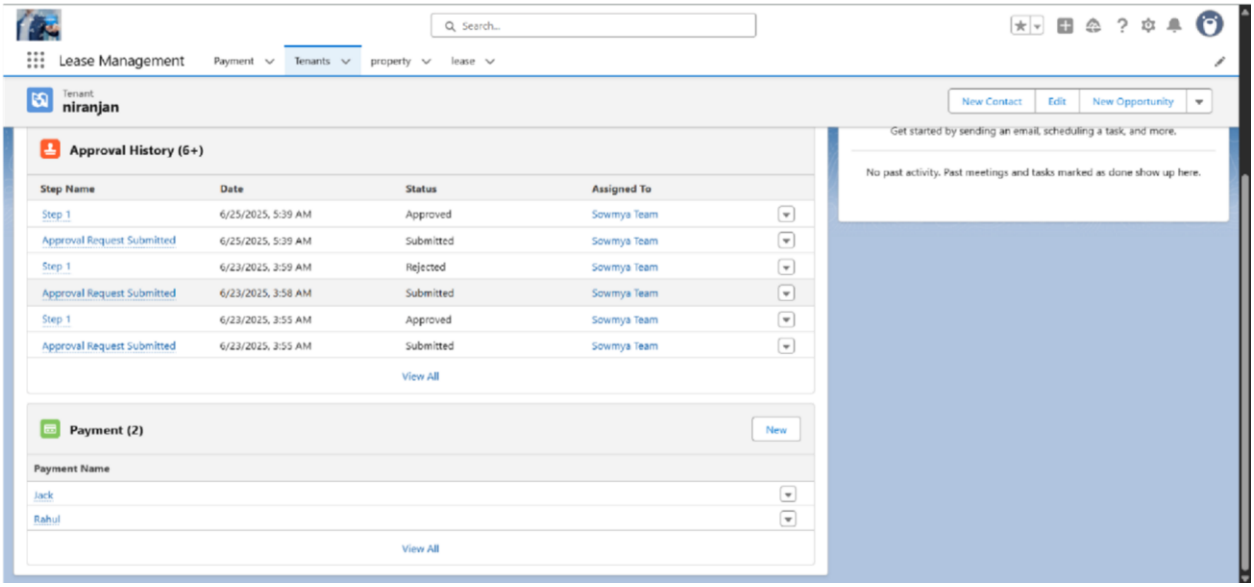


- Test flows on payment update



- Approval process validated through email alerts and status updates

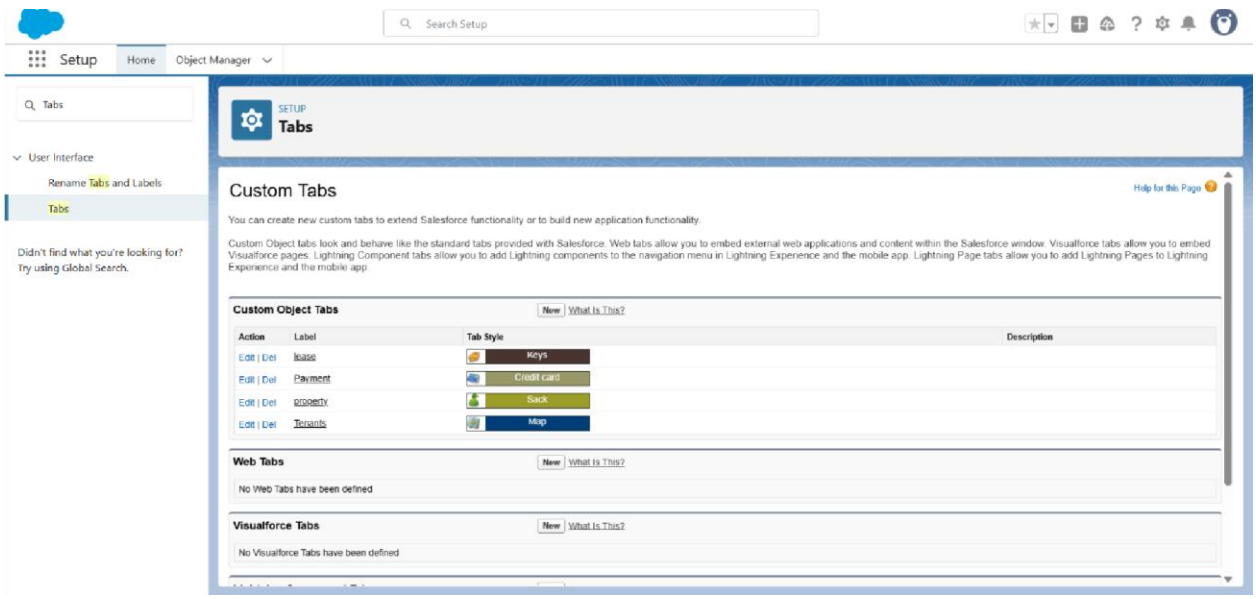

Search...
Lease Management
Payment
Tenants
property
lease
* niranjan Approval
Tenant
niranjan
Related
Details
* = Required Information
*Tenant Name
niranjan
Owner
Sowmya Team
*Email
niranjan1506@gmail.com
Phone
status
Stay
property
Parkside Lofts
Created By
Sowmya Team, 6/23/2025, 2:33 AM
Last Modified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


Search...
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.

