LEASE MANAGEMENT

COLLEGE NAME : SREE NARAYANA GURU COLLEGE

COLLEGE CODE : Bru36

TEAM ID: NM2025TMID26405

TEAM MEMBERS:

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Team Member 4 : Anas Muhammad M

Email : anasanasmuhammed01@gmail.com

1. INTRODUCTION

1.1 Project Overview

The Lease Management System is a Salesforce-based application that automates and streamlines real estate leasing processes. It manages tenant records, lease contracts, rent payments, and communication within a centralized platform, reducing manual effort and errors. Using Salesforce features like Flows, Approval Processes, and Email Alerts, the system ensures timely reminders, accurate payment tracking, and proper contract approvals. With dashboards and reports, stakeholders gain insights into occupancy, payments, and renewals, enabling better decision-making. Overall, it enhances efficiency, improves tenant satisfaction, and secures data with role-based access.

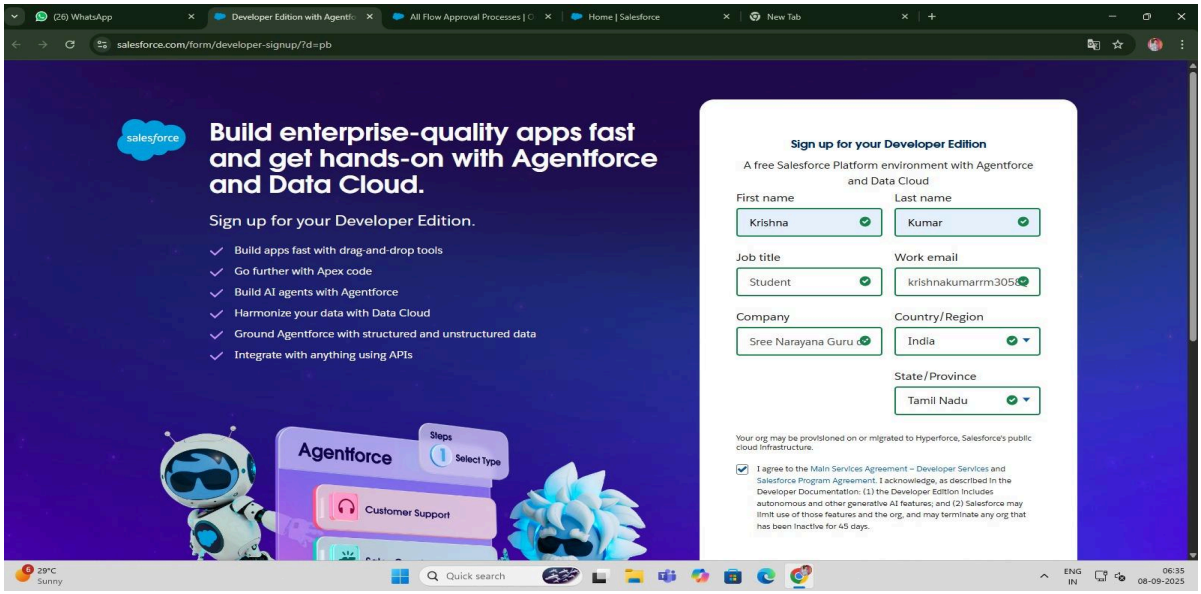
1.2 Purpose

The purpose of the Lease Management System is to provide a centralized, automated solution for managing properties, tenants, and lease activities. By using Salesforce features such as Flows, Approval Processes, and Email Alerts, the system reduces manual effort, improves accuracy, and ensures timely communication. It enhances compliance through secure role-based access and strengthens tenant–landlord relationships with transparent, efficient processes, ultimately increasing productivity and supporting better decision-making.

DEVELOPMENT PHASE

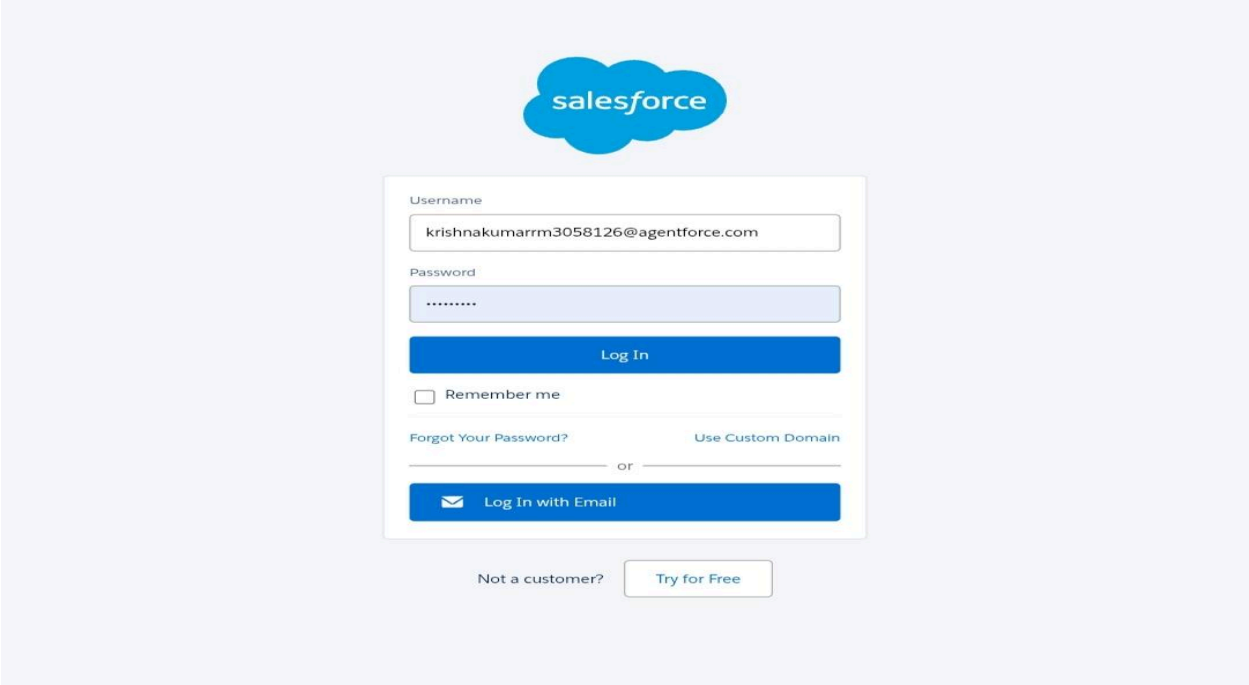
- **Creating Developer Account:**

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

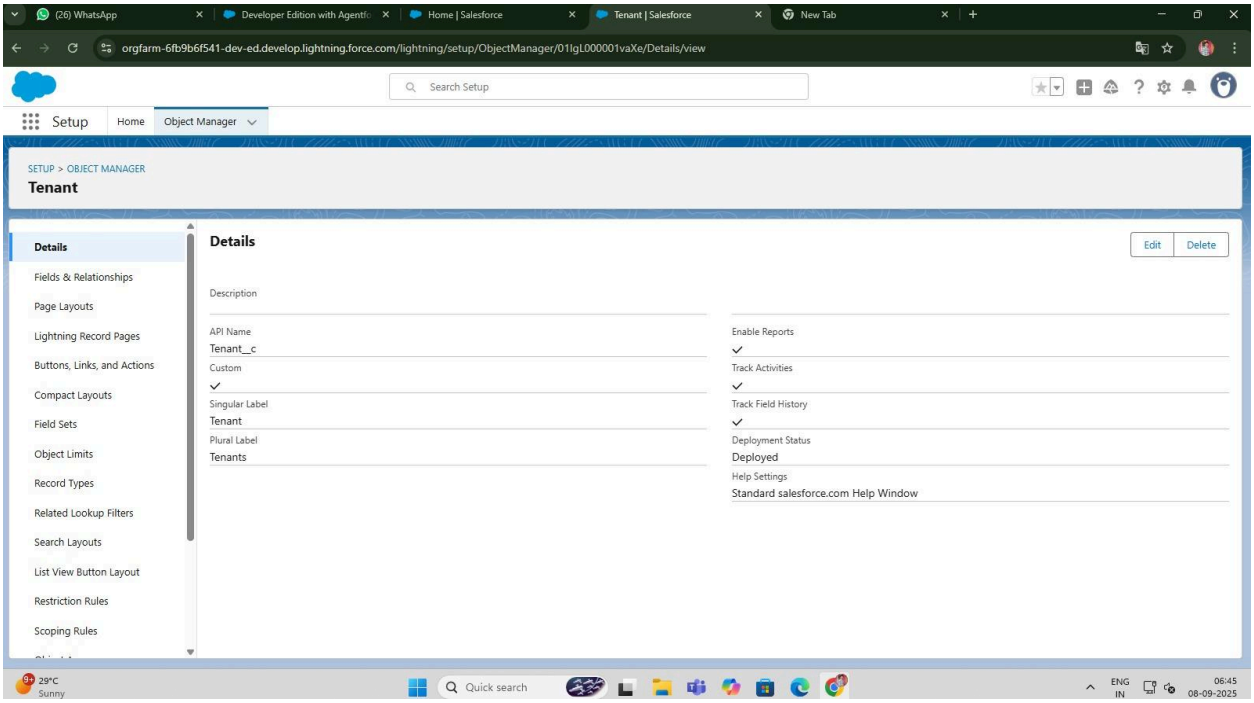


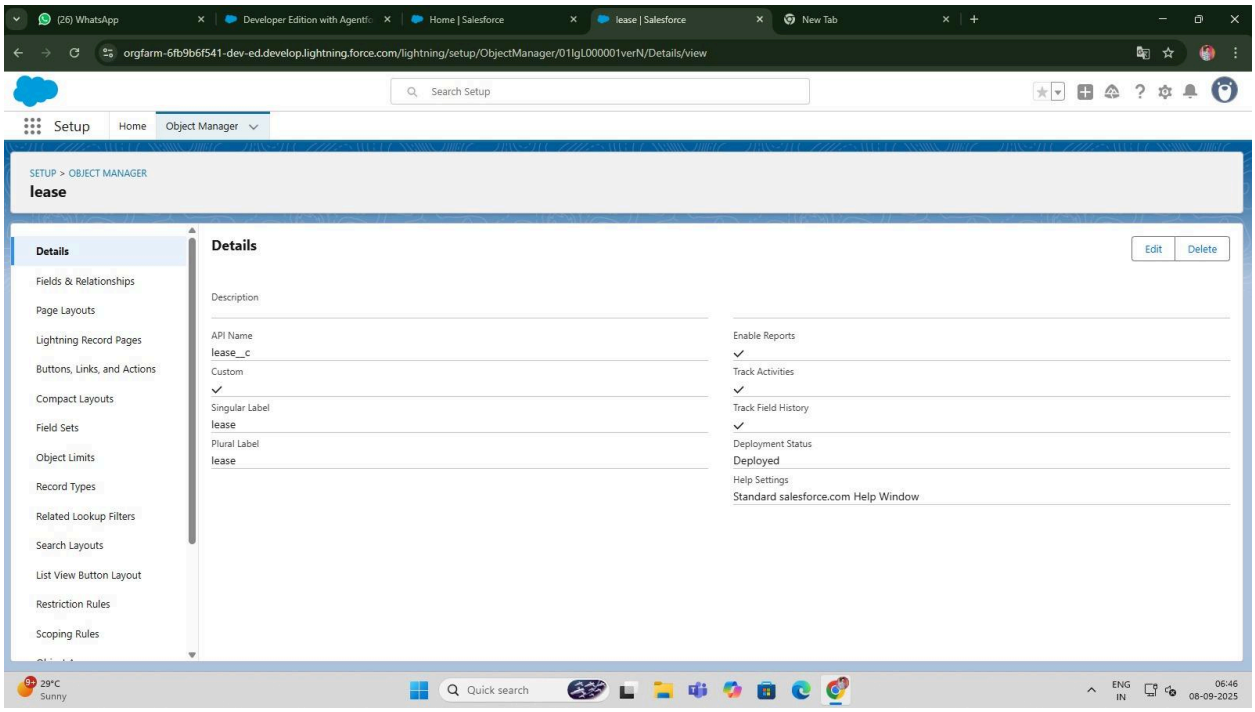
Account activation then next login this link

