Lease Management

User Story:

The objective of the Lease Management System is to streamline the process of managing property leases, ensuring efficient handling of lease agreements, renewals, and terminations. It aims to provide a centralized platform for tracking tenant information, payment schedules, and property details. The system enhances transparency by offering real-time updates and automated reminders for key lease events. Additionally, it reduces manual errors and administrative overhead, ensuring compliance with legal and financial obligations. Ultimately, the project aims to improve productivity, tenant satisfaction, and overall lease lifecycle management.

Project Overview:

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.

Project Flow:

Milestone 1: Salesforce Developer Account Creation

Milestone 2: Object

Milestone 3: Tabs

Milestone 4: The Lightning App

Milestone 5: Fields

Milestone 6: Validation Rule

Milestone 7: Email Template

Milestone 8: Approval Processes

Milestone 9: Apex Trigger

Milestone 10: Flows

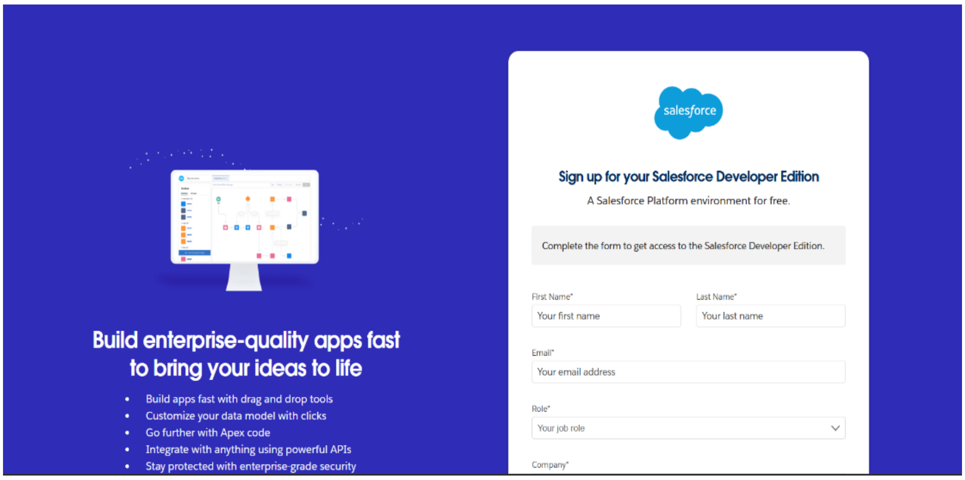
Milestone 11: Schedule class

Milestone 1: Salesforce Developer Account Creation:

Activity 1: Creating Developer Account

Creating a developer org in salesforce.

1. Go to https://developer.salesforce.com/signup
2. On the sign up form, enter the following details:

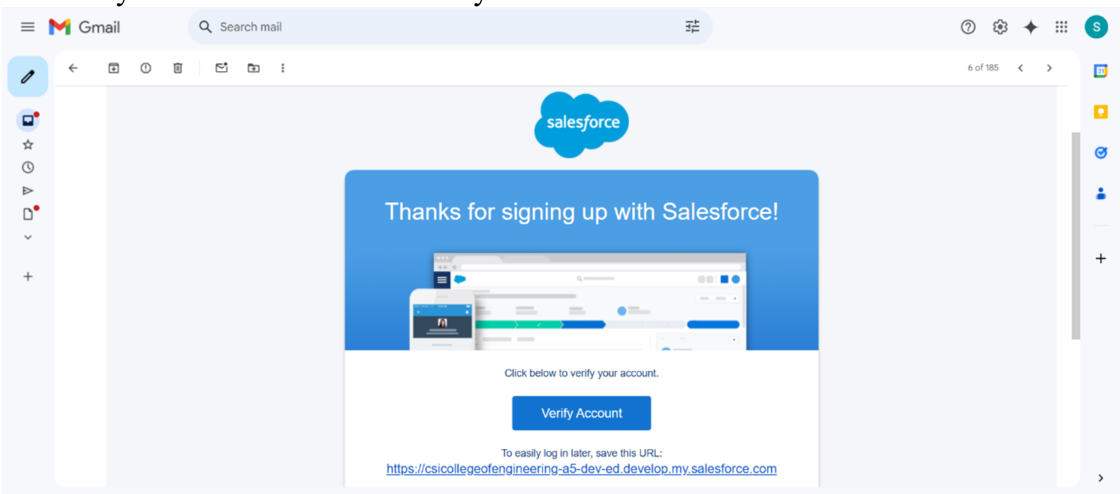


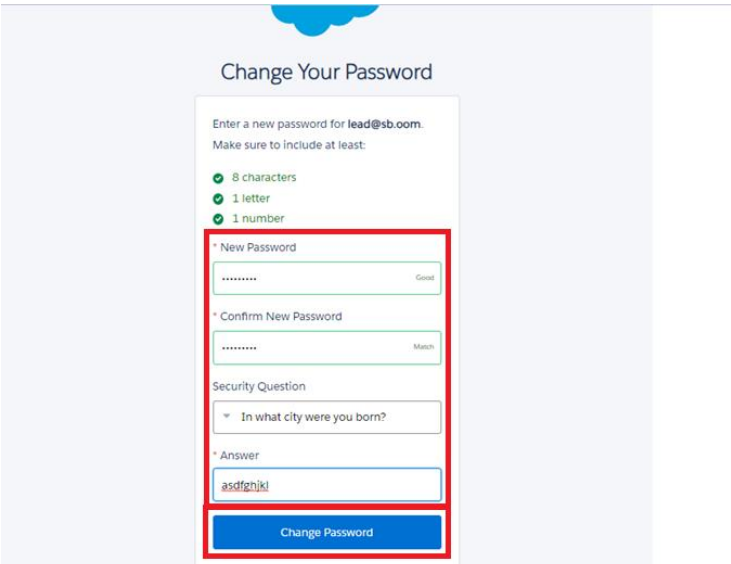
1. First name & Last name
2. Email
3. Role: Developer
4. Company: College Name
5. Country: India
6. Postal Code: Pin Code
7. Username: should be a combination of your name and company

This need not be an actual email id, you can give anything in the format: username@organization.com
click on sign me up after filling these.

