SHIVANI ENGINEERING COLLEGE

Department of Artificial Intelligence and Data Science (AIDS)

PROJECT TITLE:

LEASE MANAGEMENT SYSTEM

Submitted by (Team Members):

1. Sivaranjani C (Team Leader)
2. Nirmala S
3. Nivetha N
4. Sarathi I

Guided by:

Mr. Jayashree K

Platform: Salesforce Developer

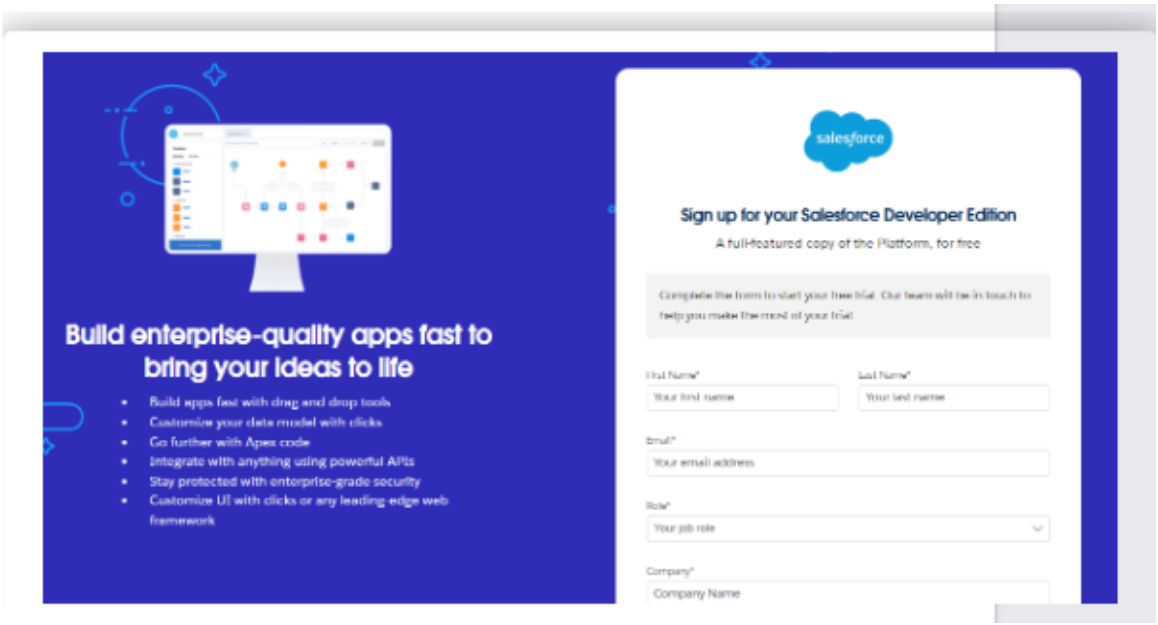
Date of Submission: 01/11/2025

bProject Description

A lease management project involves creating a system or application to efficiently handle the processes related to leasing real estate properties, equipment, or other assets.
The goal is to streamline and automate various tasks associated with lease agreements, ensuring accurate record-keeping, compliance with regulations, and effective communication between parties involved.