https://login.salesforce.com/



- Created objects: Property, Tenant, Lease, Payment

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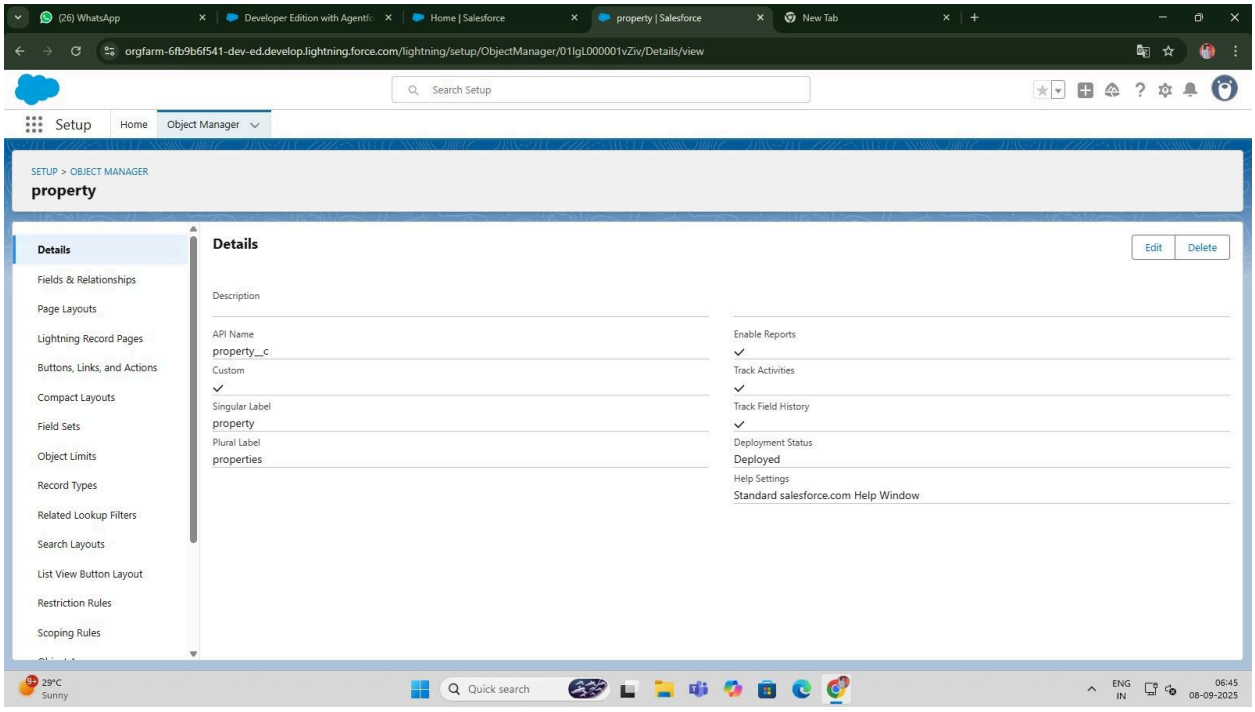
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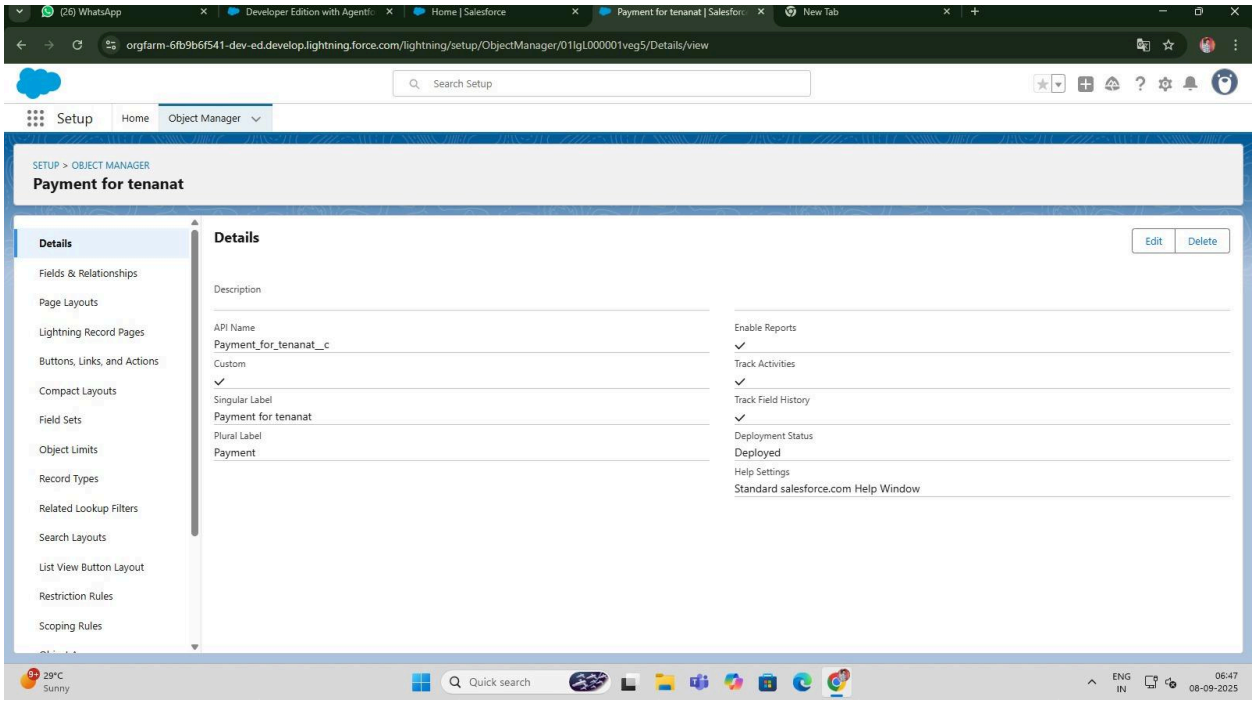
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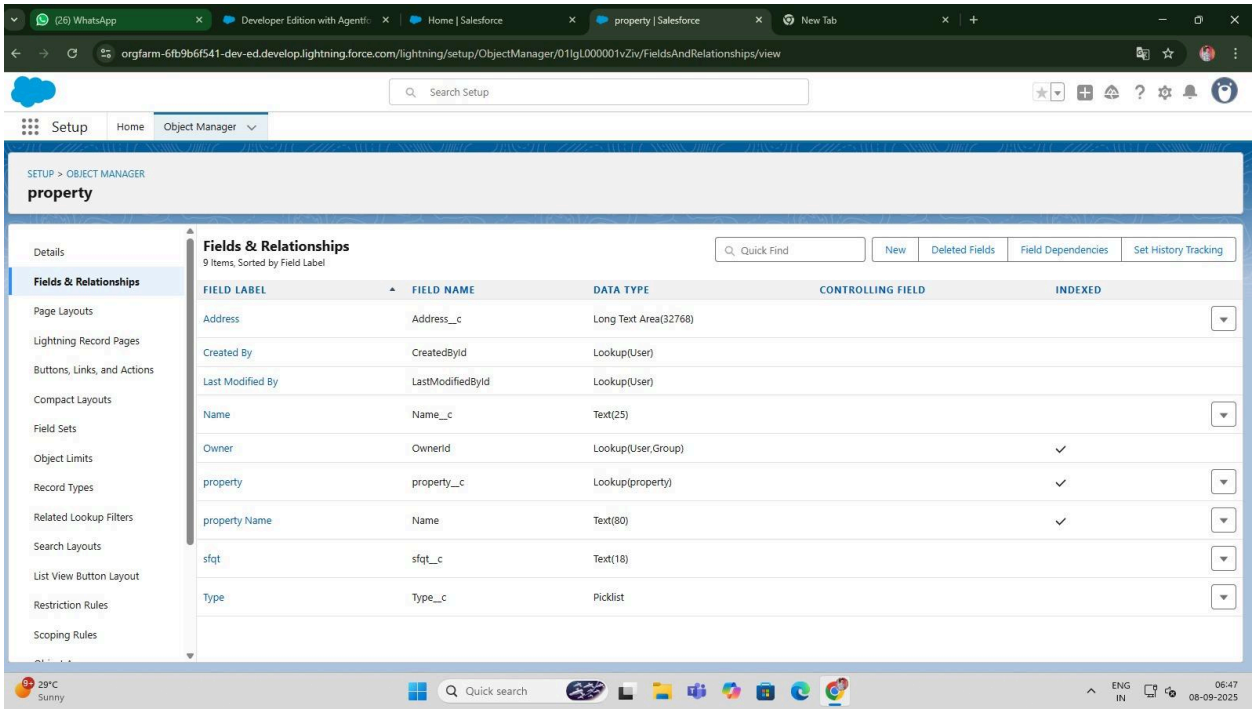
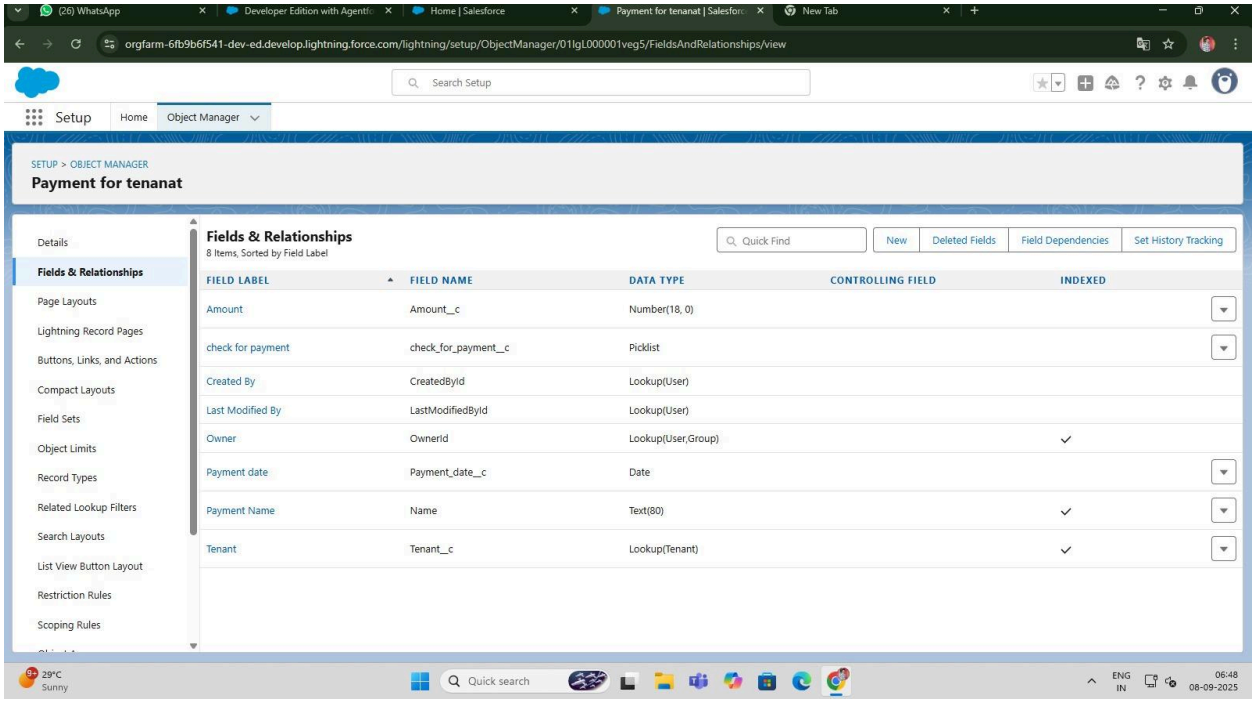
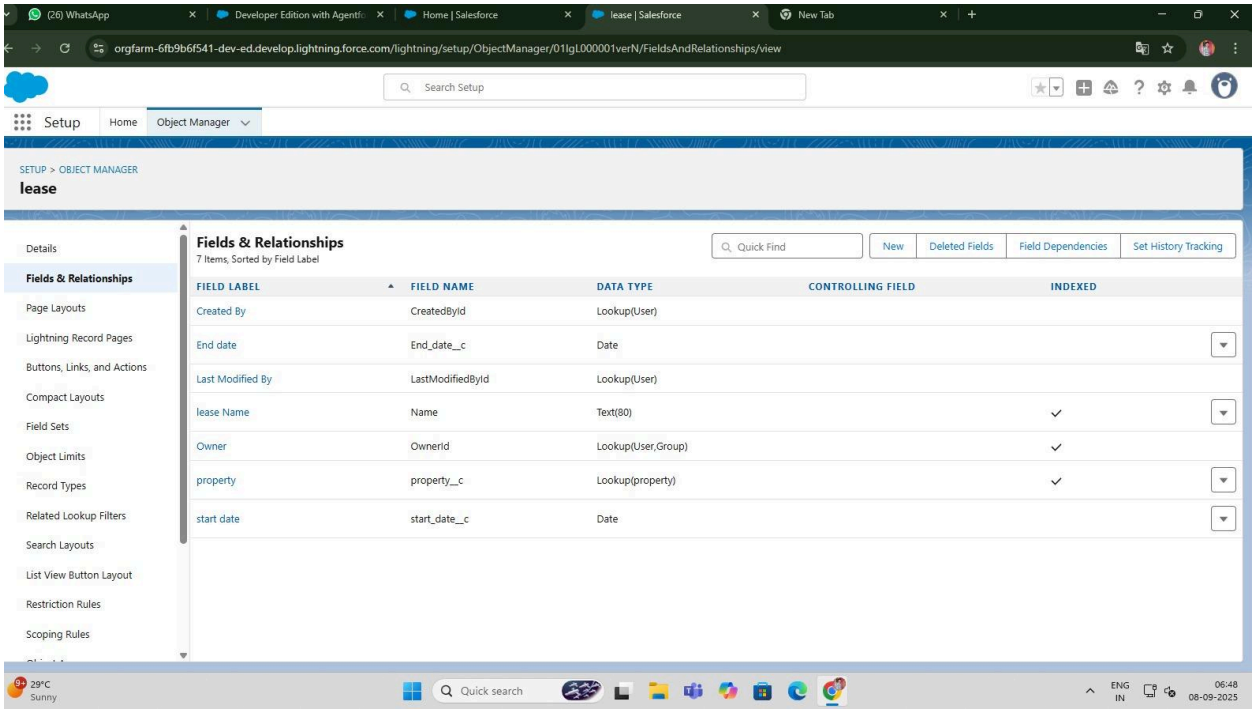
- Configured fields and relationships