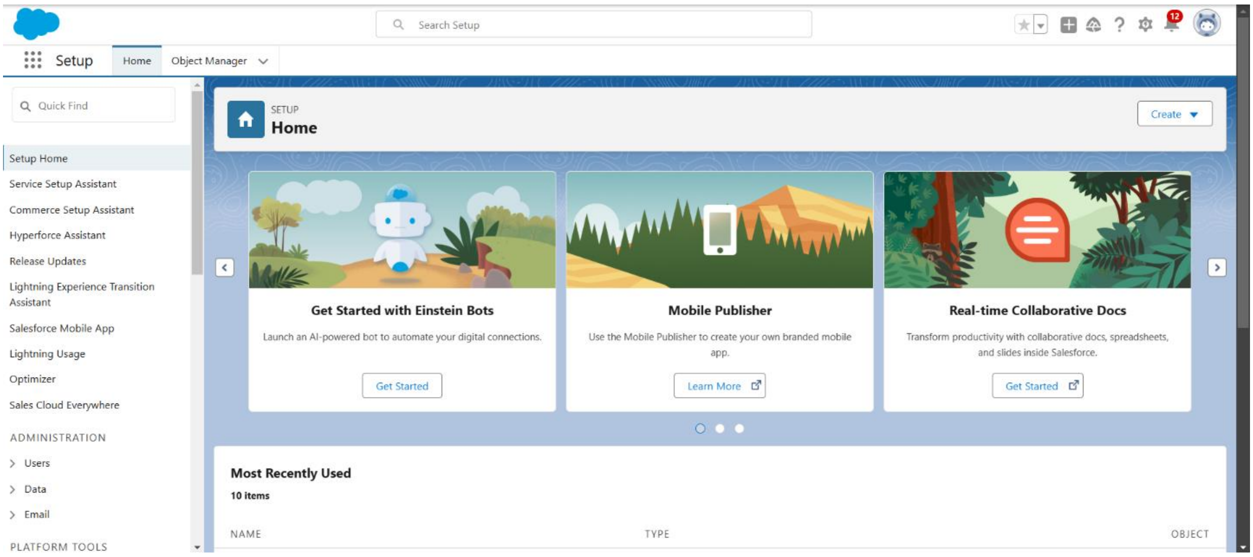
Activity 2: Account Activation

1. Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10 mins.



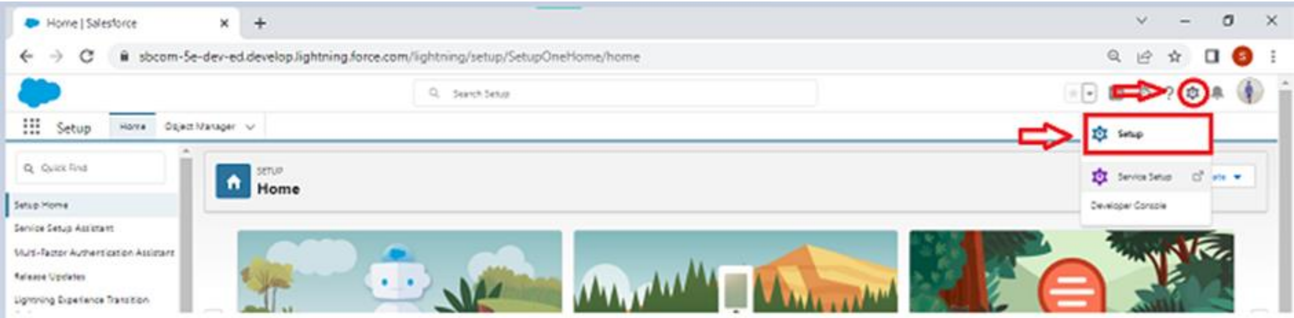


1. Click on Verify Account
2. Give a password and answer a security question and click on change password.
3. Give a password and answer a security question and click on change password.
4.Then you will redirect to your salesforce setup page.



Milestone 2: Object

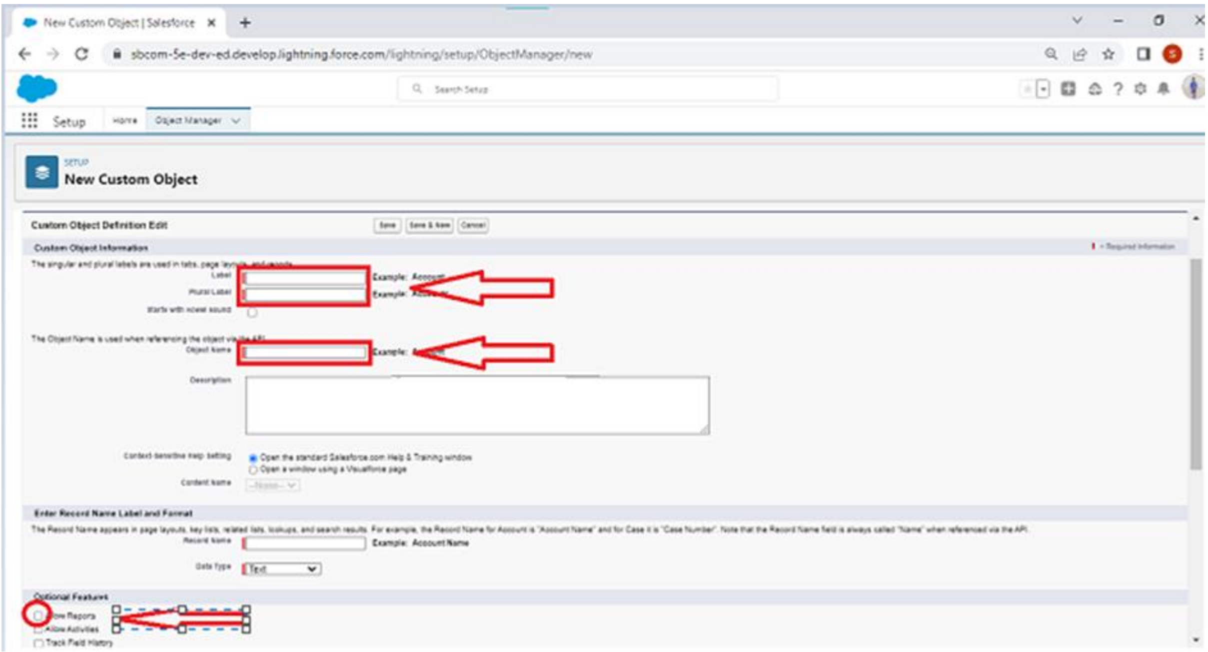
To navigate to setup page:

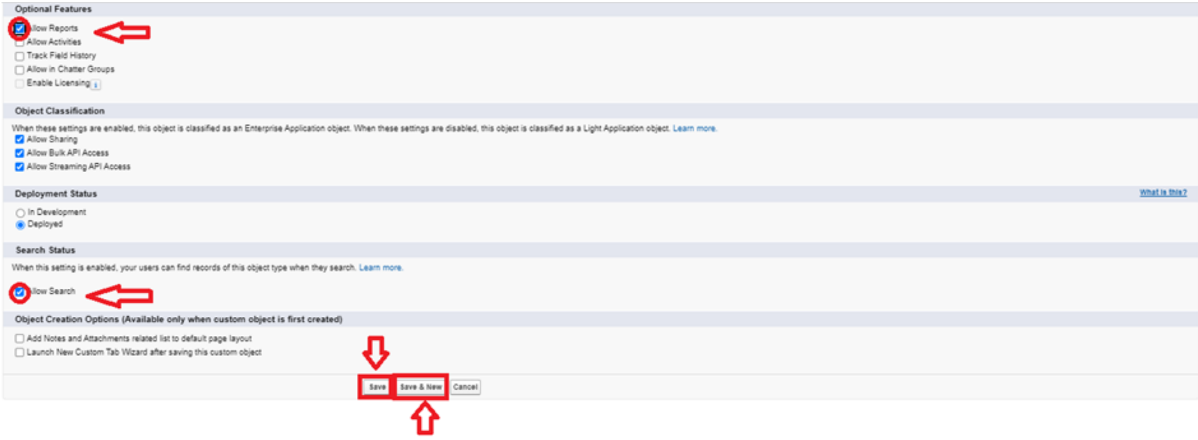


To create an object:

1. From the setup page→Click Object Manager→Click Create→Click Custom Object.

2. On custom object defining page:
3. Enter the label name, plural label name, click on Allow reports, Allow search.





4. Click on Save

Activity 1: Create Property Object

To create an object:

From the setup page→Click on Object Manager→Click on Create→Click on Custom Object.

1. Enter the label name→property
2. Plural label name→property
3. Enter Record Name Label and Format
4. Record Name→property Name
5. Data Type→Text
6. Click on Allow reports and Track Field History, Allow Activities
7. Allow search→Save.

Activity 2: Create Tenant Object

To create an object:

From the setup page→Click on Object Manager→Click on Create→Click on Custom Object.

1. Enter the label name→Tenant
2. Plural label name→Tenants
3. Enter Record Name Label and Format
4. Record Name→Tenant Name
5. Data Type→Text
6. Click on Allow reports and Track Field History, Allow Activities
7. Allow search→Save.

Activity 3: Create Payment Object

To create an object:

From the setup page→Click on Object Manager→Click on Create→Click on Custom Object.

1. Enter the label name→Payment for tenant
2. Plural label name→Payment
3. Enter Record Name Label and Format
4. Record Name→Payment Name
5. Data Type→Text
6. Click on Allow reports and Track Field History, Allow Activities
7. Allow search→Save.

Activity 4: Create Lease Object

To create an object:

From the setup page→Click on Object Manager→Click on Create→Click on Custom Object.

1. Enter the label name→lease
2. Plural label name→lease
3. Enter Record Name Label and Format
4. Record Name→lease Name
5. Data Type→Text
6. Click on Allow reports and Track Field History, Allow Activities
7. Allow search→Save.

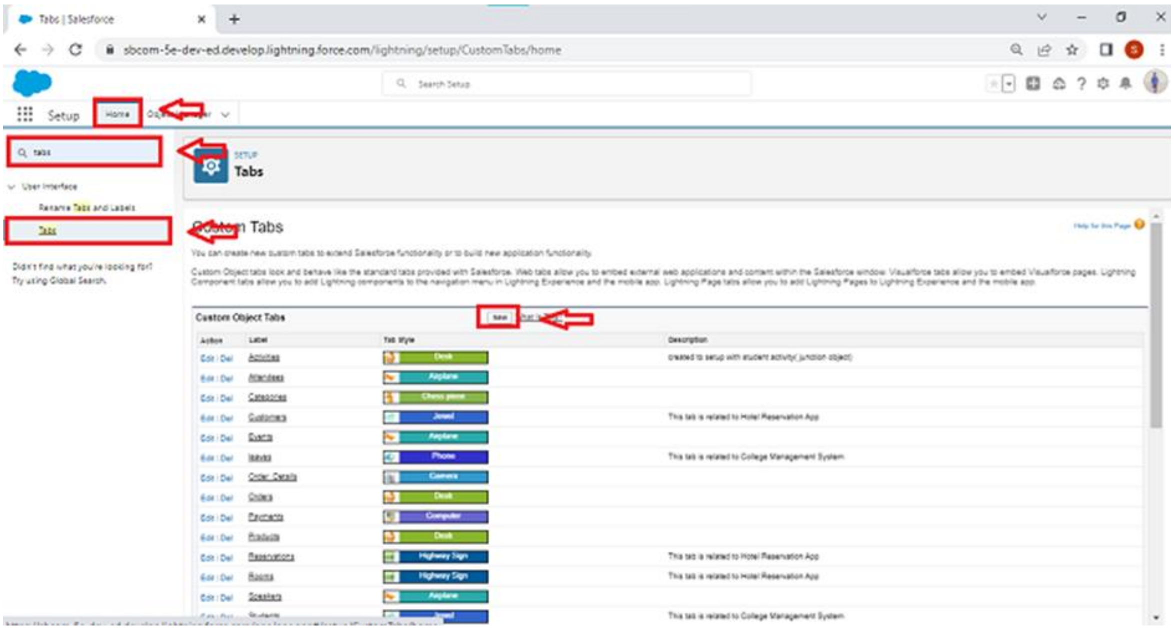
Milestone 3: Tabs

What is tab: A tab is like a user interface that is used to build records for object and to view the records in the object.

Activity 1: Creating a Custom Tab

To create a Tab: (Property)

1. Go to setup page→type Tabs in Quick Find bar→click on tabs→New (under custom object tab)



2. Select Object (property)→Select the tab style→Next (Add to profiles page) keep it as default→Next (Add to Custom App) uncheck the include tab.
3. Make sure that the Append tab to users' existing personal customizations is checked.
4. Click save