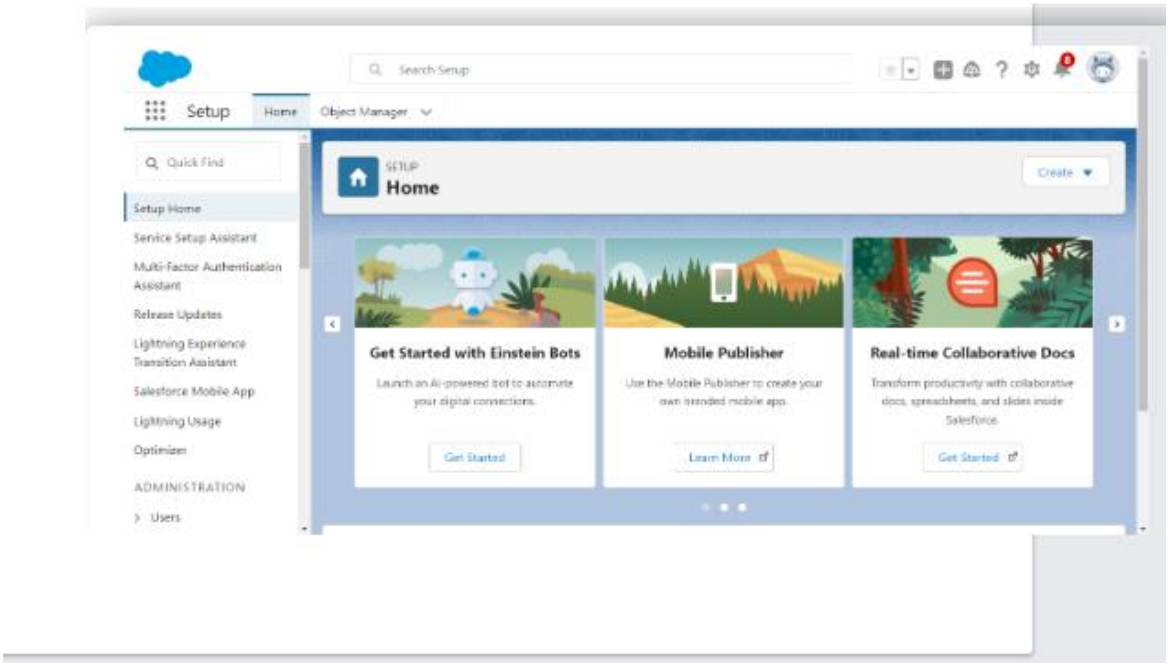
Creating Developer Account

In this step, a new Salesforce Developer Account is created using a valid email address. This account provides access to the development environment for project setup.