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Scoping Rules
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Set History Tracking
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Lookup(User)
End date
End_date__c
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Lookup(User)
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Lookup(User,Group)
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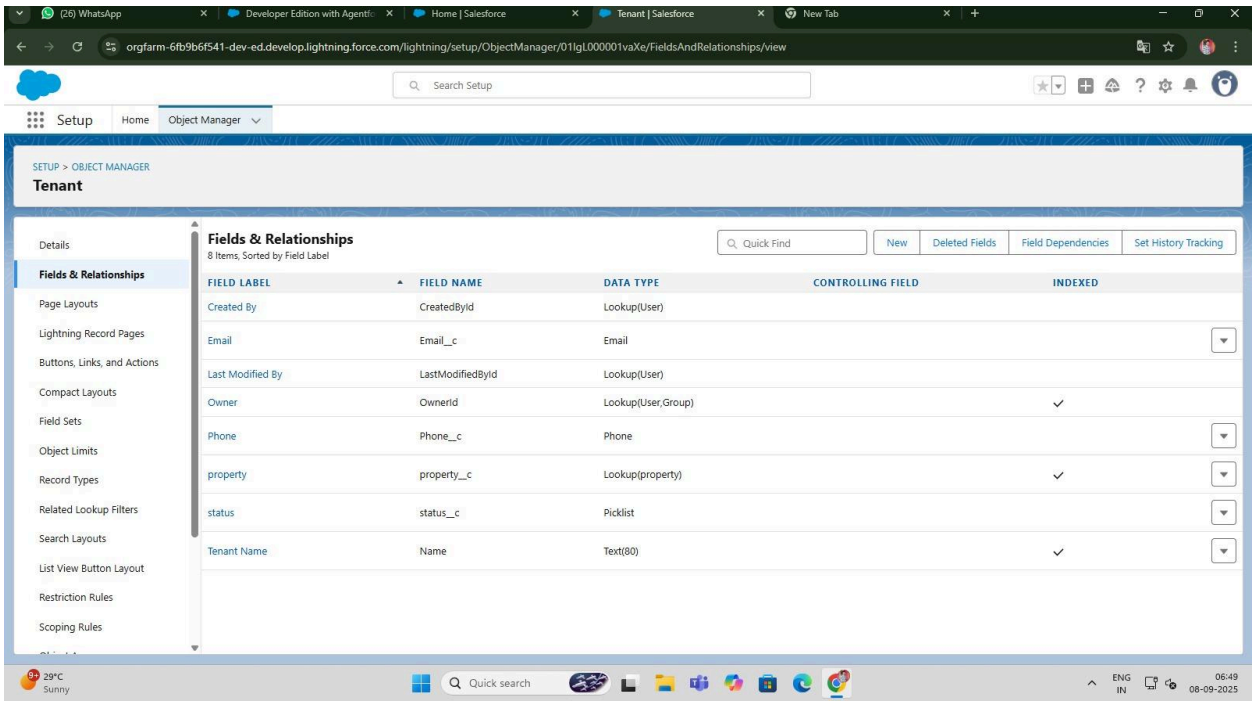
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Set History Tracking
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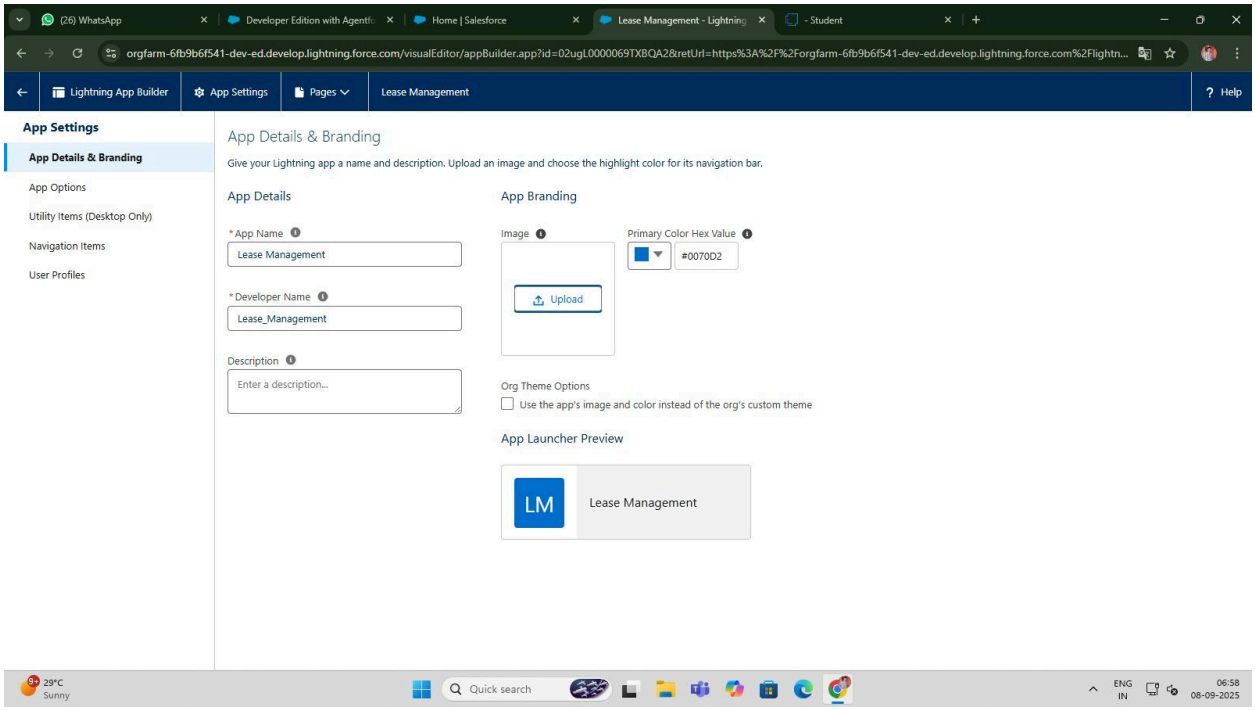
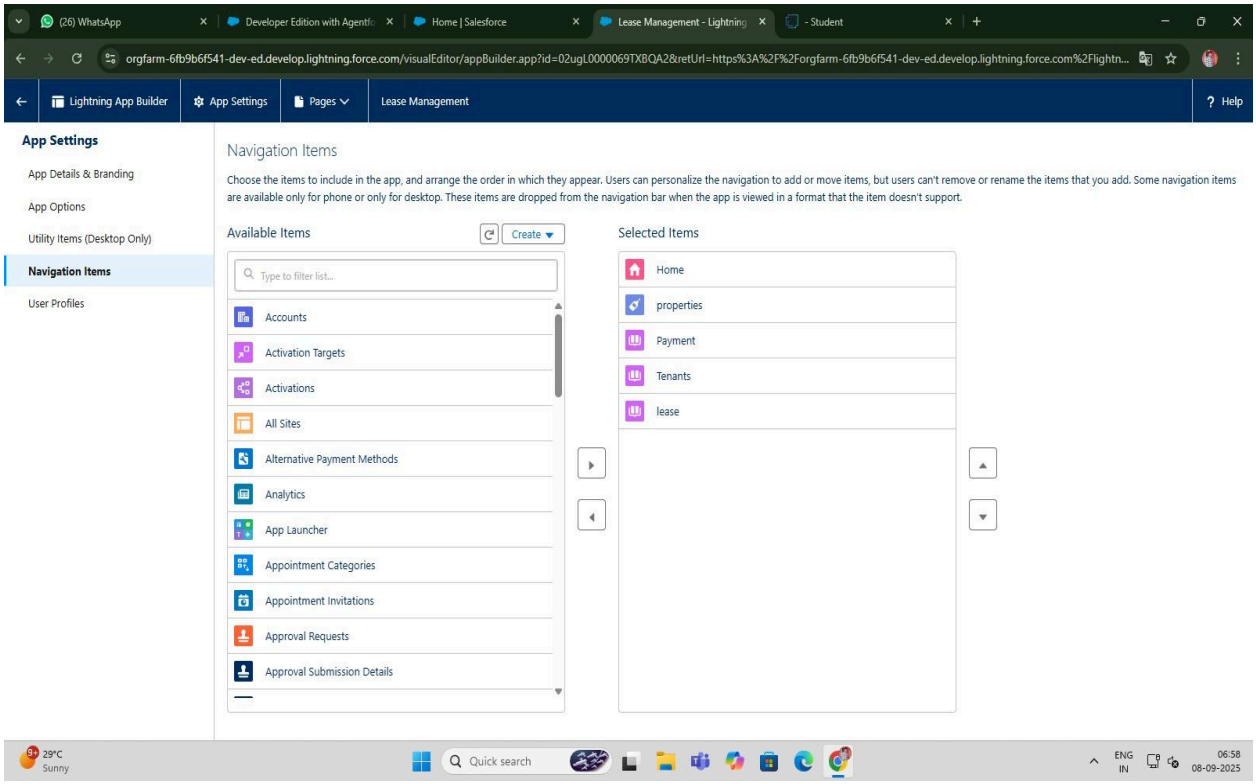
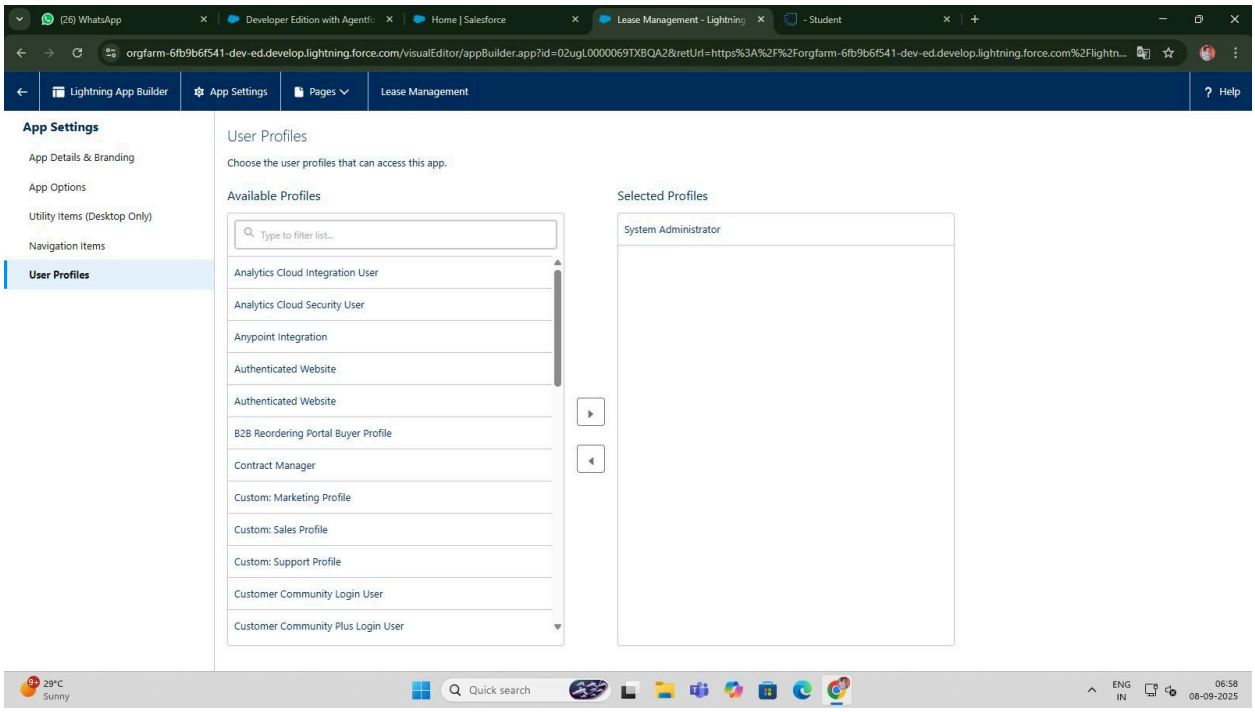
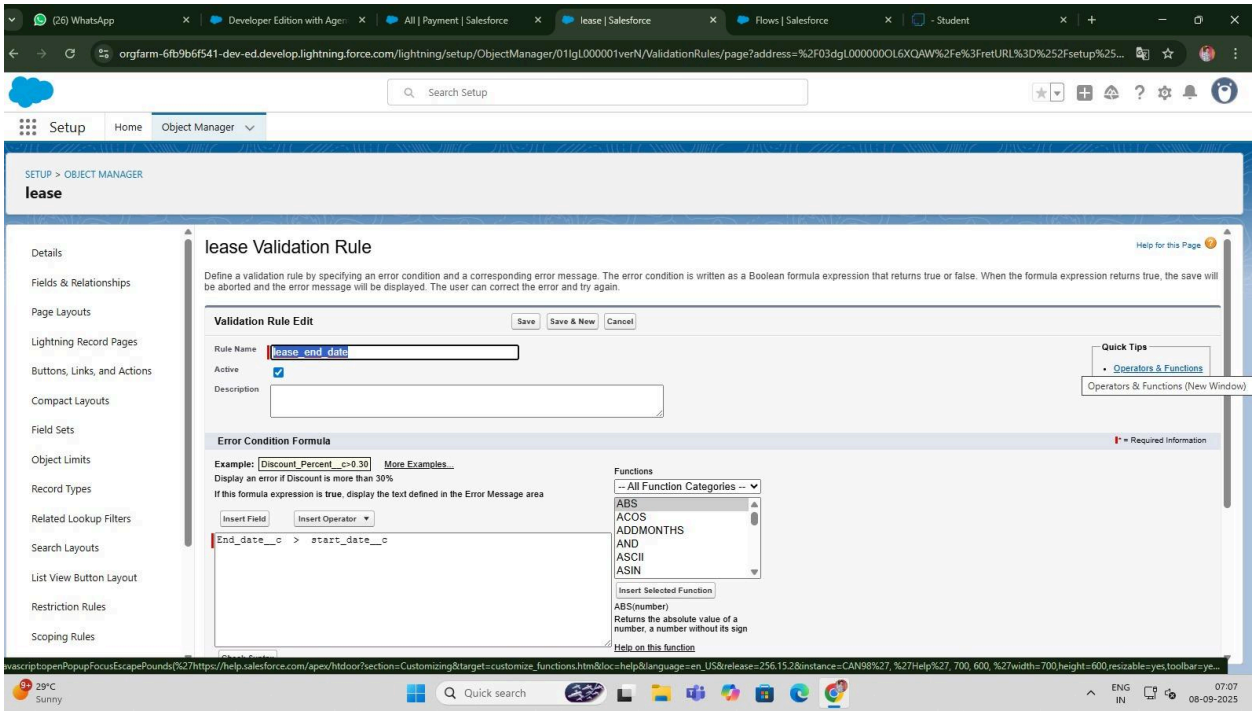
- Developed Lightning App with relevant tabs



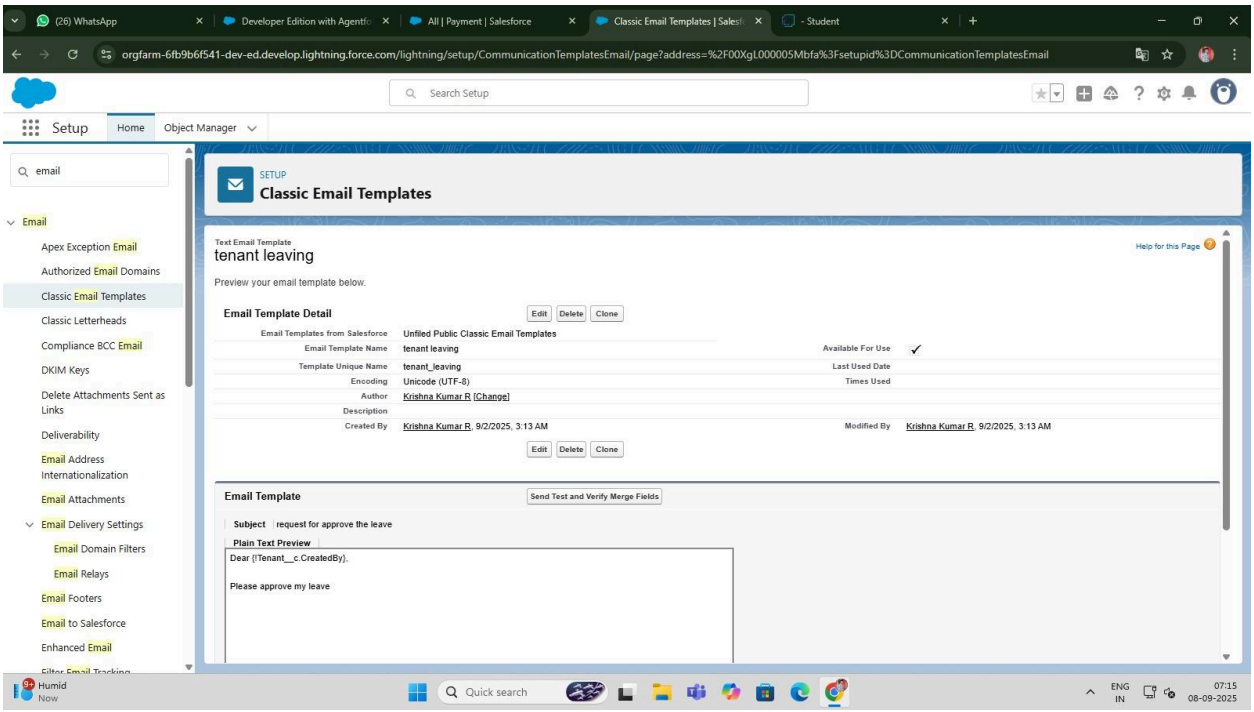


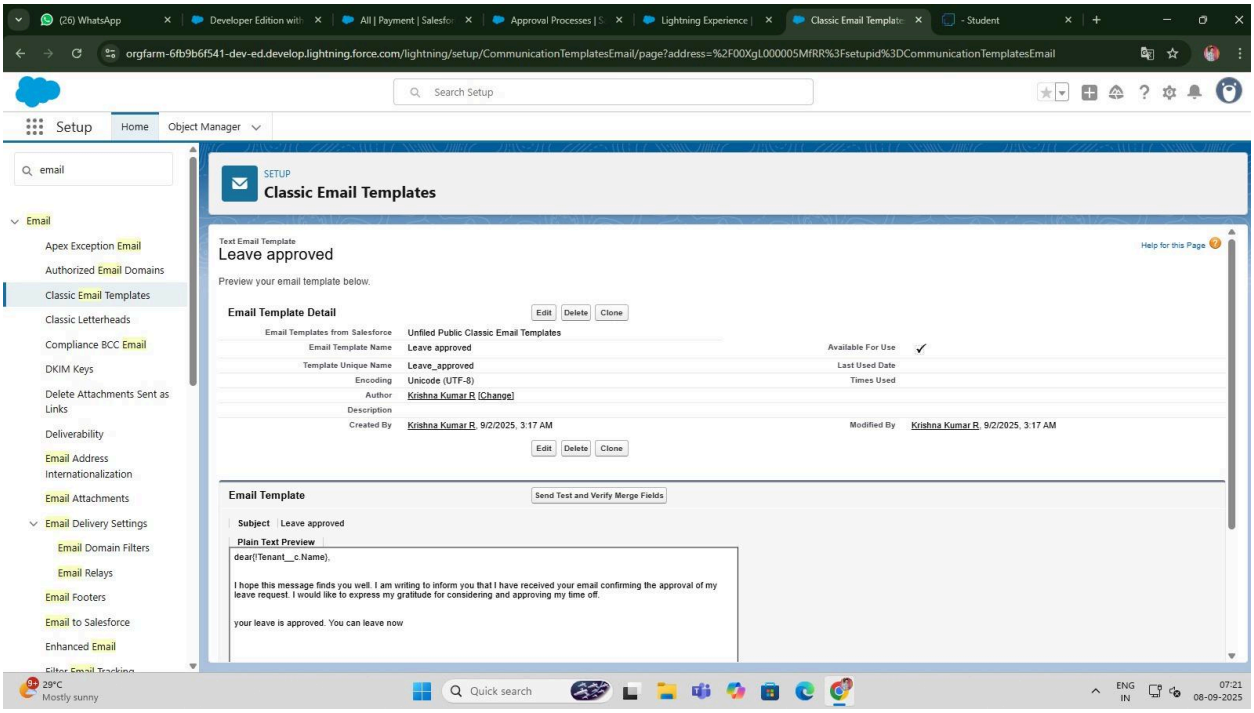


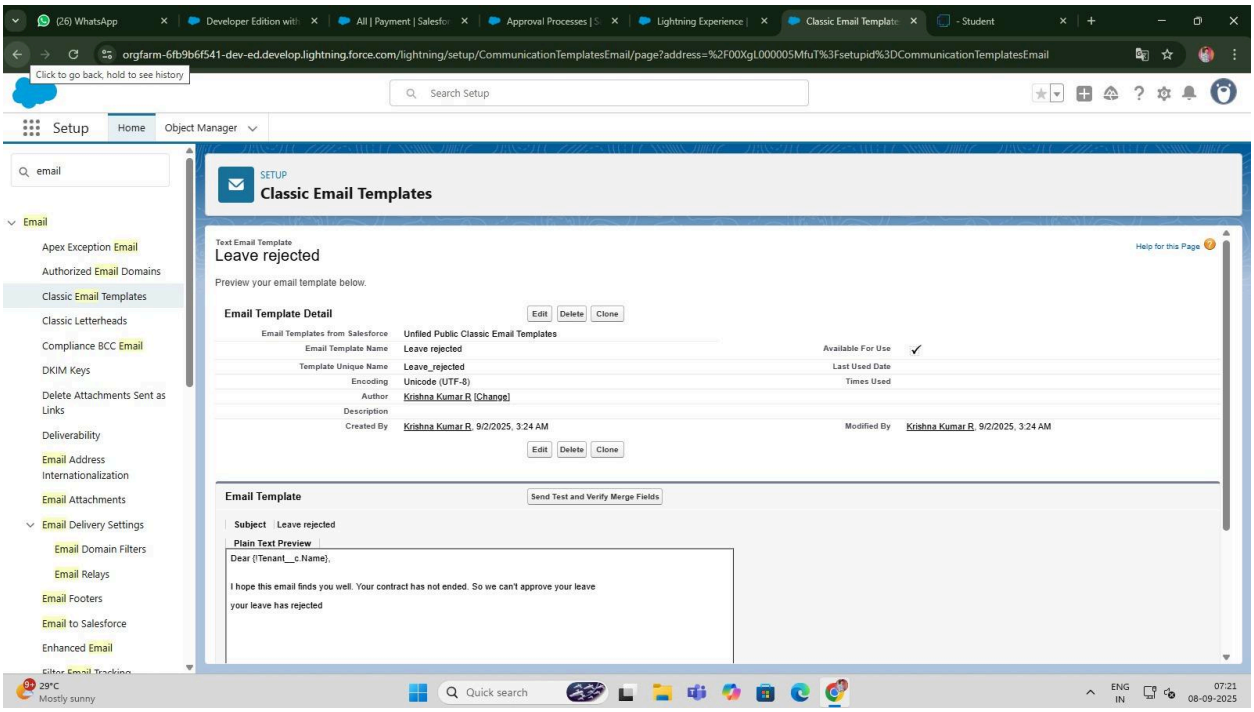
- create a validation rule to an Lease Object