Activity 2: Creating Remaining Tabs

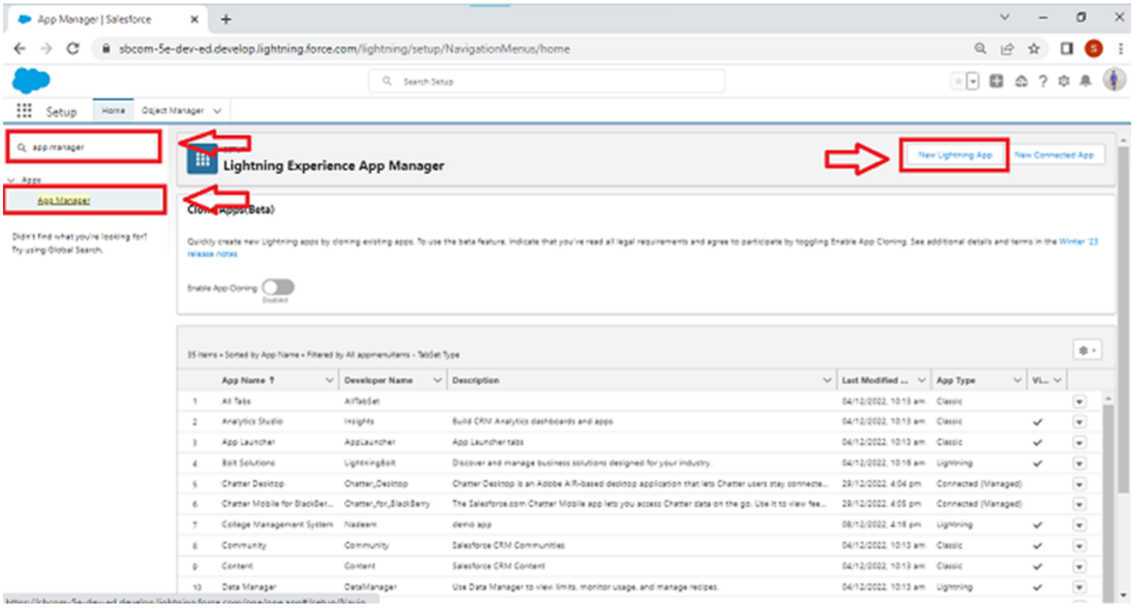
1. Now create the Tabs for the remaining Objects, they are “Payment for tenant, lease, Tenant”.
2. Follow the same steps as mentioned in Activity -1.

<u>Milestone 4: The Lightning App</u>

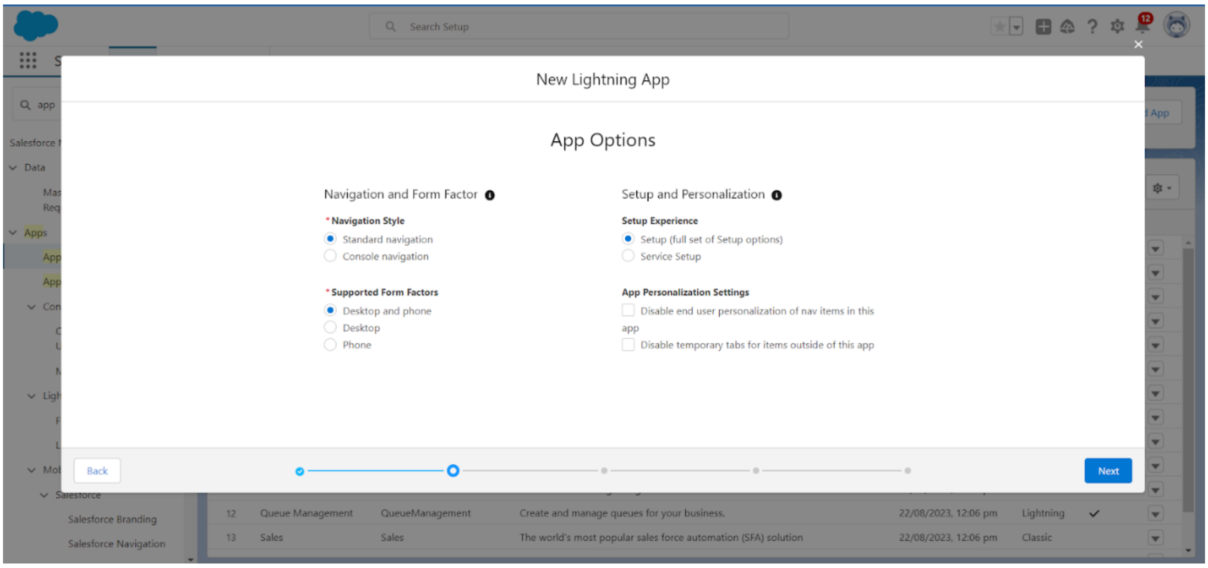
Activity 1: Create A Lightning App

To create a lightning app page:

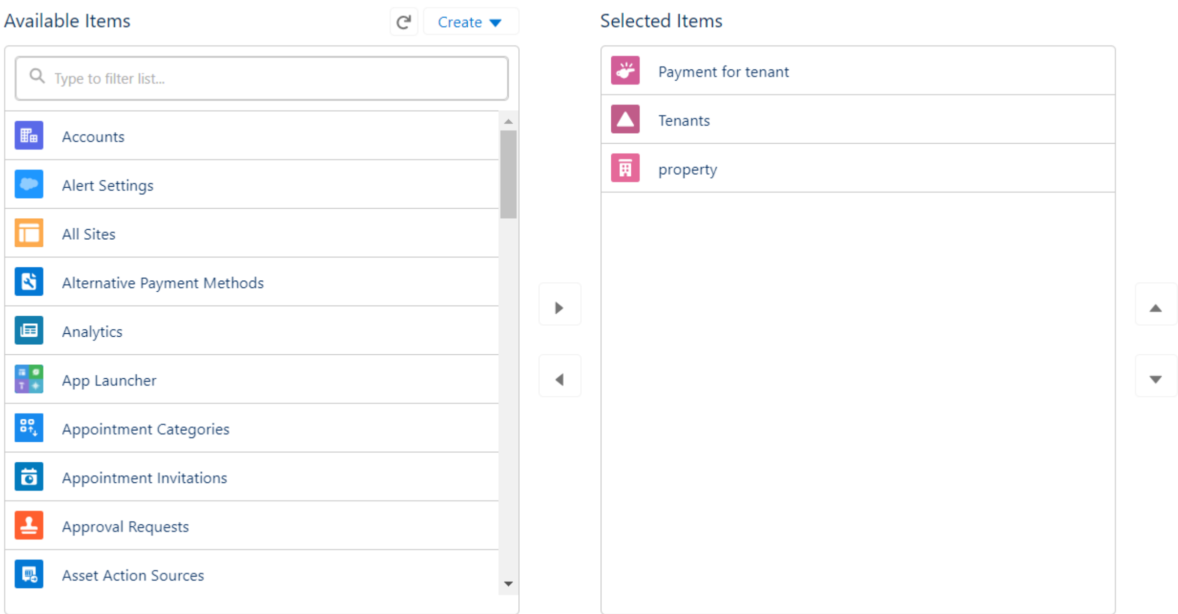
1. Go to setup page→search “app manager” in quick find→select “app manager” →click on New lightning App.



2. Fill the app name in app details and branding as follow
- App Name: Lease Management
- Developer Name: This will auto populated
- Image: optional (if you want to give any image you can otherwise not mandatory) Primary colour hex value: keep this default.
3. Then click Next→(App option page) Set Navigation Style as Standard Navigation→ Next.