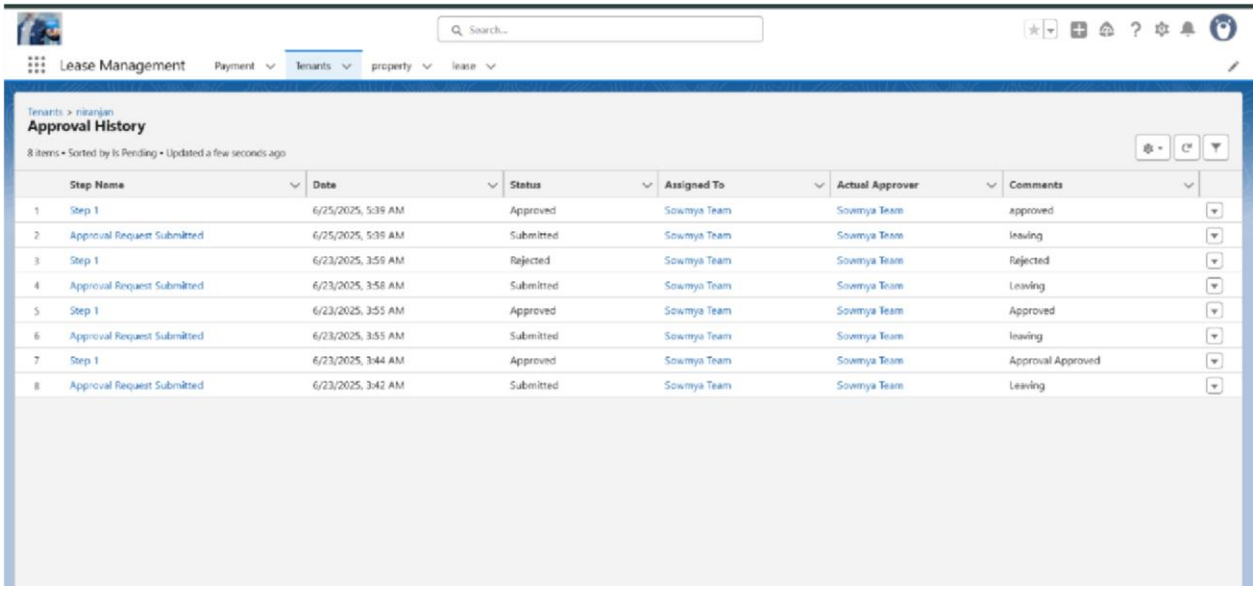
RESULTS

Output Screenshots

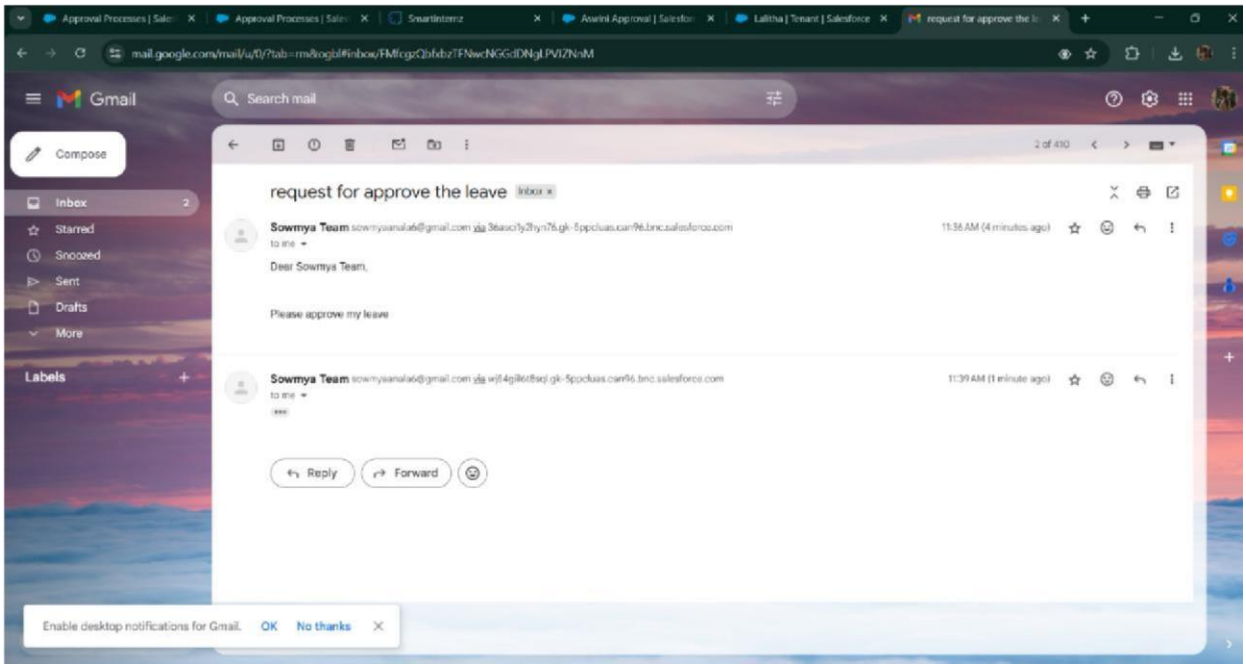
- Tabs for Property, Tenant, Lease, Payment