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






Setup
Home
Object Manager
email
Email
Apex Exception Email
Authorized Email Domains
Classic Email Templates
Classic Letterheads
Compliance BCC Email
DKIM Keys
Delete Attachments Sent as Links
Deliverability
Email Address Internationalization
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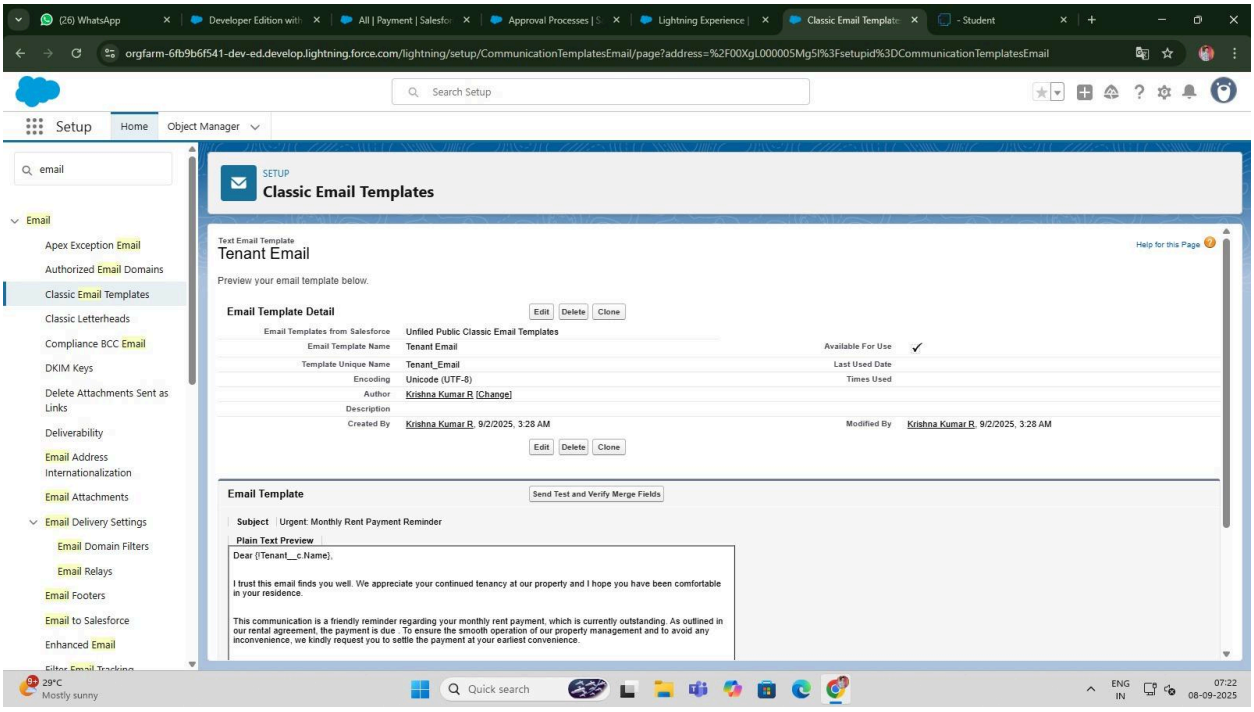
Email Delivery Settings
Email Domain Filters
Email Relays
Email Footers
Email to Salesforce
Enhanced Email
SETUP
Classic Email Templates
Text Email Template
Leave rejected
Preview your email template below.
Email Template Detail
Edit
Delete
Clone
Email Templates from Salesforce
Unfiled Public Classic 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
Krishna Kumar R [Change]
Description
Created By
Krishna Kumar R, 9/2/2025, 3:24 AM
Modified By
Krishna Kumar R, 9/2/2025, 3:24 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


Setup
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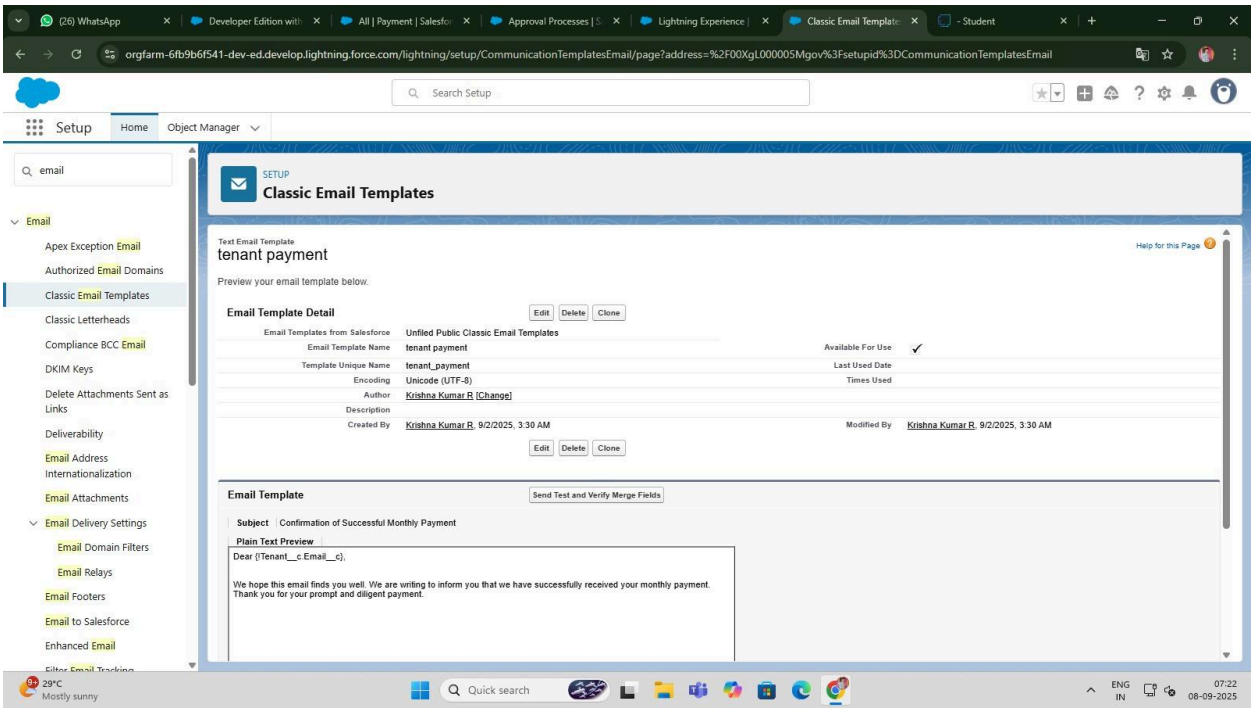
Apex Exception Email
Authorized Email Domains
Classic Email Templates
Classic Letterheads
Compliance BCC Email
DKIM Keys
Delete Attachments Sent as Links
Deliverability
Email Address Internationalization
Email Attachments
Email Delivery Settings
Email Domain Filters
Email Relays
Email Footers
Email to Salesforce
Enhanced Email
SETUP
Classic Email Templates
Text Email Template
Tenant Email
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
Krishna Kumar R [Change]
Description
Created By
Krishna Kumar R, 9/2/2025, 3:28 AM
Modified By
Krishna Kumar R, 9/2/2025, 3:28 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.
This communication is a friendly reminder regarding your monthly rent payment, which is currently outstanding. As outlined in our rental agreement, the payment is due . To ensure the smooth operation of our property management and to avoid any inconvenience, we kindly request you to settle the payment at your earliest convenience.



- **Approval Process creation**

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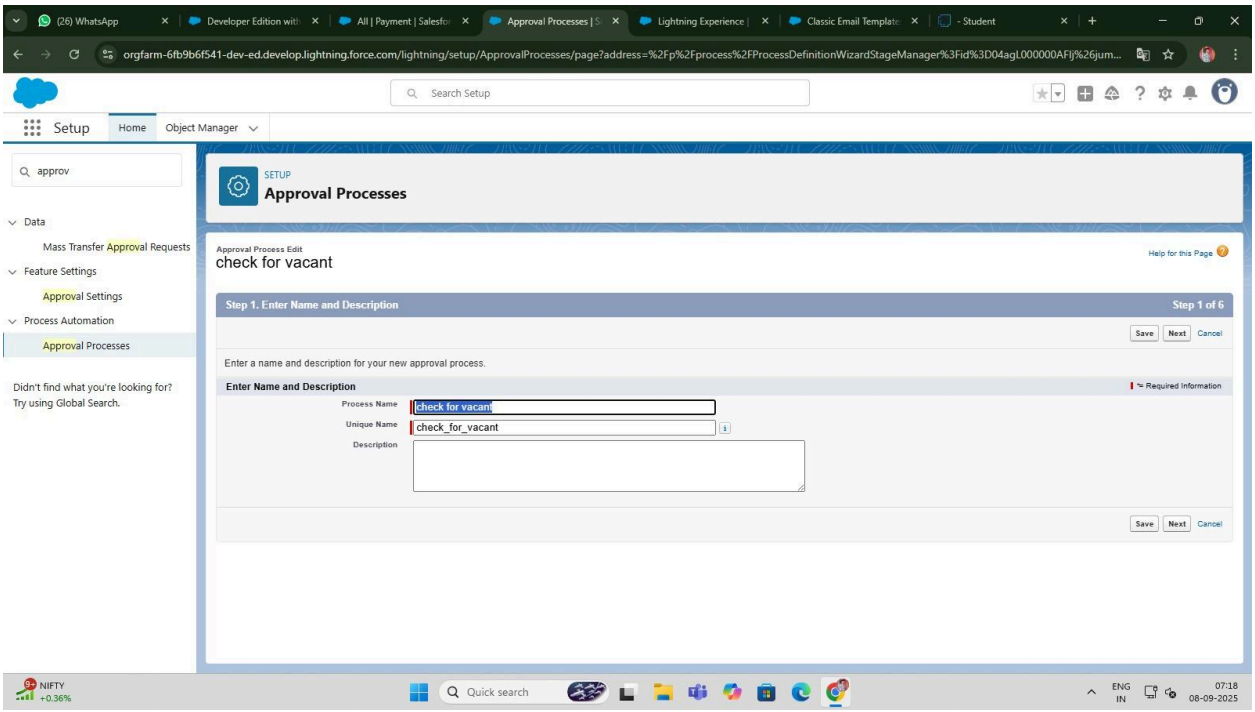

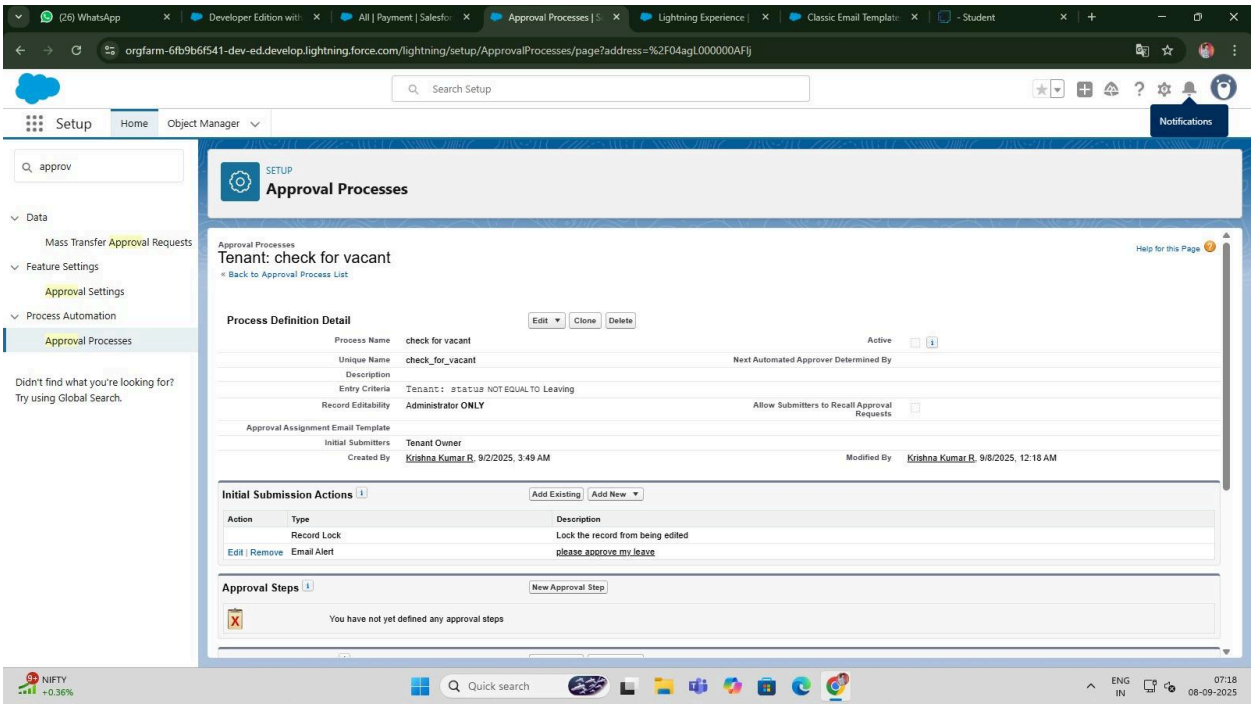

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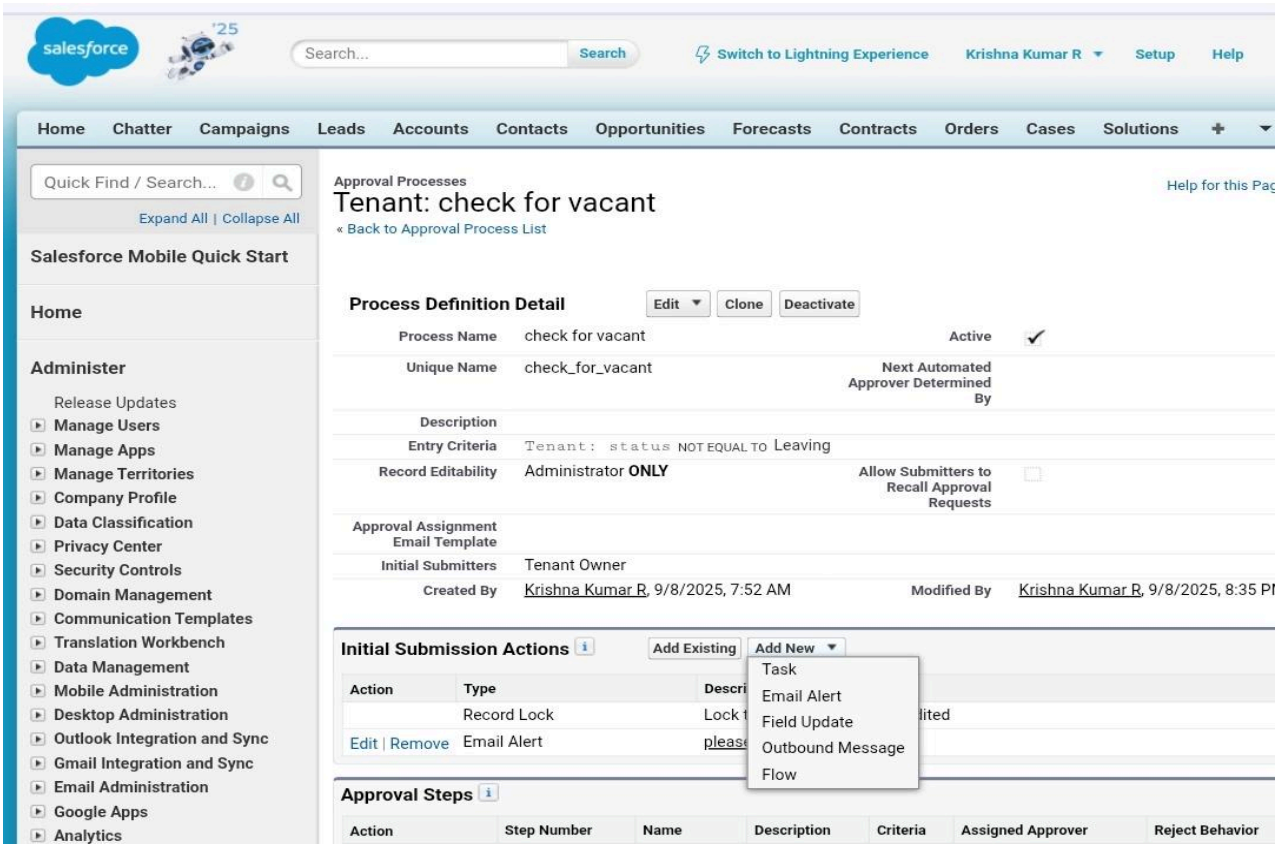