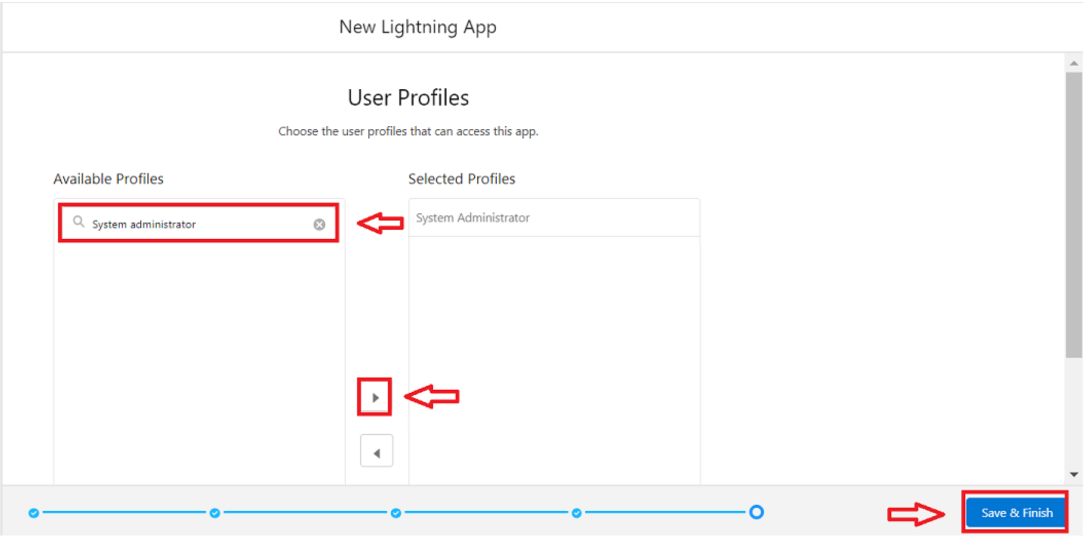
4. (Utility Items) keep it as default→Next
5. To Add Navigation Items:



Search for the item in the (Payment for tenant, Tenants, property, lease) from the search bar and move it using the arrow button? Next? Next.

6. To Add User Profiles:

search profiles (System administrator) in the search bar→click on the arrow button→save & finish.

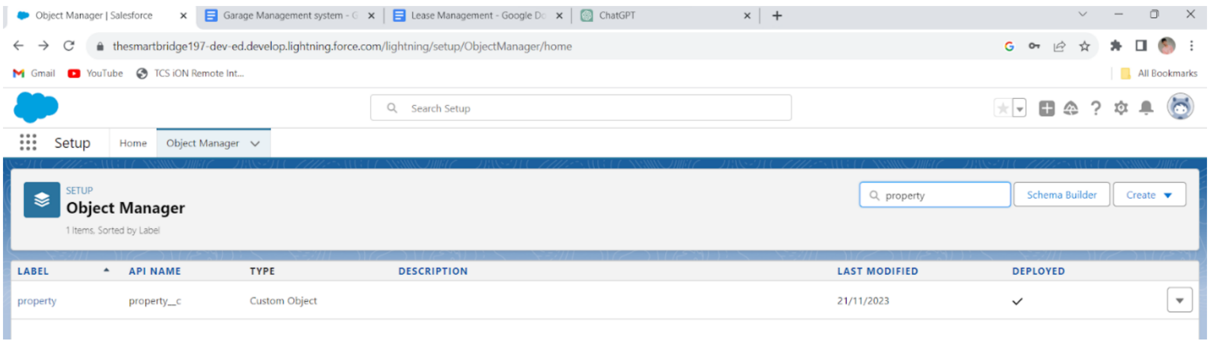


Milestone 5: Fields

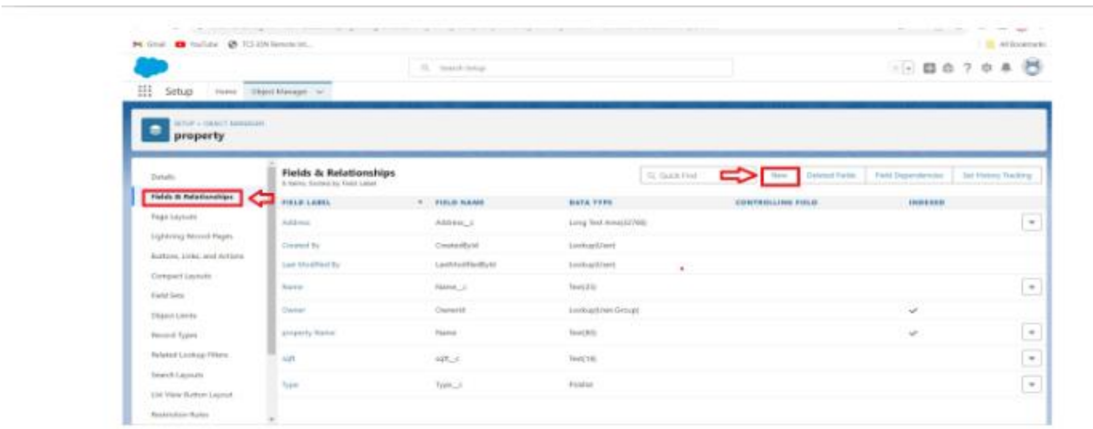
Activity 1: Creation of Fields for the Property Object

To create fields in an object:

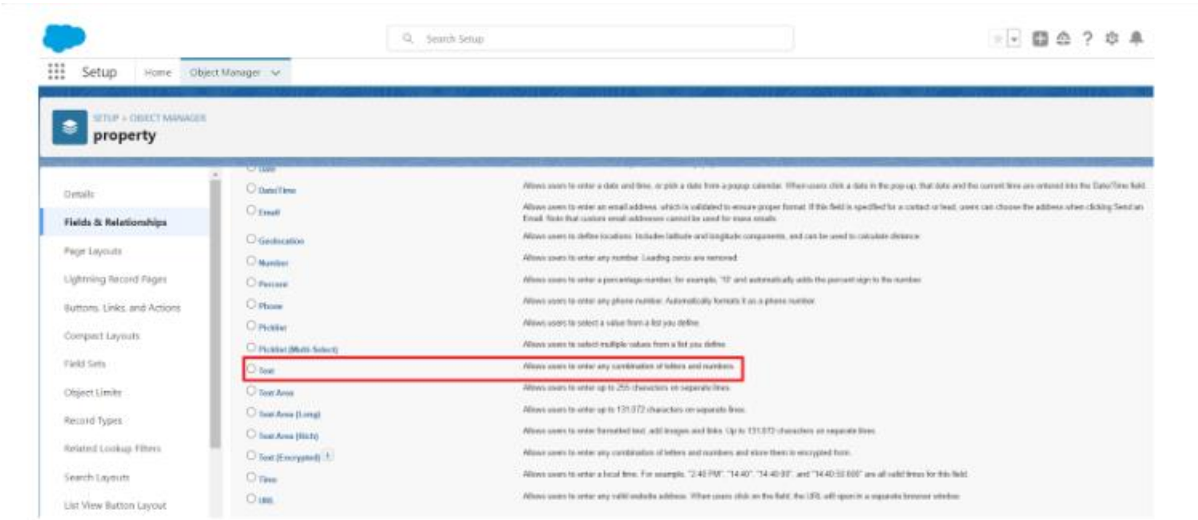
1. Go to setup→click on Object Manager→type object name(property) in search bar→click on the object.