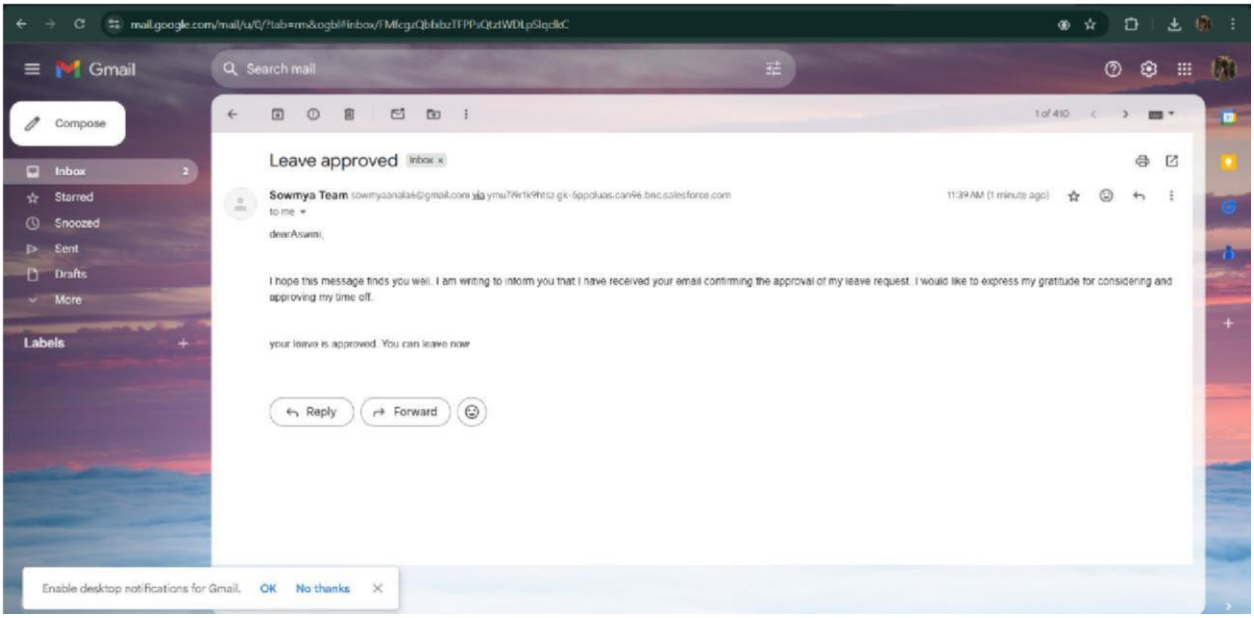
- Email alerts



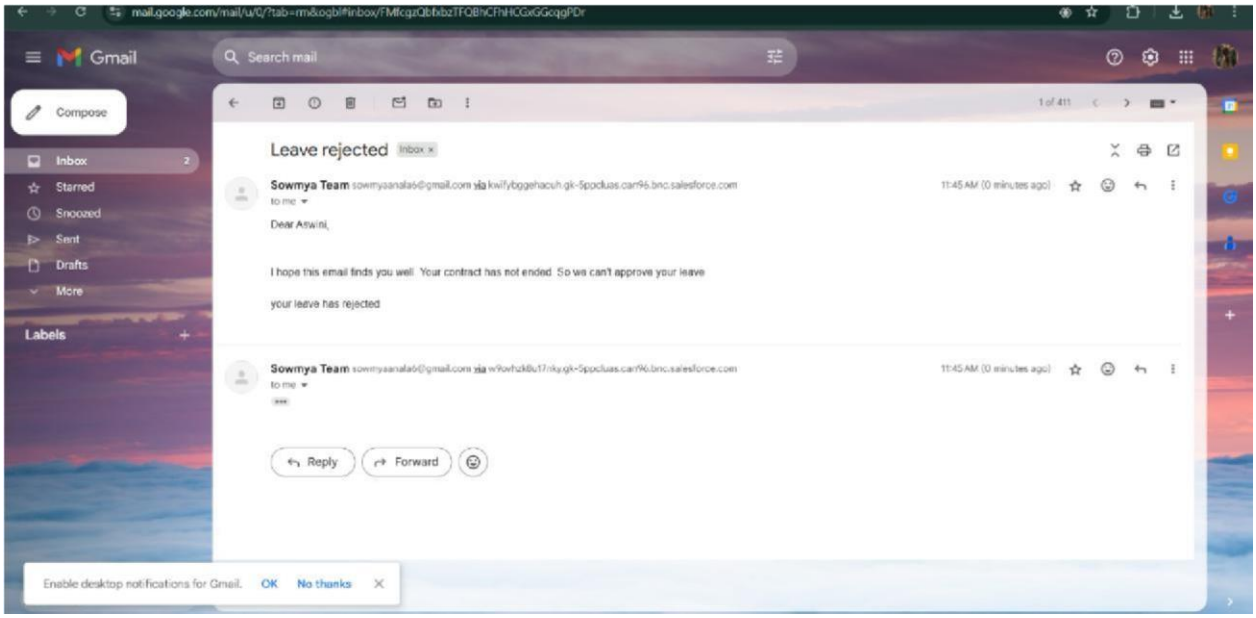
- Request for approve the leave



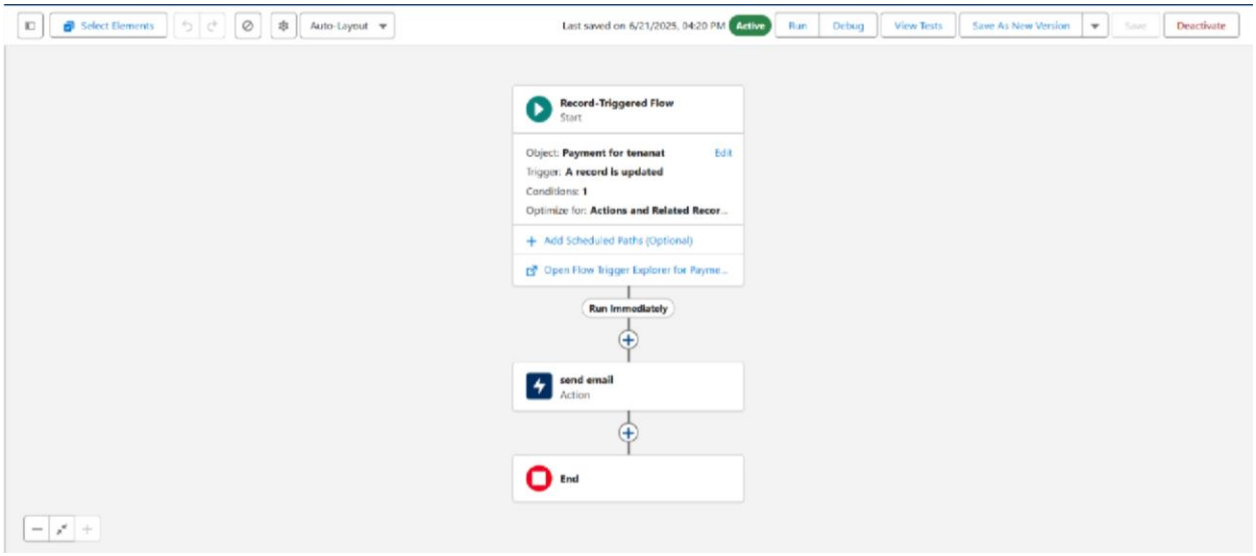