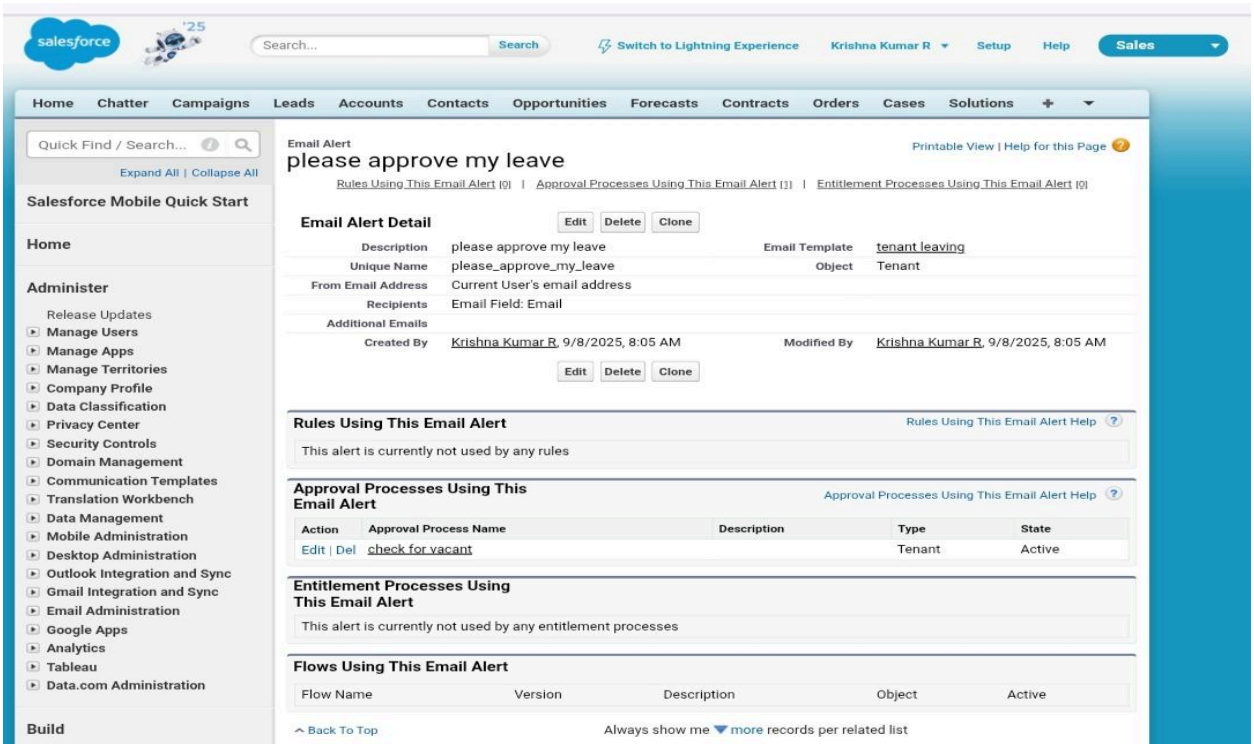

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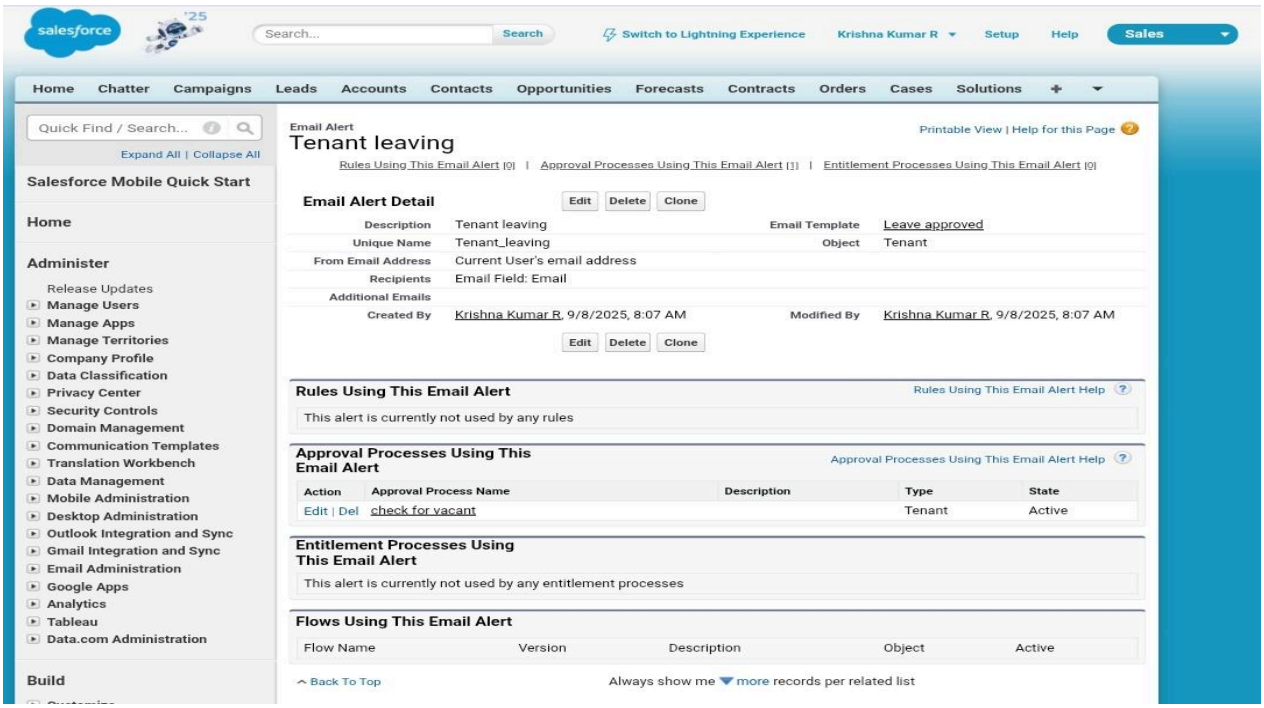

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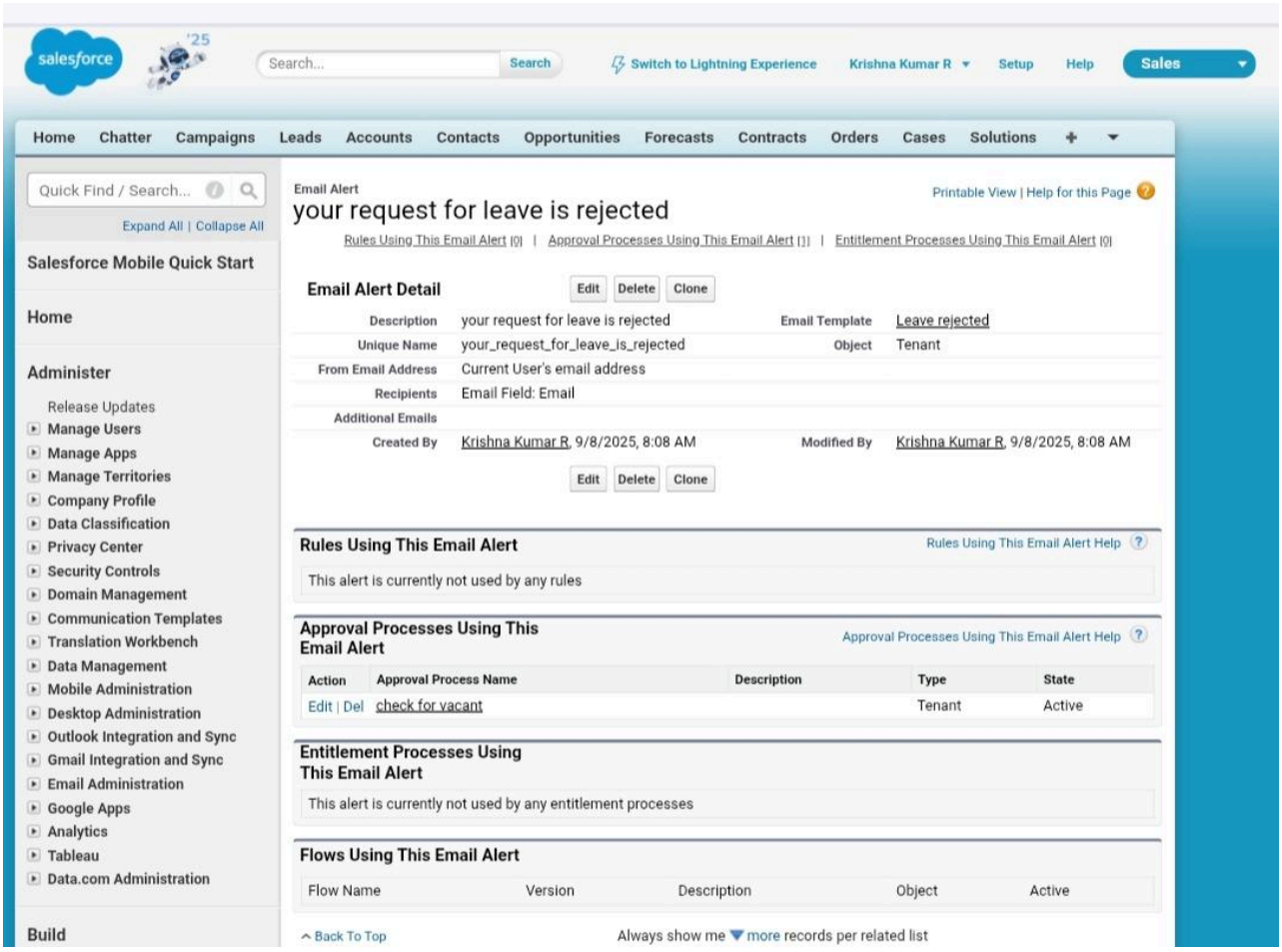
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Orders
Cases
Solutions
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Salesforce Mobile Quick Start
Home
Administer
Release Updates
Manage Users
Manage Apps
Manage Territories
Company Profile
Data Classification
Privacy Center
Security Controls
Domain Management
Communication Templates
Translation Workbench
Data Management
Mobile Administration
Desktop Administration
Outlook Integration and Sync
Gmail Integration and Sync
Email Administration
Google Apps
Analytics
Tableau
Data.com Administration
Build
Email Alert
your request for leave is rejected
Printable View | Help for this Page
Rules Using This Email Alert [0] | Approval Processes Using This Email Alert [1] | Entitlement Processes Using This Email Alert [0]
Email Alert Detail
Edit
Delete
Clone
Description
your request for leave is rejected
Email Template
Leave rejected
Unique Name
your_request_for_leave_is_rejected
Object
Tenant
From Email Address
Current User's email address
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Email Field: Email
Additional Emails
Created By
Krishna Kumar R, 9/8/2025, 8:08 AM
Modified By
Krishna Kumar R, 9/8/2025, 8:08 AM
Edit
Delete
Clone
Rules Using This Email Alert
Rules Using This Email Alert Help
This alert is currently not used by any rules
Approval Processes Using This Email Alert
Approval Processes Using This Email Alert Help
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Approval Process Name
Description
Type
State
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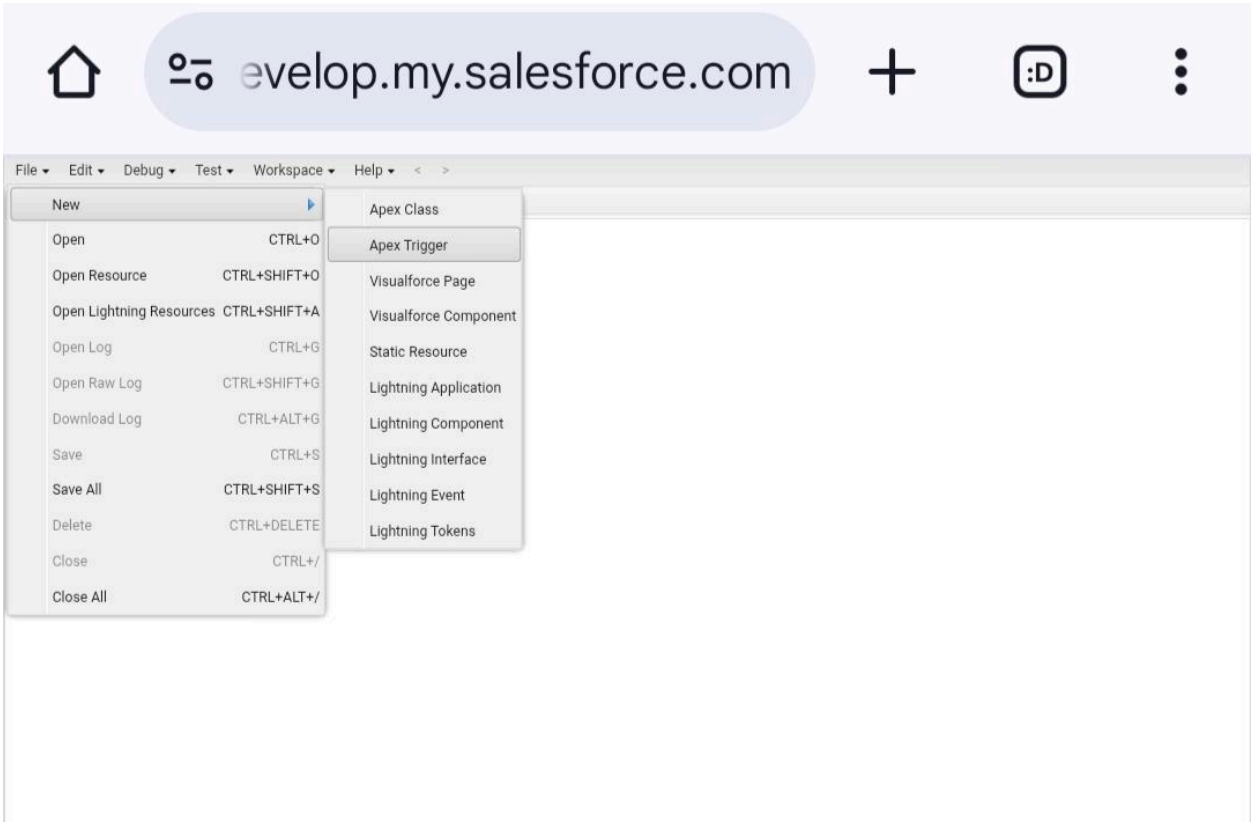
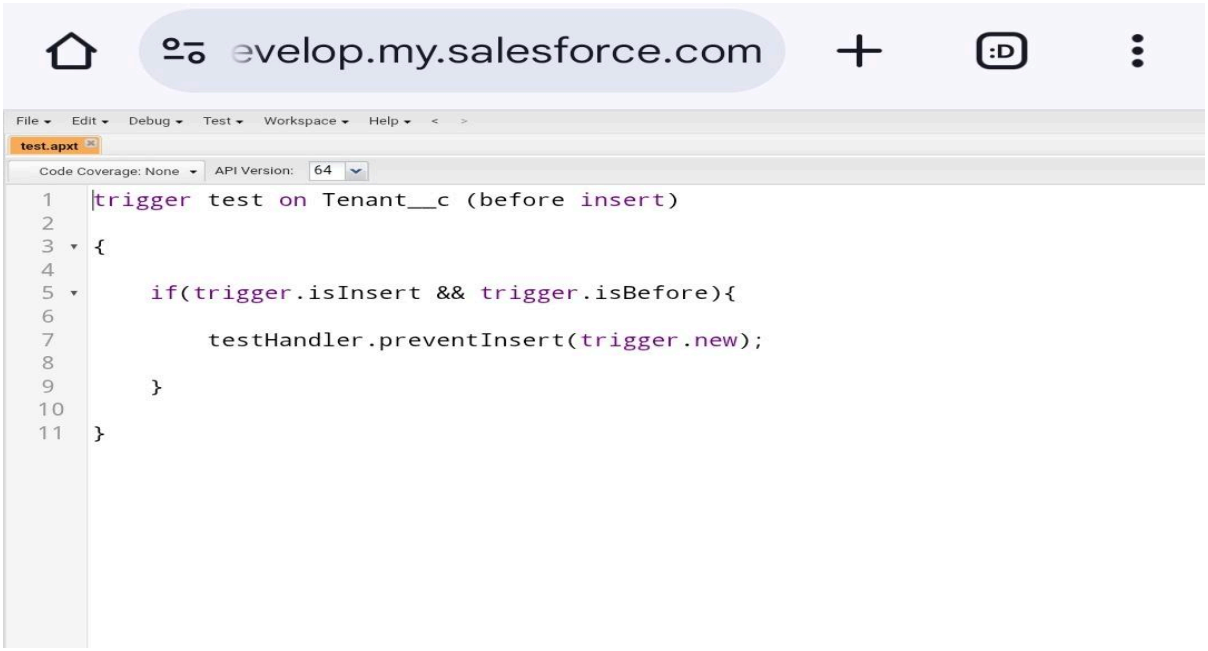
check for vacant
Tenant
Active
Entitlement Processes Using This Email Alert
This alert is currently not used by any entitlement processes
Flows Using This Email Alert
Flow Name
Version
Description
Object
Active
Back To Top
Always show me more records per related list