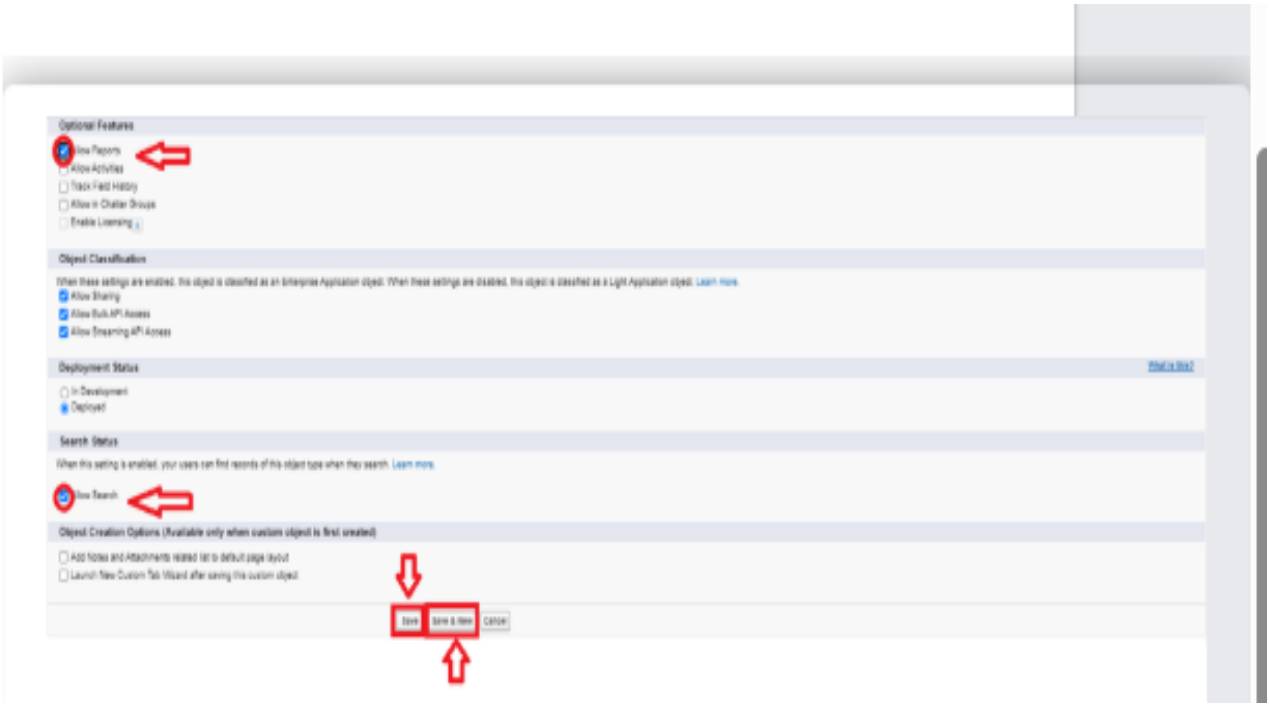
Account Activation

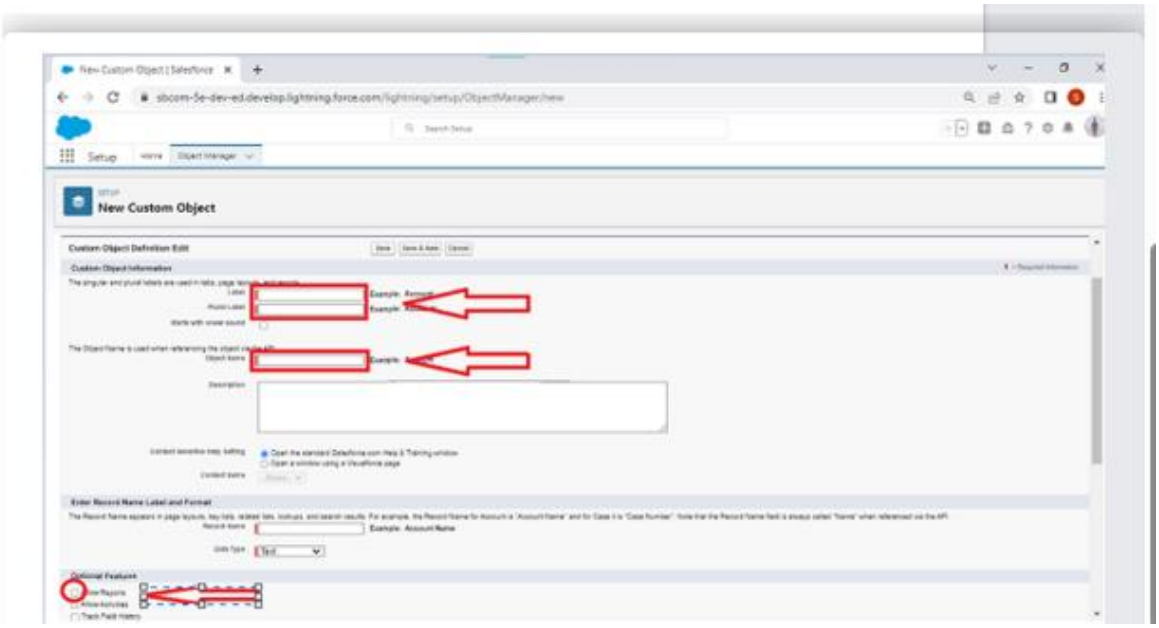
Activate the Salesforce Developer Account by verifying the registered email and completing the activation process.



Create Property Object

Create a new custom object named “Property” to store details related to lease properties such as property name, type, and location.





Create Tenant Object

Create a “Tenant” custom object to manage tenant information including name, contact, and lease duration.

Create Payment Object

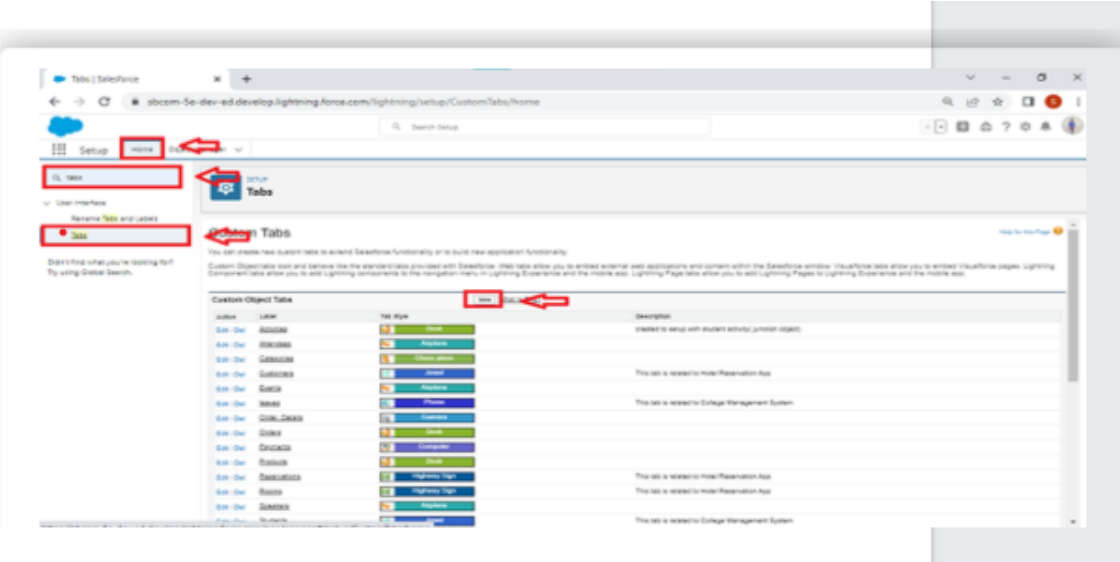
Design a “Payment” object to handle rent payments, due dates, and payment status tracking.