- Leave approved



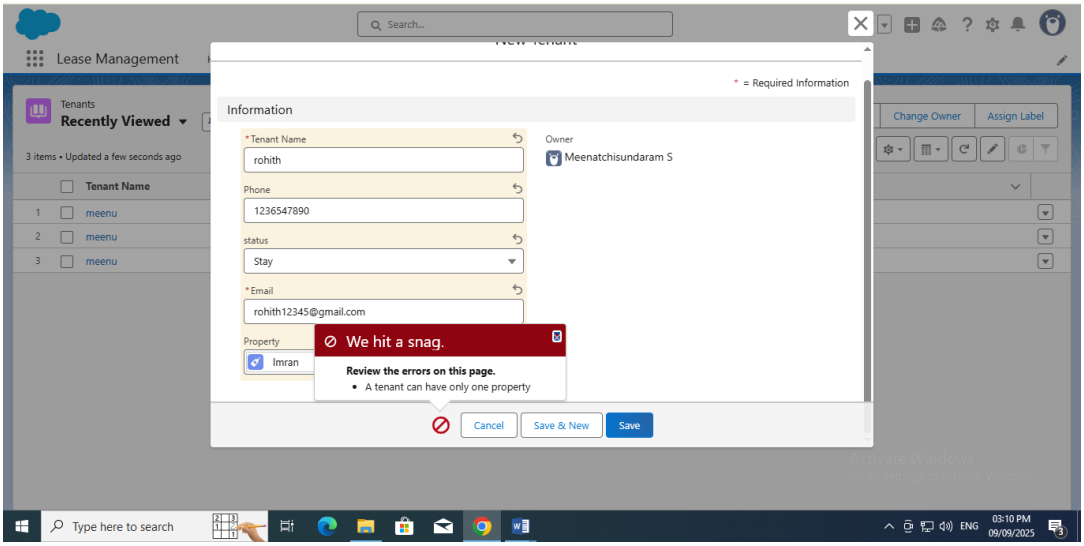
- Leave rejected



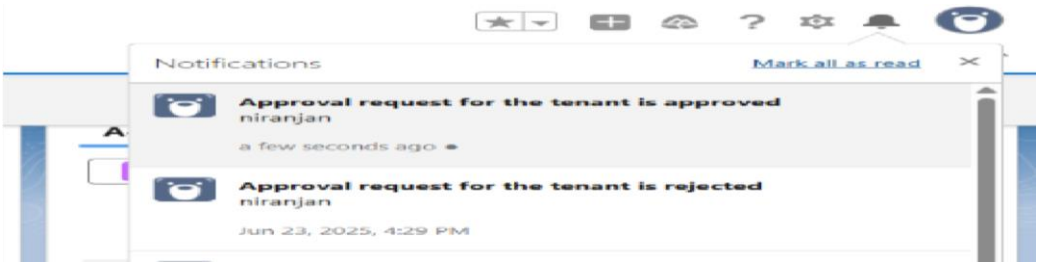
- Flow runs



- Trigger error messages



- Approval process notifications



ADVANTAGES & DISADVANTAGES

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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});

        }

    }

}
```