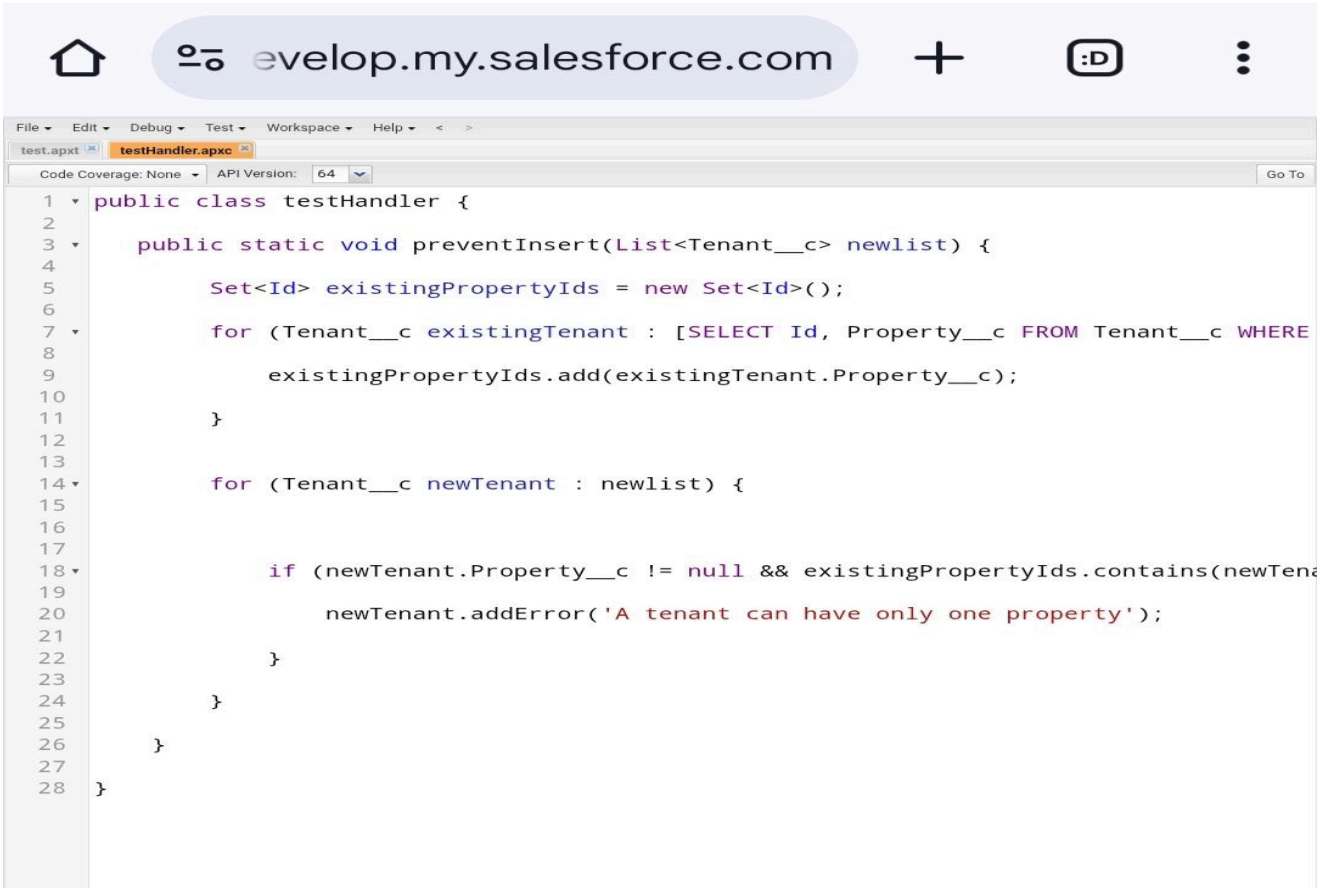
Apex Trigger

- Create an Apex Trigger





- Create an Apex Handler class



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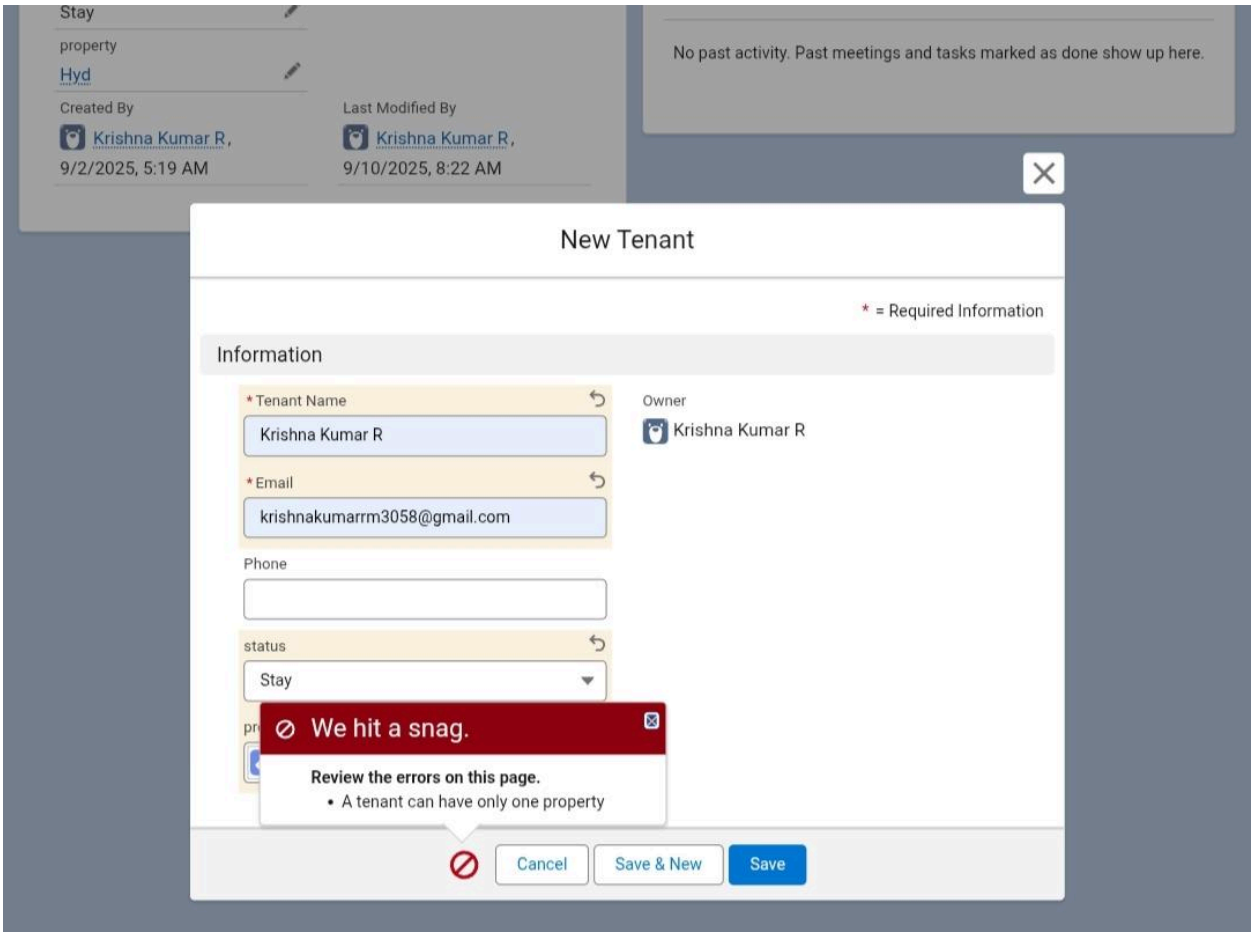
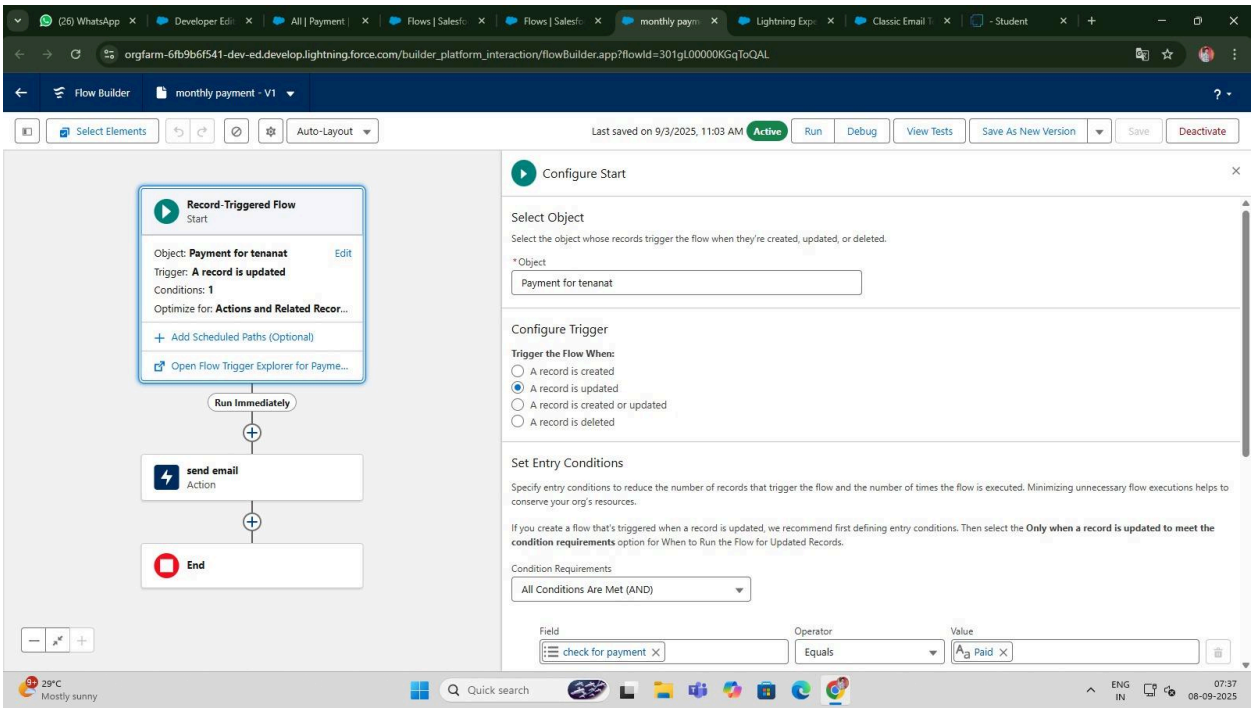
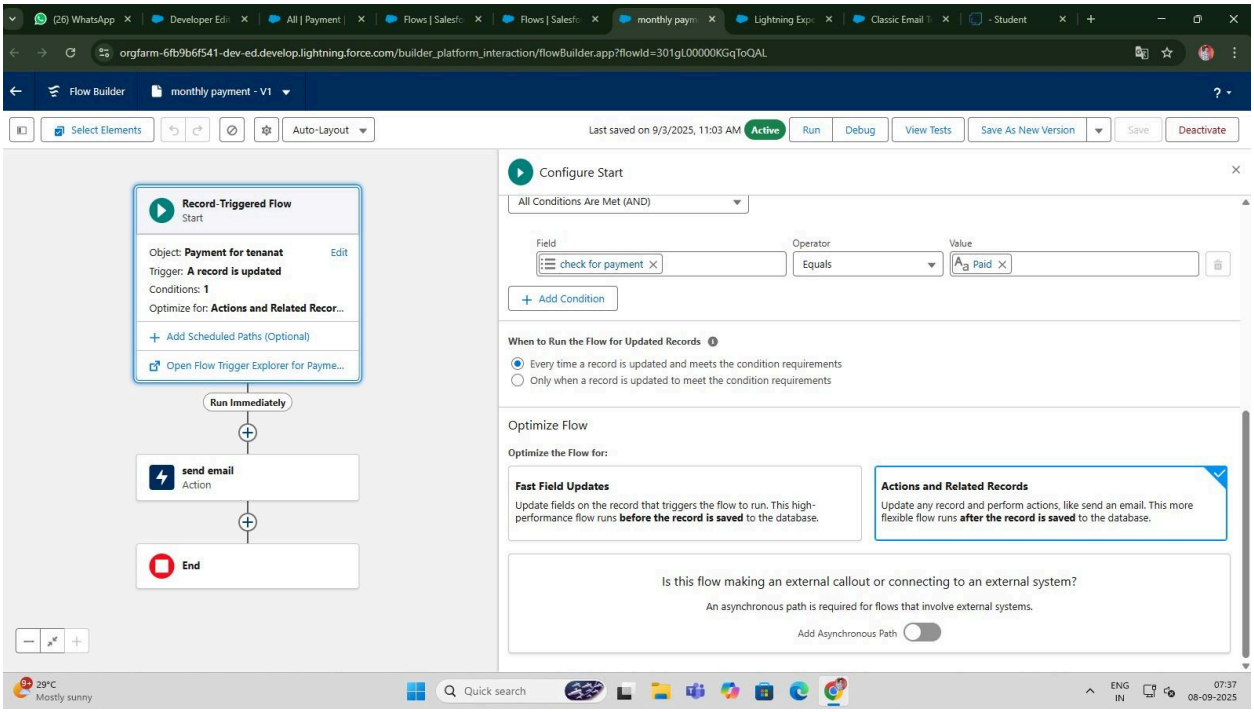

Stay
property
Hyd
Created By
Krishna Kumar R,
9/2/2025, 5:19 AM
Last Modified By
Krishna Kumar R,
9/10/2025, 8:22 AM
No past activity. Past meetings and tasks marked as done show up here.
New Tenant
* = Required Information
Information
* Tenant Name
Krishna Kumar R
* Email
krishnakumarrm3058@gmail.com
Phone
status
Stay
Owner
Krishna Kumar R
We hit a snag.
Review the errors on this page.
• A tenant can have only one property
Cancel
Save & New
Save