Create Lease Object

Establish a “Lease” object to connect Property and Tenant objects and manage lease terms, start and end dates.

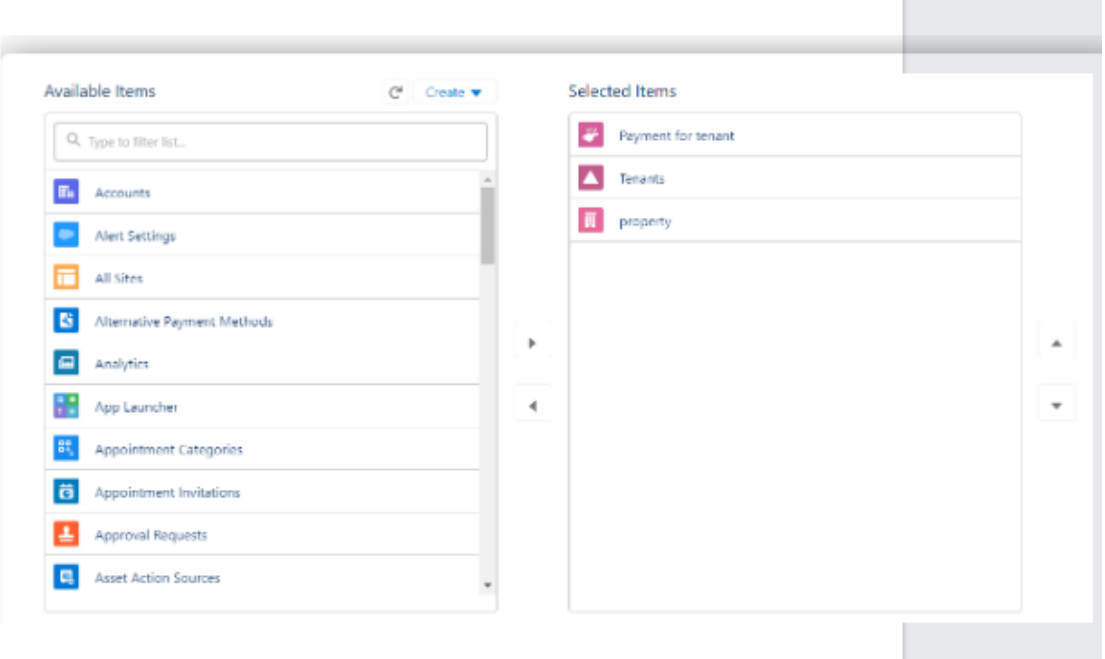
Creating a Custom Tab

Add custom tabs for each created object to make them accessible in the Salesforce app navigation bar.



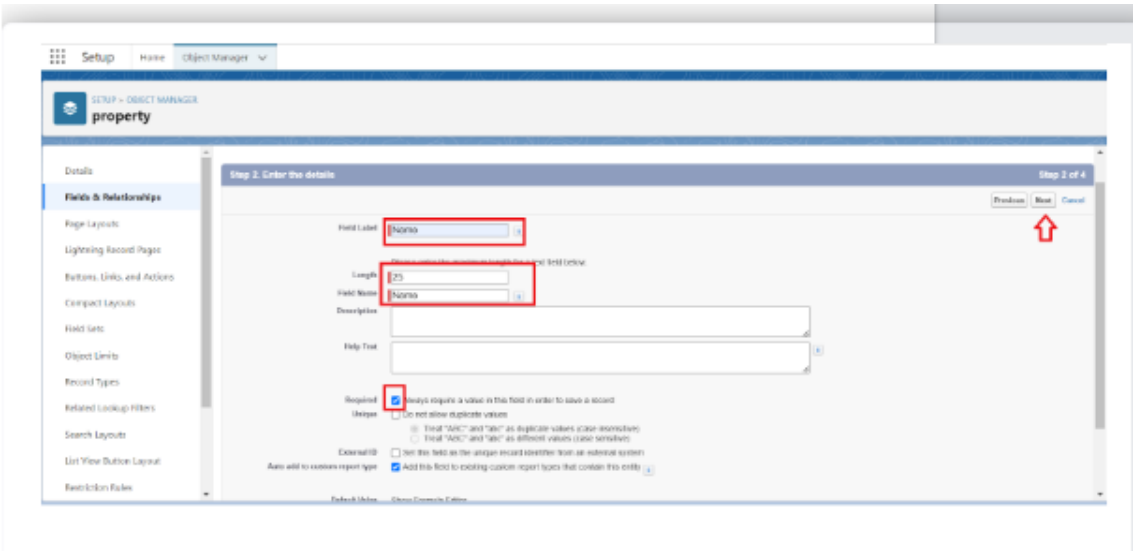
Lightning App Creation

Create a custom Lightning App that includes all the custom objects and tabs for better project navigation. **Fields Creation**