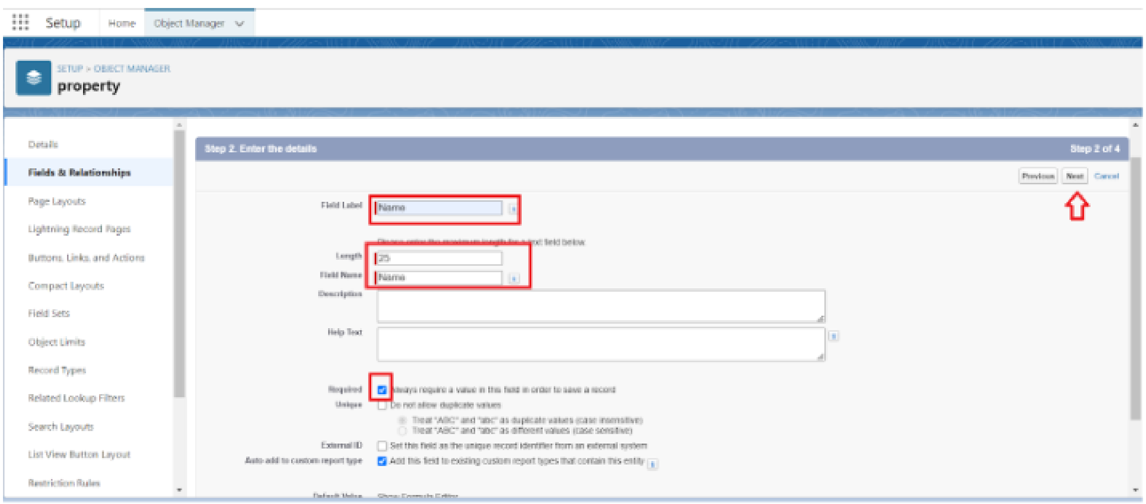
2. Now click on “Fields & Relationships”→New



3. Select Data Type as a “Text”



4. Click on Next



5. Fill the Above as following:
6. Field Label: Name
7. Field Name: gets auto generated
8. Length: 25
9. Required: check box
10. Click on Next→Next→Save and new.

To create another fields in an object:

1. Go to setup→click on Object Manager→type object name(property) in search bar→click on the object.
2. Now click on “Fields & Relationships”→New
3. Select Data type as a “Long Text” and Click on Next
4. Fill the Above as following:

- Field Label: Address
- Field Name: gets auto generated
- Click on Next→Next→Save and new.

To create another fields in an object:

1. Go to setup→click on object manager→type object name (property) in search bar→ click on the object.
2. Now click on “Fields & Relationships”→New
3. Select Data type as a “Picklist” and Click on Next
4. Fill the Above as following:
    - Field Label: Type
    - Field Name: gets auto generated
    - Enter values, with each value separated by a new line
    - Enter these values:
    - 1BHK
    - 2BHK
    - 3BHK
    - Click on Next→Next→Save and New

To create another fields in an object:

1. Go to setup→click on object manager→type object name (Property) in search bar→click on the object
2. Now click on “Fields & Relationships”→New
3. Select Data type as a “Text” and Click on Next
4. Fill the above as following:
    - Field Label: sfqt
    - Field Name: gets auto generated
    - Length: 18
5. Click on Next→Next→Save

Activity 2: Creation of Fields for the Tenant Object

1. Go to setup→click on Object Manager→type object name (Tenant) in search bar→click on the object.
2. Now click on “Fields & Relationships”→New
3. Select Data type as a “Email” and Click on Next
4. Fill the Above as following:
    - Field Label: Email
    - Field Name: gets auto generated
    - Click on required check box
5. Click on Next→Next→Save and new.

To create another fields in an object:

1. Go to setup→click on Object Manager→type object name (Tenant) in search bar→click on the object.
2. Now click on “Fields & Relationships”→New
3. Select Data type as a “phone” and Click on Next
4. Fill the Above as following:
   - Field Label: Phone
   - Field Name: gets auto generated
   - Click on Next→Next→Save and new.

To create another fields in an object:

1. Go to setup→click on object manager→type object name (Tenant) in search bar→click on the object.
2. Now click on “Fields & Relationships”→New
3. Select Data type as a “Picklist” and click on Next
4. Fill the above as following:
5. Field Label: status
6. Field Name: gets auto generated
7. Enter values, with each value separated by a new line
8. Enter these values:
9. Stay
10. Leaving
11. Click on Next→Next→Save

Activity 3: Creation of Fields for the Lease Object

1. Go to setup→click on Object Manager→type object name (Lease) in search bar→click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data type as a “Date” and Click on Next
4. Fill the Above as following:
   - Field Label: start date
   - Field Name: gets auto generated
   - Click on Next→Next→Save and new.

To create another fields in an object:

1. Go to setup→click on Object Manager→type object name (Lease) in search bar→click on the object.
2. Now click on “Fields & Relationships”→New
3. Select Data type as a “Date” and Click on Next
4. Fill the Above as following:
   - Field Label: End date
   - Field Name: gets auto generated
   - Click on Next→Next→Save and new.

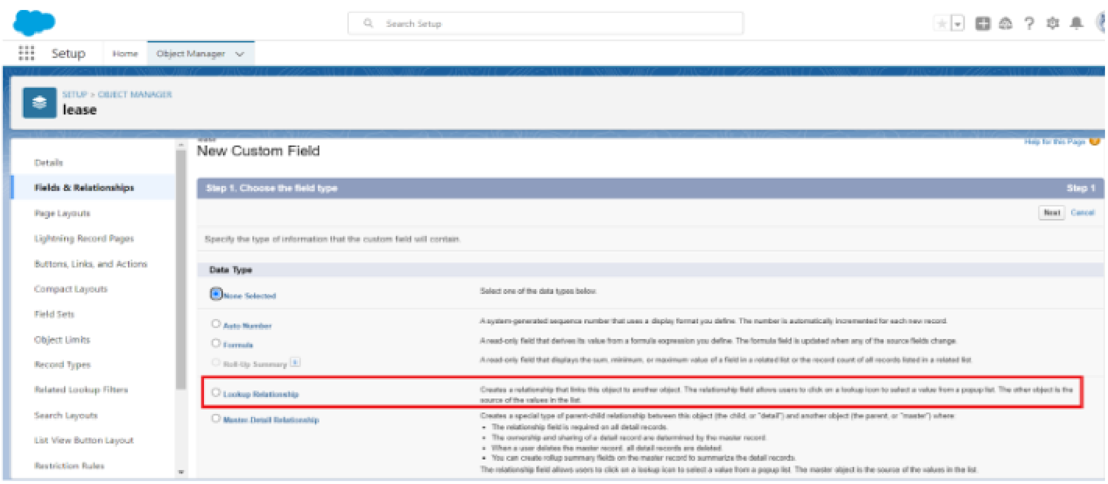
Activity 4: creation of Fields for the Payment for Tenant Object

1. Go to setup→click on Object Manager→type object name (Lease) in search bar→click on the object.
2. Now click on “Fields & Relationships”→New
3. Select Data type as a “Date” and Click on Next
4. Fill the Above as following:
   - Field Label: start date
   - Field Name: gets auto generated
   - Click on Next→Next→Save and new.