Create Flow for monthly payment





Schedule class

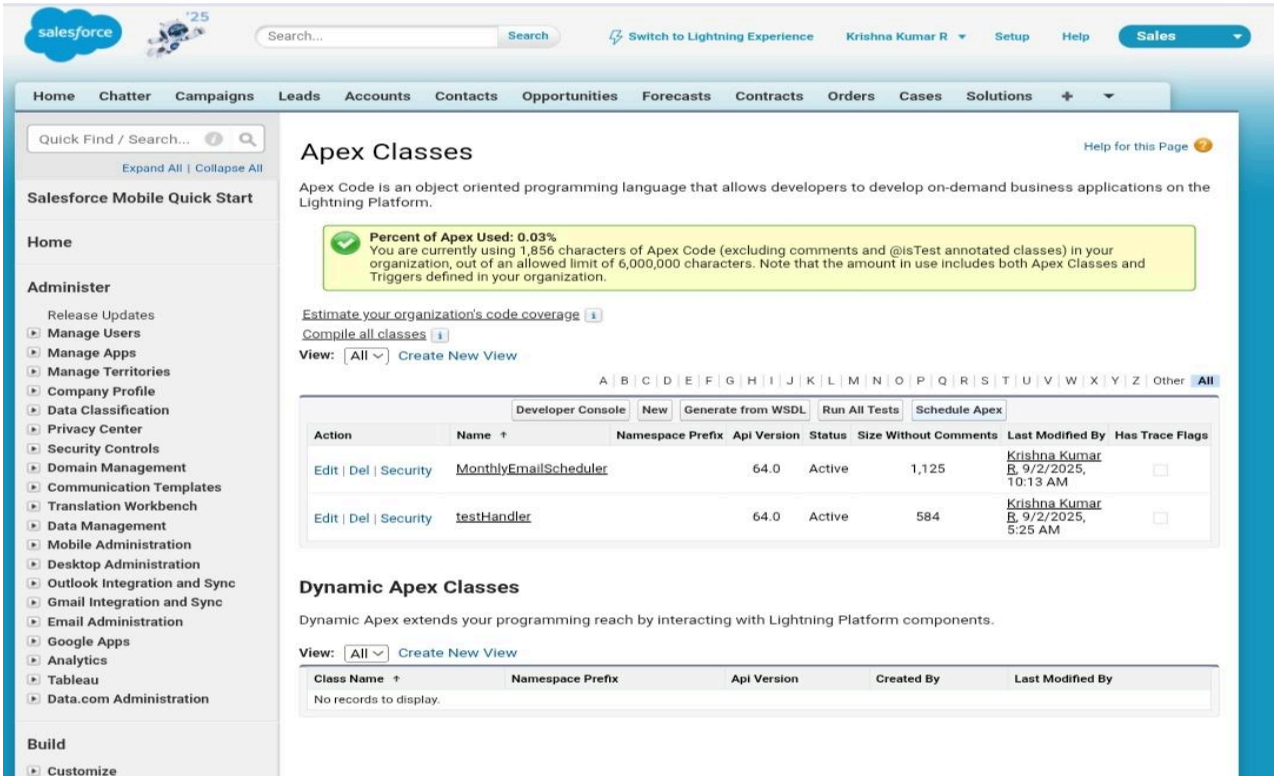
- Create an Apex Class

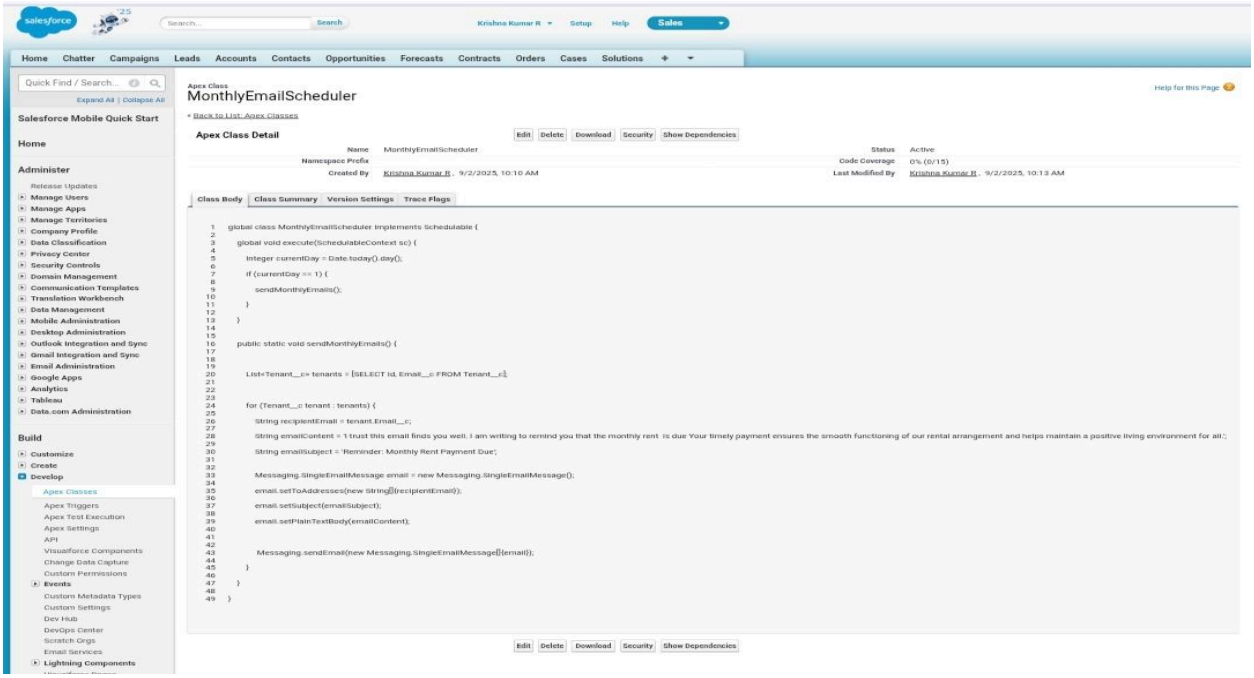
test.apxt | testHandler.apxc | MonthlyEmailScheduler.apxc

Code Coverage: None | API Version: 64 | Go To

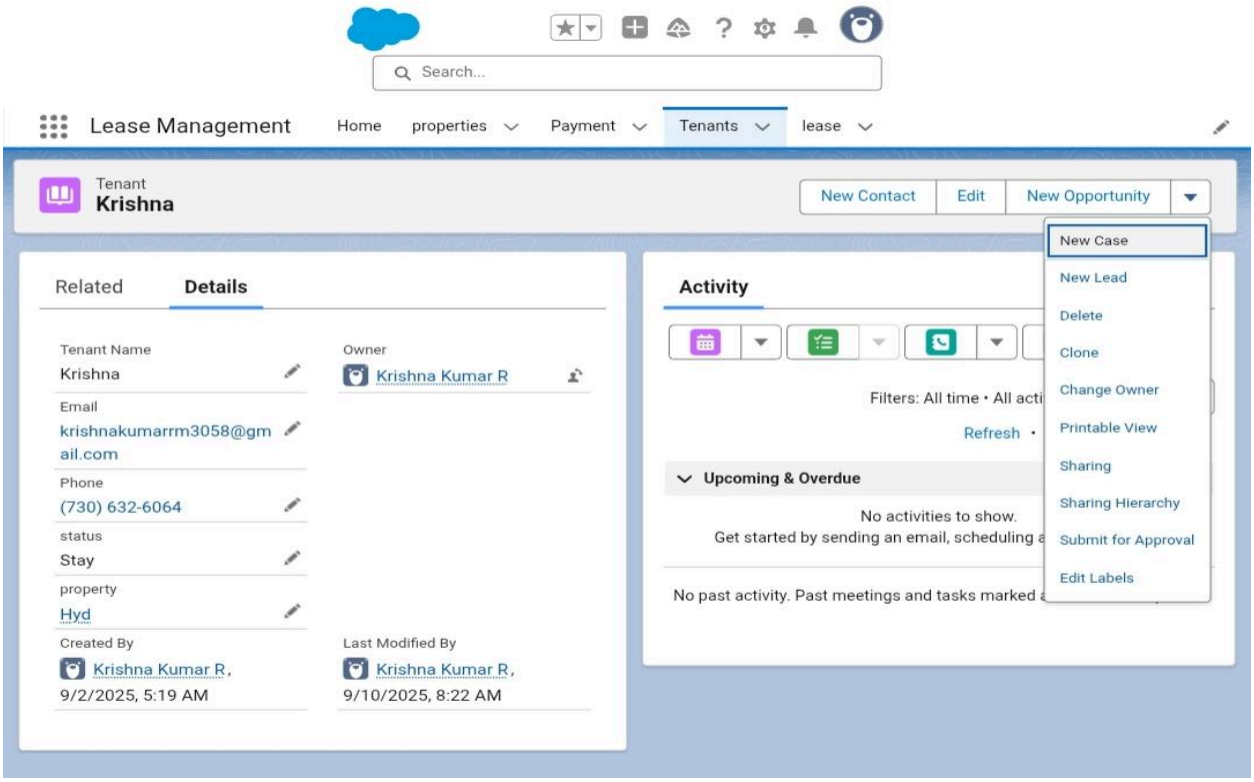
```
global class MonthlyEmailScheduler implements Schedulable {

    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

            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});

        }

    }

}
```