Fields Creation

In Salesforce, **Fields** are used to store different types of data inside each **Object**.Each object in the **Lease Management System** has specific fields that help to manage properties, tenants, leases, and payments efficiently.



Email Template

An **Email Template** in Salesforce is a pre-designed message format that allows users to send standardized emails automatically or manually.
It saves time, ensures consistency, and helps communicate important information like **lease confirmation**, **payment receipts**, and **reminders** to tenants

1. Tenant Leaving Notification

Sends an alert to the admin when a tenant requests to vacate the property.

2. Lease Approved

Notifies the tenant that their lease request has been approved successfully.

3. Lease Rejection Email

Informs the tenant that their lease application has been rejected due to missing details or eligibility.

4 . Monthly Payment Reminder

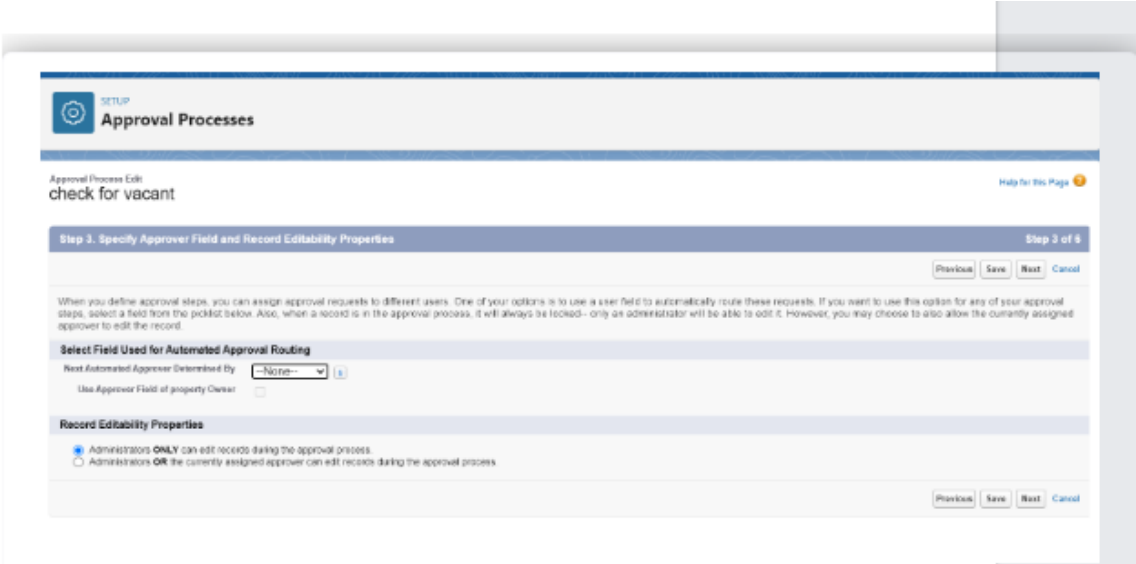
Automatically reminds the tenant each month about the upcoming rent payment due date.

5. Successful Payment Confirmation

Sends a thank-you message and confirmation once the tenant's rent payment is received successfully.