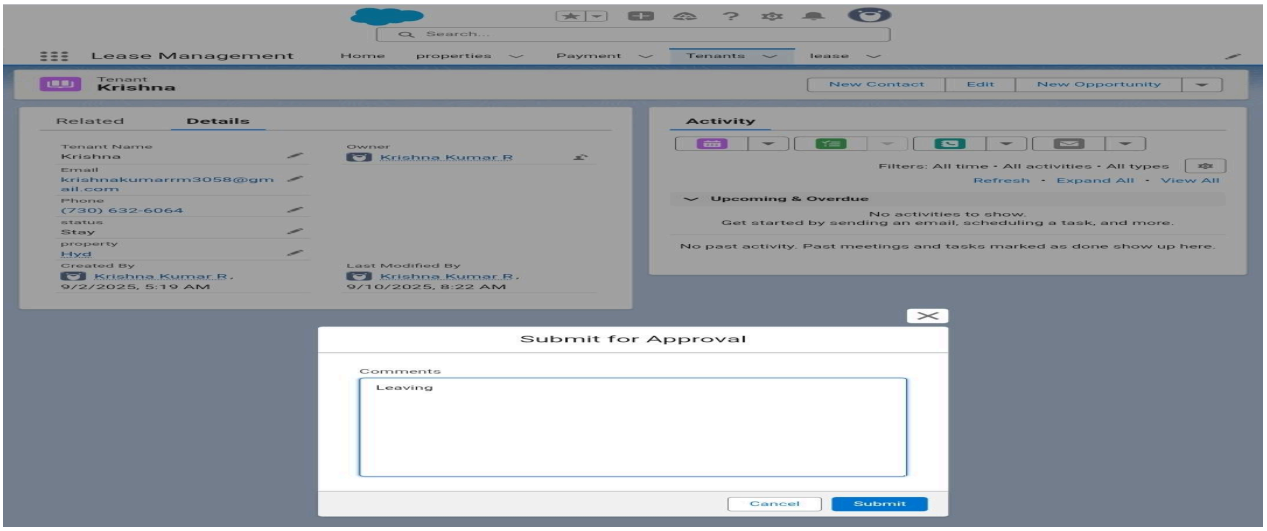
Schedule Apex class

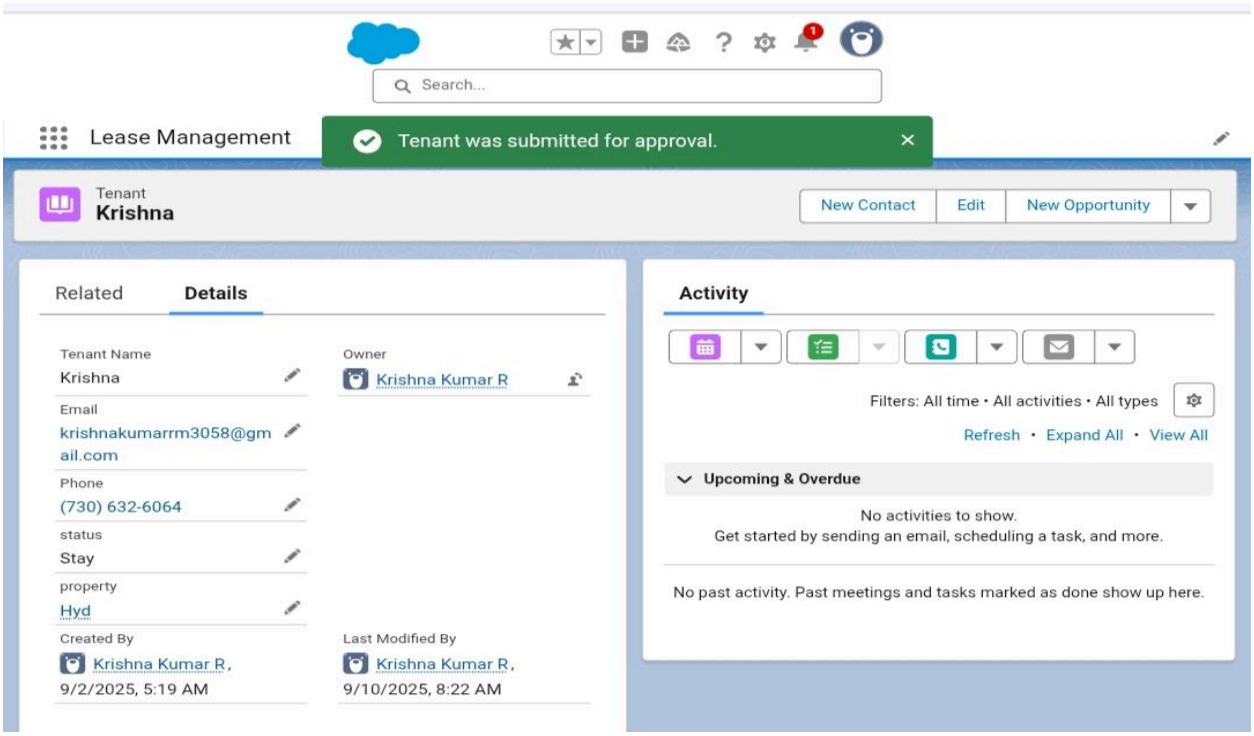


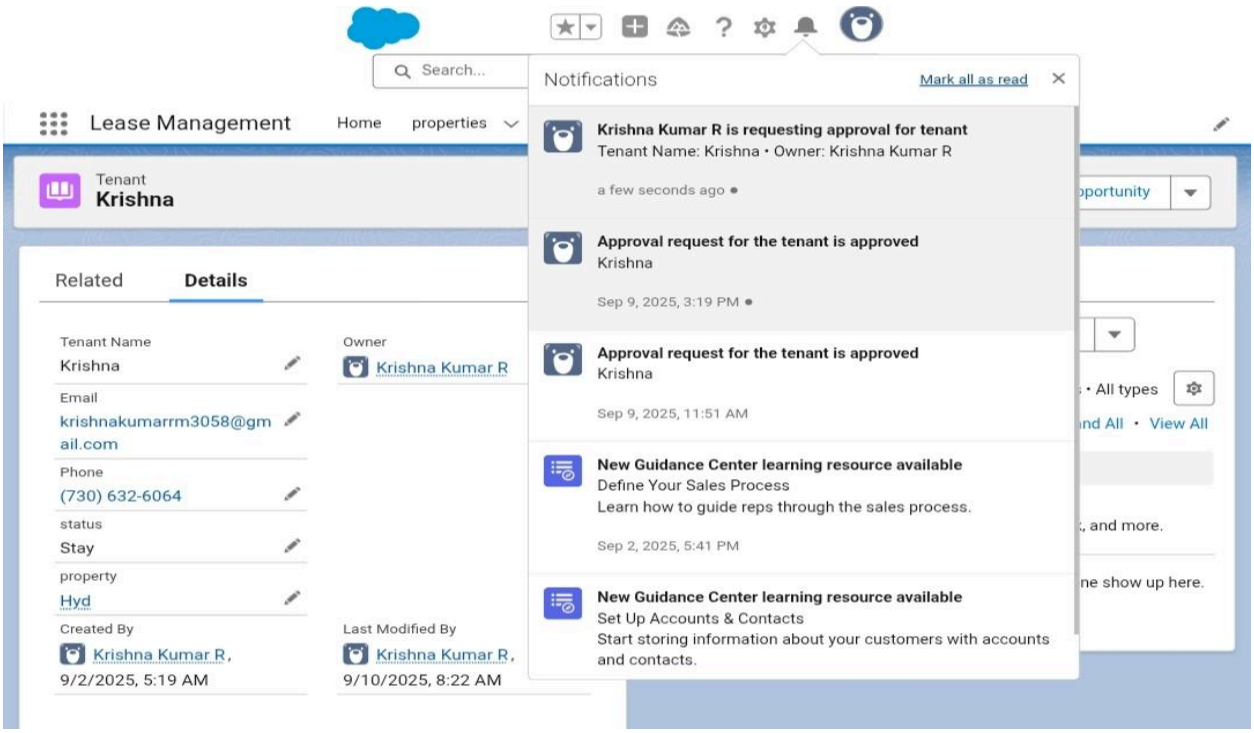


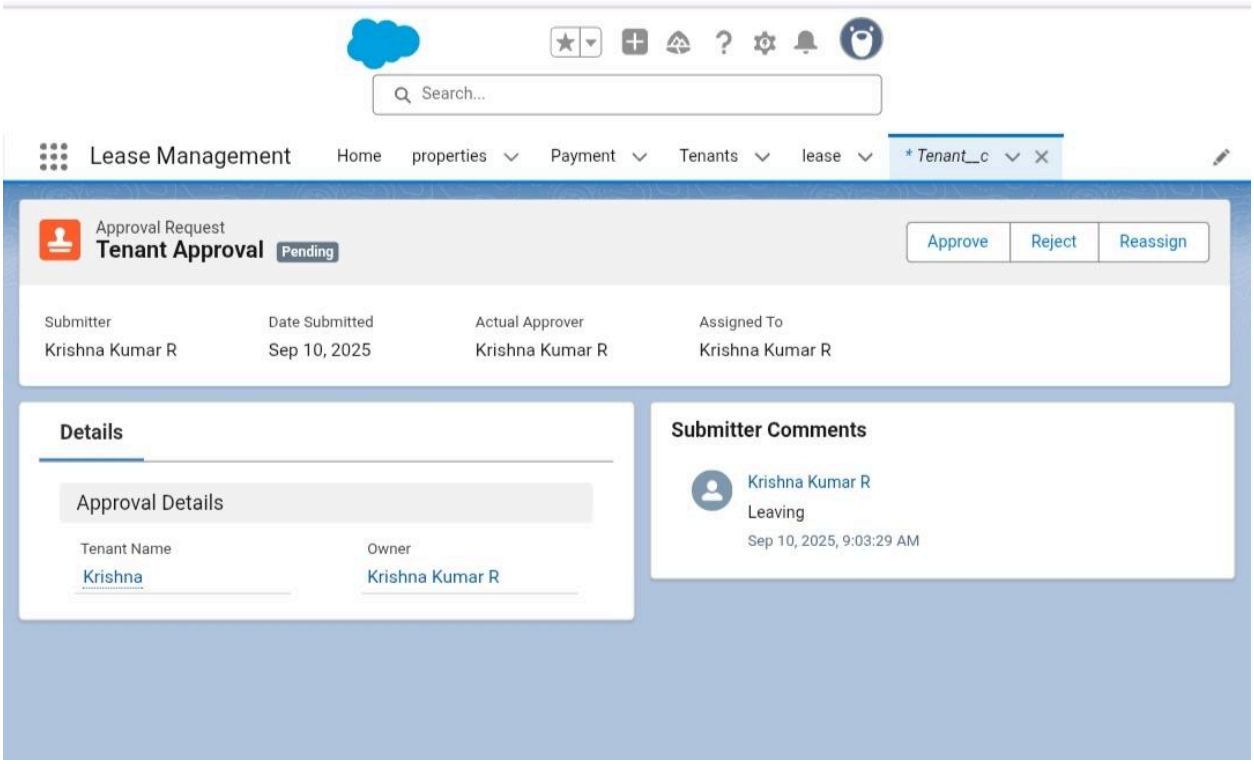
- Testing the approval process

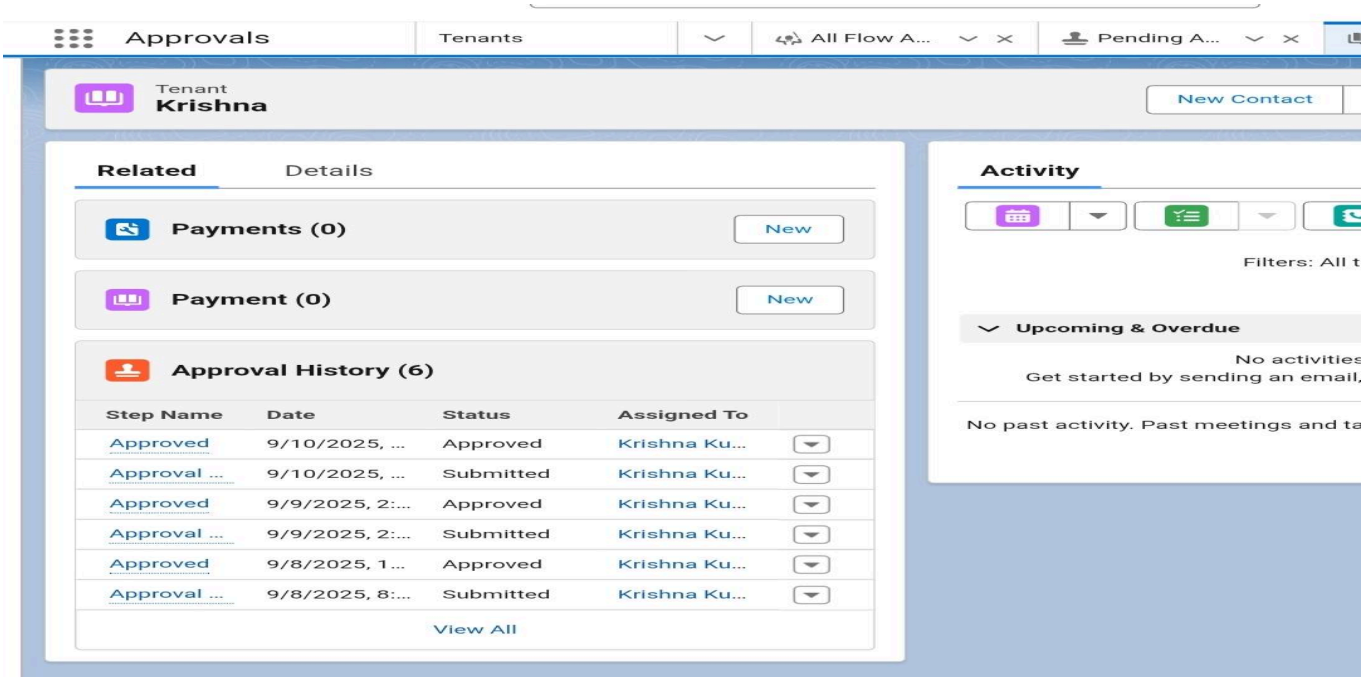





Search...
Lease Management
Tenant was submitted for approval.
Tenant
Krishna
New Contact
Edit
New Opportunity
Related
Details
Tenant Name
Krishna
Owner
Krishna Kumar R
Email
krishnakumarrm3058@gmail.com
Phone
(730) 632-6064
status
Stay
property
Hyd
Created By
Krishna Kumar R, 9/2/2025, 5:19 AM
Last Modified By
Krishna Kumar R, 9/10/2025, 8:22 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.


Search...
Notifications
Mark all as read
Lease Management
Home
properties
Tenant
Krishna
Related
Details
Tenant Name
Krishna
Owner
Krishna Kumar R
Email
krishnakumarrm3058@gmail.com
Phone
(730) 632-6064
status
Stay
property
Hyd
Created By
Krishna Kumar R, 9/2/2025, 5:19 AM
Last Modified By
Krishna Kumar R, 9/10/2025, 8:22 AM
Krishna Kumar R is requesting approval for tenant
Tenant Name: Krishna • Owner: Krishna Kumar R
a few seconds ago
Approval request for the tenant is approved
Krishna
Sep 9, 2025, 3:19 PM
Approval request for the tenant is approved
Krishna
Sep 9, 2025, 11:51 AM
New Guidance Center learning resource available
Define Your Sales Process
Learn how to guide reps through the sales process.
Sep 2, 2025, 5:41 PM
New Guidance Center learning resource available
Set Up Accounts & Contacts
Start storing information about your customers with accounts and contacts.

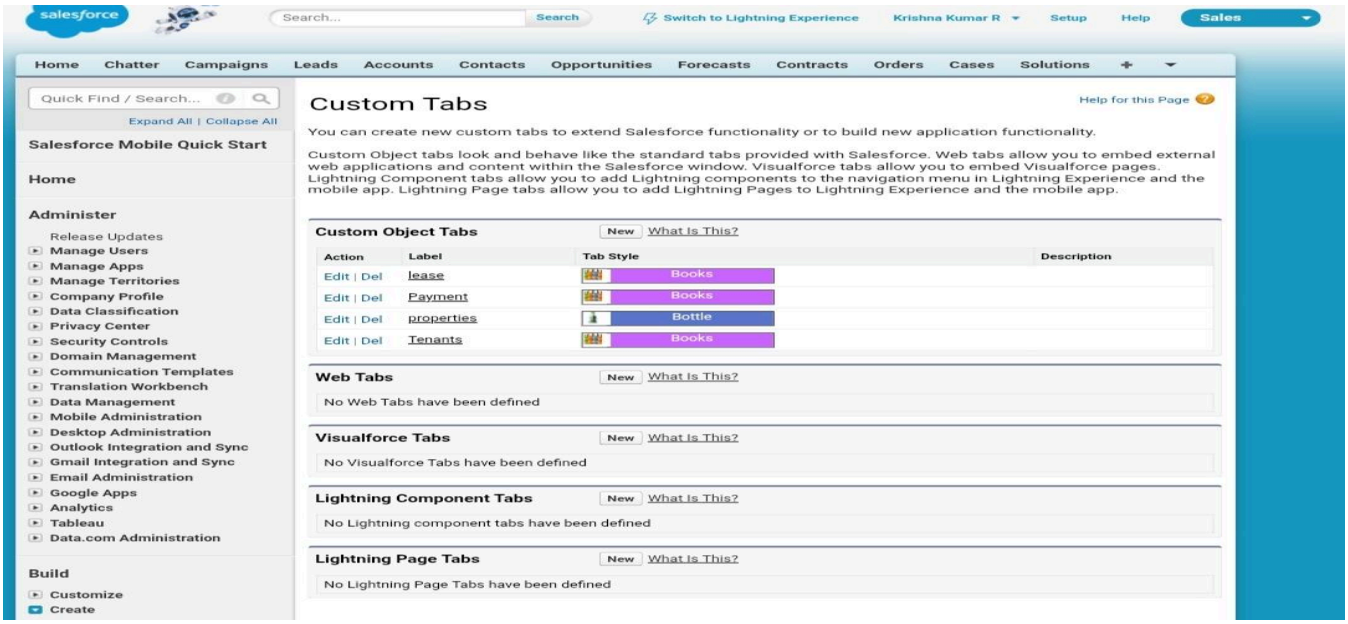

Search...
Lease Management
Home
properties
Payment
Tenants
lease
* Tenant__c
Approval Request
Tenant Approval
Pending
Approve
Reject
Reassign
Submitter
Krishna Kumar R
Date Submitted
Sep 10, 2025
Actual Approver
Krishna Kumar R
Assigned To
Krishna Kumar R
Details
Approval Details
Tenant Name
Krishna
Owner
Krishna Kumar R
Submitter Comments
Krishna Kumar R
Leaving
Sep 10, 2025, 9:03:29 AM

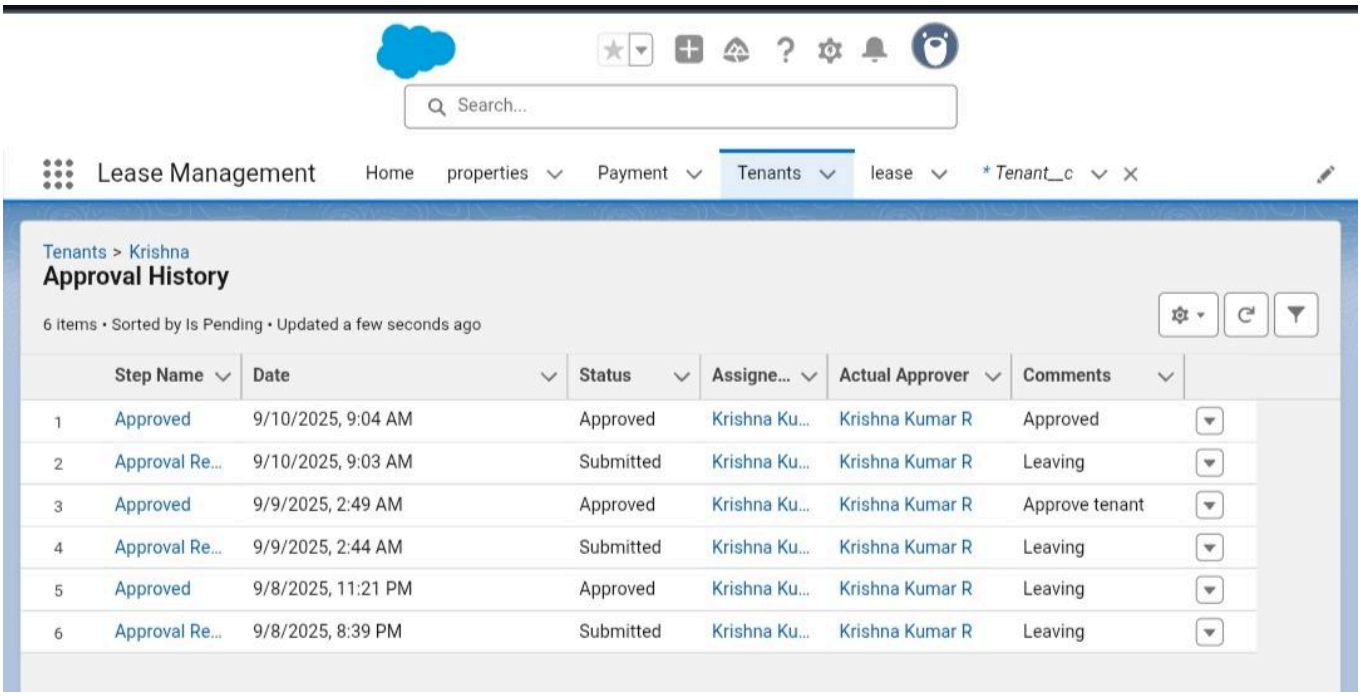

Approvals
Tenants
All Flow A...
Pending A...
Tenant
Krishna
New Contact
Related
Details
Payments (0)
New
Payment (0)
New
Approval History (6)
Step Name
Date
Status
Assigned To
Approved
9/10/2025, ...
Approved
Krishna Ku...
Approval ...
9/10/2025, ...
Submitted
Krishna Ku...
Approved
9/9/2025, 2:...
Approved
Krishna Ku...
Approval ...
9/9/2025, 2:...
Submitted
Krishna Ku...
Approved
9/8/2025, 1...
Approved
Krishna Ku...
Approval ...
9/8/2025, 8:...
Submitted
Krishna Ku...
View All
Activity
Filters: All t
Upcoming & Overdue
No activities
Get started by sending an email,
No past activity. Past meetings and ta

RESULTS

Output Screenshots

Tabs for Property, Tenant, Lease, Payment





ADVANTAGES & DISADVANTAGES

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Advantages of Lease Management System

Centralized Data Management – All tenant, property, and lease records are stored in one place, reducing duplication and errors.

Automation of Processes – Workflows, approvals, and reminders minimize manual intervention, saving time and effort.

Improved Accuracy – Automated tracking of payments and contracts reduces chances of mistakes and missed deadlines.

Better Communication – Email alerts and notifications keep tenants and property managers informed in real time.

Enhanced Compliance – Role-based access ensures data security and adherence to legal requirements.

Data Analytics & Reporting – Dashboards provide insights into occupancy rates, payment status, and lease renewals.

Scalability – Can be extended to manage multiple properties and tenants as the business grows.

Tenant Satisfaction – Timely updates and smoother processes improve the overall tenant experience.

Disadvantages of Lease Management System

High Initial Setup Cost – Implementing Salesforce and customizing it for lease management may require investment.

Training Requirement – Staff need to be trained to use Salesforce effectively, which can take time

Dependency on Internet – Being a cloud-based solution, it requires stable internet connectivity.

Customization Complexity – Advanced customizations may need skilled Salesforce developers, adding to costs.

Data Migration Challenges – Transferring existing lease and tenant records into the system can be time-consuming.

Subscription Costs – Ongoing Salesforce licensing fees may be expensive for smaller organizations

CONCLUSION

The Lease Management System streamlines leasing operations by centralizing tenant data, contracts, payments, and communication within Salesforce. It enhances accuracy, reduces manual effort, and ensures timely rent collection and contract renewals through automation. With features like Flows, Approval Processes, and Email Alerts, the system improves efficiency and communication, while dashboards provide real-time insights for decision-making. Overall, it boosts productivity, tenant satisfaction, and compliance, offering a scalable foundation for future growth.

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});

}

}

}