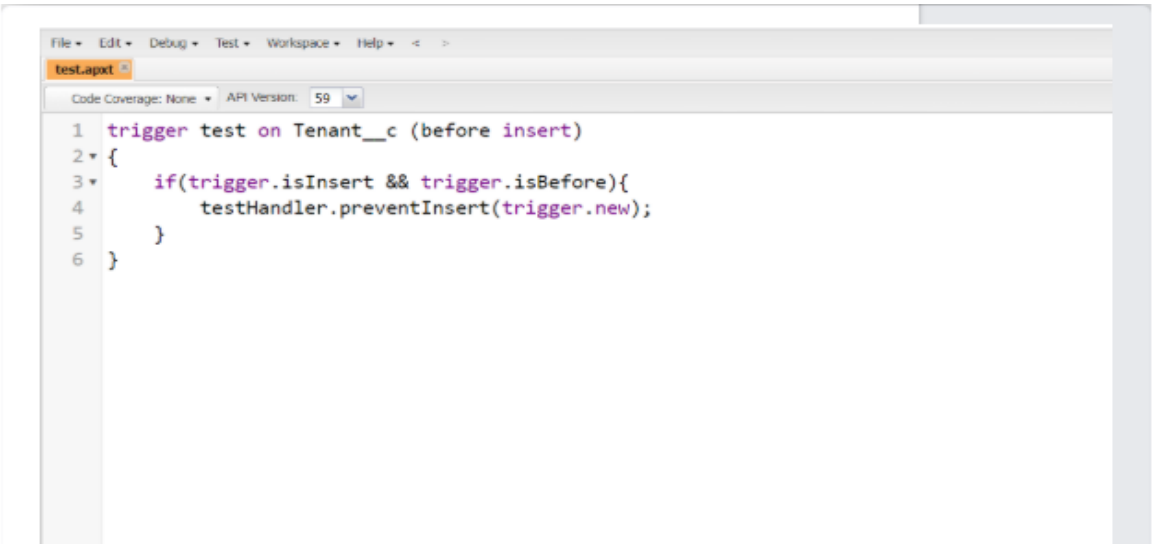
Approval Process

An **Approval Process** automates how records are approved in Salesforce.In this project, an approval process is created for the **Lease or Payment** object to ensure that certain records (for example, rent amount > ₹50,000) need admin or manager approval before final confirmation.



Apex Trigger

An **Apex Trigger** is used to perform automatic actions when a record is created or updated.In this project, a trigger is written on the **Payment** object to automati cally update the **Lease Status** once the payment is completed.

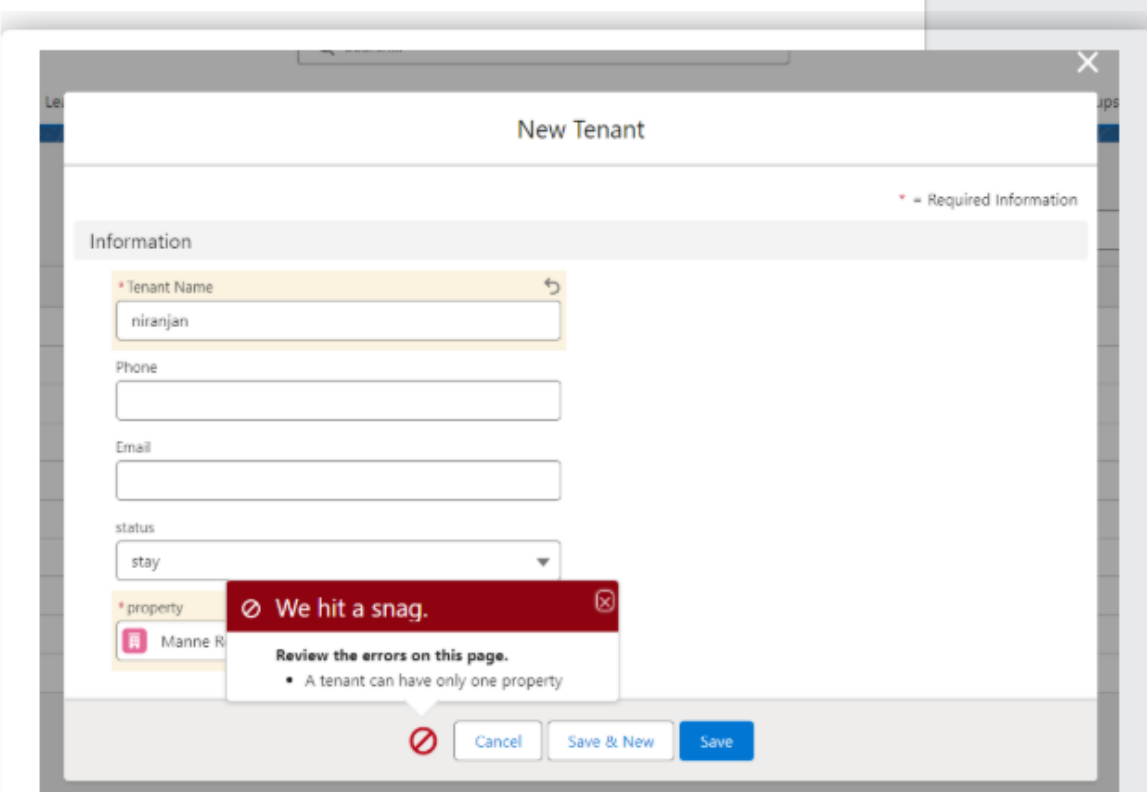


Apex logic:

:

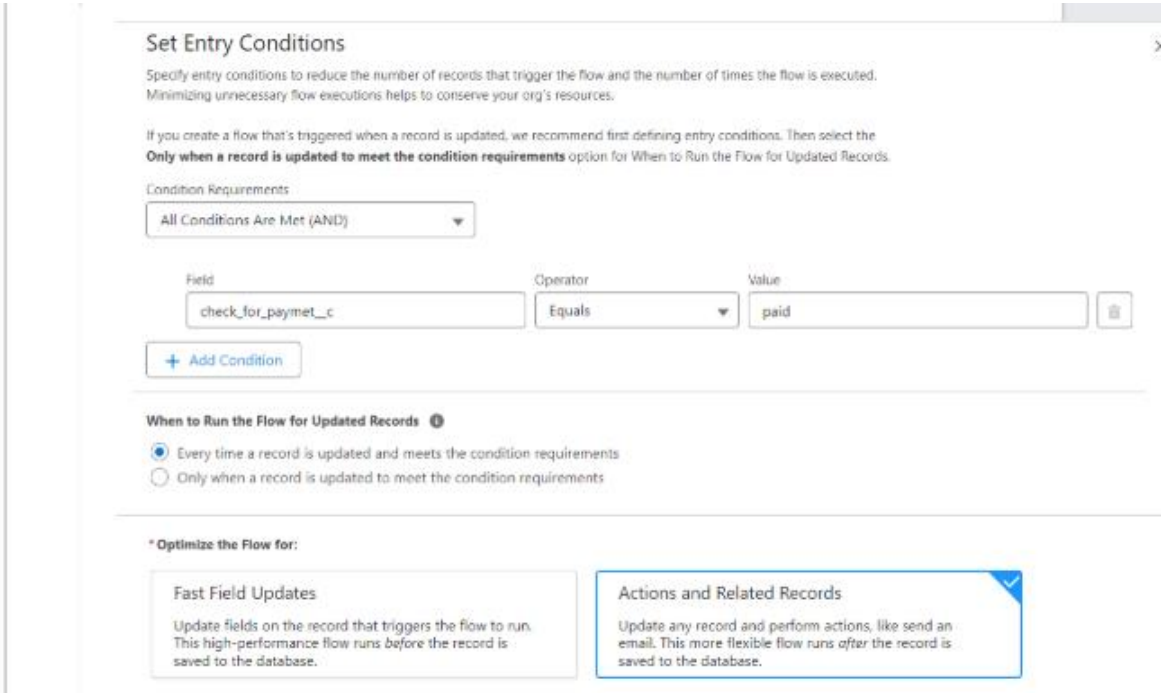
```
 public class testHandler {
  public static void preventInsert(List<Tenant__c> newlist) {
      Set<Id> existingPropertyIds = new Set<Id>();
      for (Tenant__c existingTenant : [SELECT Id, Property__c FROM Tenant__c WHERE
Property__c != null]) {
          existingPropertyIds.add(existingTenant.Property__c);
      }

      for (Tenant__c newTenant : newlist) {

          if (newTenant.Property__c != null &&
existingPropertyIds.contains(newTenant.Property__c)) {
              newTenant.addError('A tenant can have only one property');
          }
      }
  }
}
```

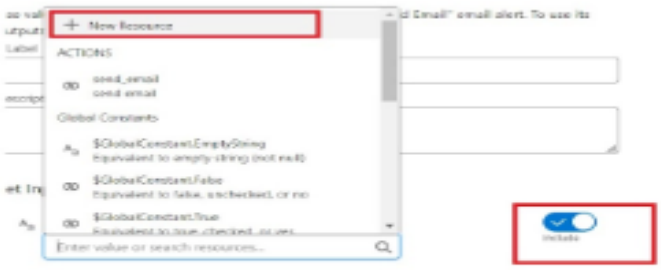
Testing the Trigger:



Flow Creation

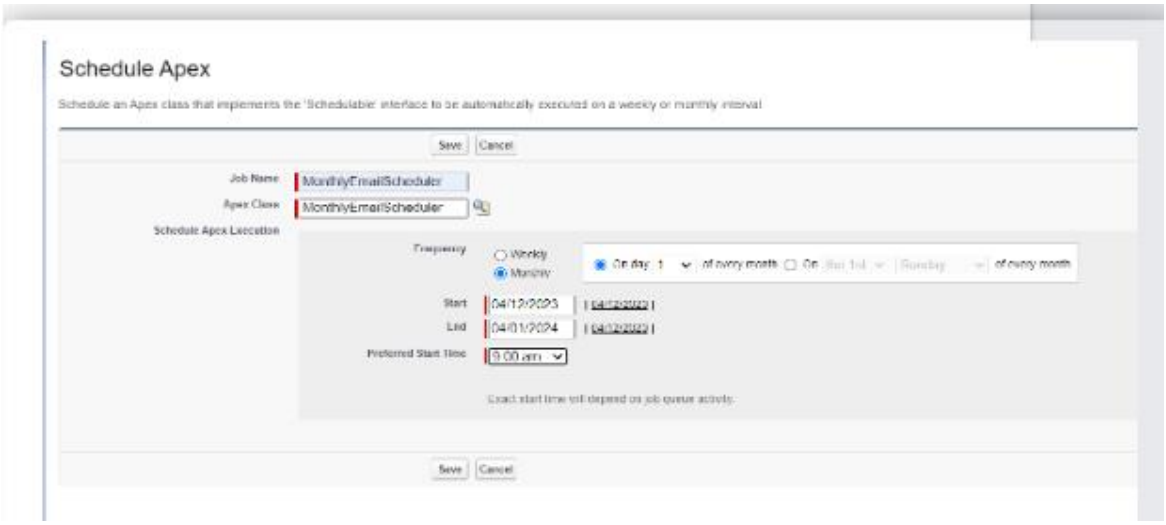
A **Flow** is created to automate record updates or send email alerts without coding.
In this project, a **Record-Triggered Flow** is designed on the **Tenant** or **Payment** object to send an automatic email when a new payment is recorded.

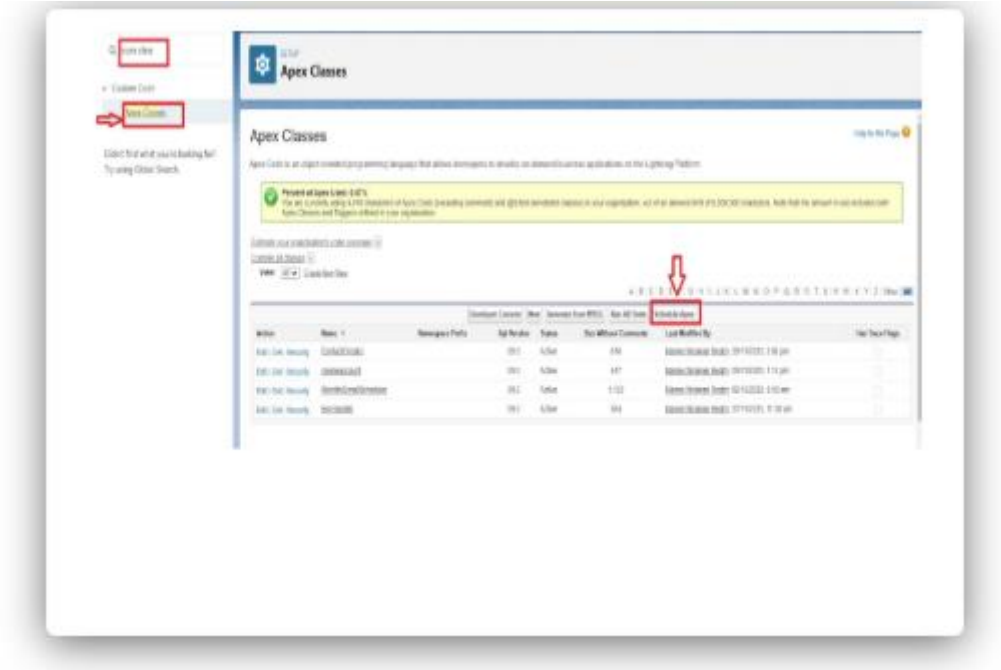




Schedule Apex Class

A **Scheduled Apex Class** is used to run Apex code automatically at a specific time (daily, weekly, monthly).
For example — sending payment reminders, lease expiry alerts, or auto-updating records every morning.





Conclusion

The *Lease Management System* project was successfully created using Salesforce. This project demonstrates how different Salesforce features such as **Objects, Tabs, Validation Rules, Email Templates, Approval Process, Flows, and Apex Triggers** can be used to automate and simplify lease management tasks. The system ensures efficient handling of tenant records, payments, and lease approvals with minimal manual work. Overall, this project improves productivity, reduces human error, and provides a digital solution for real-time property management.