To create another fields in an object:
1. Go to setup→click on Object Manager→type object name (Lease) in search bar→click on the object.
2. Now click on “Fields & Relationships”→New
3. Select Data type as a “Date” and Click on Next
4. Fill the Above as following:
   - Field Label: End date
   - Field Name: gets auto generated
   - Click on Next→Next→Save and new.

Activity 5: Creation of Lookup Fields
Creation of Lookup Field on Lease Object:

1. Go to setup→click on Object Manager→type object name (Lease) in the search bar→click on the object.



2. Now click on “Fields & Relationships”→New
3. Select lookup relationship
4. Select the related object “property” and click next.
5. Field Name: property
6. Field label: Auto generated
7. Next >> Next >> Save.

Creation of Lookup Field on Payment Object:

1. Go to setup→click on Object Manager→type object name (payment) in the search bar→click on the object.
2. Now click on “Fields & Relationships”→New
3. Select lookup relationship
4. Select the related object “Tenant” and click next.
5. Field Name: Tenant
6. Field label: Auto generated
7. Next→Next→Save.

Creation of Lookup Field on Payment for tenant Object :

1. Go to setup→click on Object Manager→type object name (property) in the search bar→click on the object.
2. Now click on “Fields & Relationships”→New
3. Select master-detail relationship
4. Select the related object “property” and click next.
5. Field Name: property
6. Field label: Auto generated
7. Next→Next→Save.

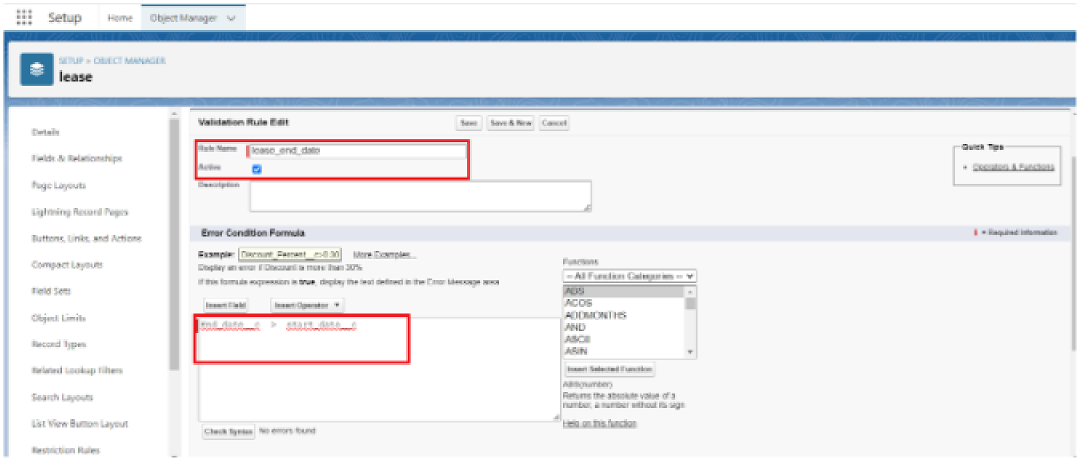
<u>Milestone 6: Validation Rule</u>

Activity 1: To create a Validation Rule to an Lease Object

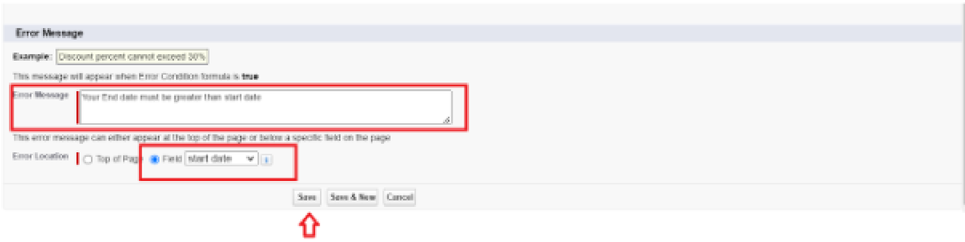
1. Go to the setup page→click on object manager→From drop down click edit for Lease object.
2. Click on the validation rule→click New.

3. Enter the Rule name as “lease_end_date”.
4. Insert the Error condition Formula as:

   End_date_c > start_date_c



5. Enter the Error Message as “Your End date must be greater than start date”, select the Error location as Field and select the field as “start date”, and click Save.



Milestone 7: Email Template

Activity 1: Create Email Template for Tenant Leaving

To create Email Template:

1. Go to setup in quick find box enter email template→click on classic Email Template
2. Click on→New Email Template→choose text
   Folder: Unified public classic Email templates
   Click on available for use
3. Email Template Name is “Tenant leaving”
4. Template unique name: Auto populated
5. Subject: “request for approve the leave”
6. Email body:
   Dear {!Tenant_c.CreatedBy},
   Please approve my leave
7. Save

Activity 2: Create Email Template for Leave Approved

To create Email Template:
1. Go to setup in quick find box enter email template→click on classic Email Template
2. Click on→New Email Template→Choose text
   Folder: Unfiled public classic Email Template
   Click available for use
3. Email Template name is “Leave Approved”
4. Template Unique Name: Auto populated
5. Subject: “Leave Approved”
6. Email body:
   Dear {!Tenant_c.Name},
   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.
7. Save

Activity 3: Create Email Template for Rejection for Leave

To create Email Template:
1. Go to setup in quick find box enter email template→click on classic Email Template
2. Click on→New Email Template→choose text
   Folder: Unified public classic Email templates
   Click on available for use
3. Email Template Name is “Leave Rejected”
4. Template unique name: Auto populated
5. Subject: “Leave Rejected”
6. Email body:
   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
7. Save

Activity 4: Create Email Template for Monthly Payment

To create Email Template:

1. Go to setup in quick find box enter email template→click on classic Email Template
2. Click on→New Email Template→choose text
   Folder: Unified public classic Email templates
   Click on available for use
3. Email Template Name is “Template Email”
4. Template unique name: Auto populated
5. Subject: “Urgent: Monthly Rent Payment Remainder”

6. Email body:
   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.
7. Save

Activity 5: Create Email Template for Successful Payment

To create Email Template

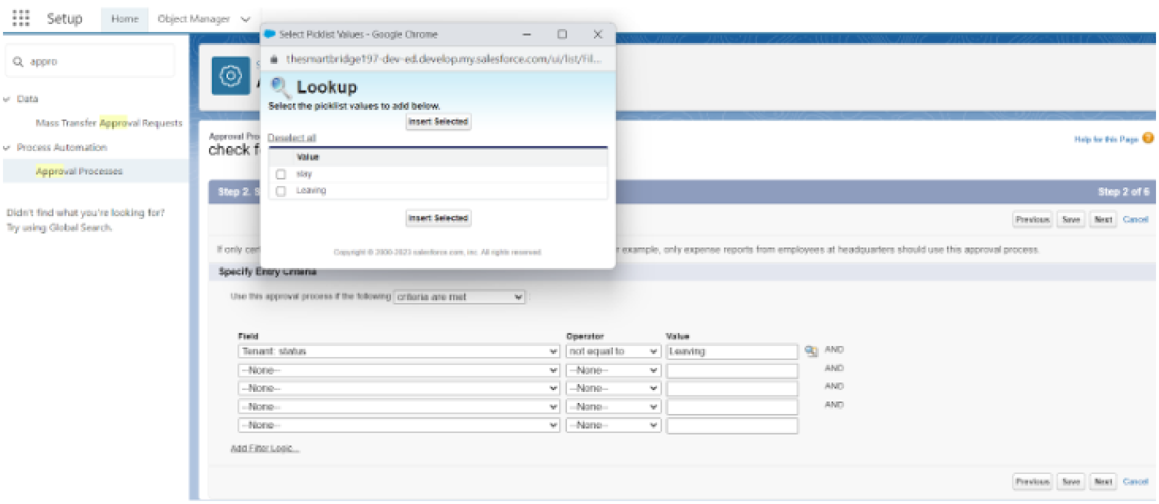
1. Go to setup in quick find box enter email template→click on classic Email Template
2. Click on→New Email Template→choose text
   Folder: Unified public classic Email templates
   Click on available for use
3. Email Template Name is "Tenant Payment"
4. Template unique name: Auto populated
5. Subject: "Confirmation of successful Monthly Payment"
6. Email body:
   Dear {!Tenant_c.Email_c},
   We hope this email finds you well. We are writing to inform you that we have successfully received your monthly payment. Thank you for your prompt and diligent payment.
7. Save

Milestone 8: Approval Process

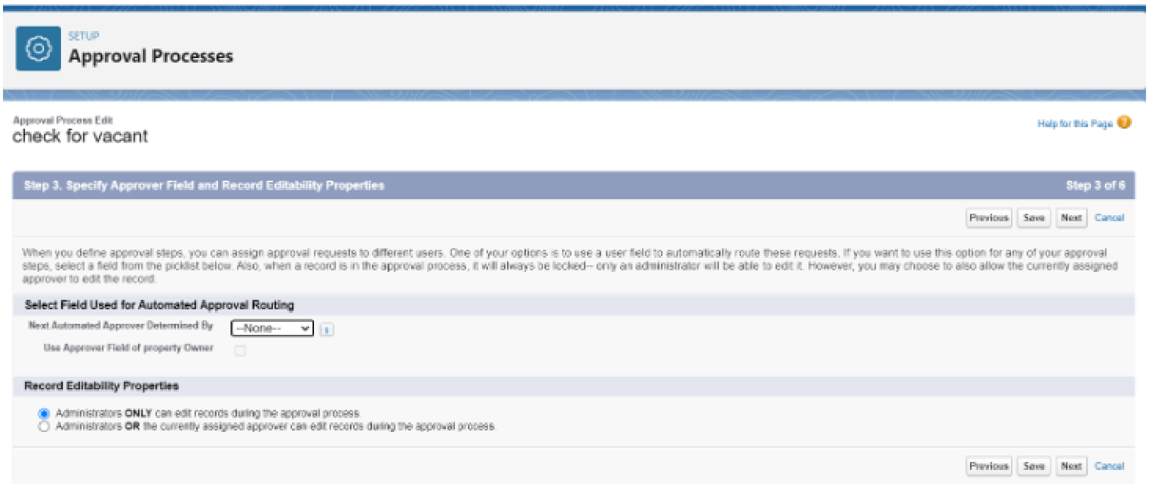
Activity 1: Create Approval Process for Check for Vacant

To create fields in an object:

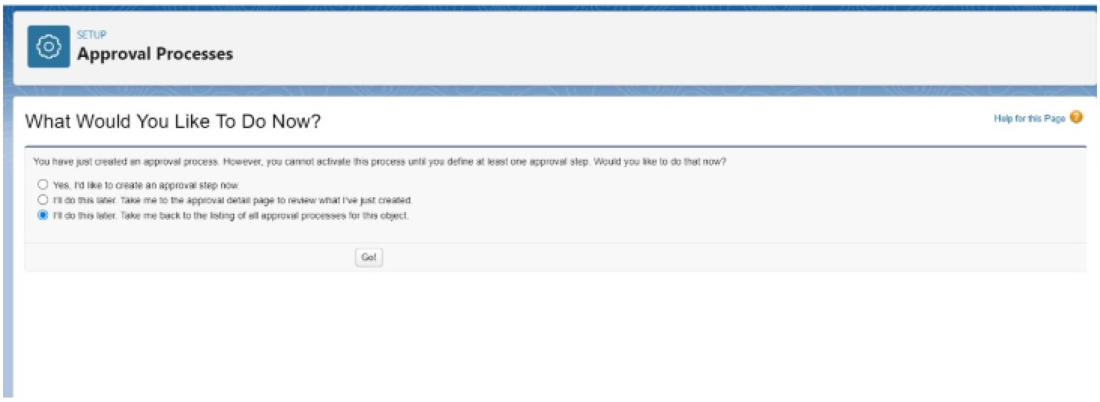
1. Go to setup→Approval Processes in quick find bar→click on it
2. Manage Approval Processes for→"Tenant" from the drop down.
3. Click on "Create New Approval Process"→Use standard setup wizard.
4. Process Name "check for vacant"→Click Next.
5. Field "Tenant: status"→Operator: Not equals, Value→Click on the lookup filter icon and select "Leaving".
6. Click insert fields, then click Next.



7. Next automated Approver determined by “None” from the drop down.
8. Select the “Administrators ONLY can edit records during the approval process”. Then Next.

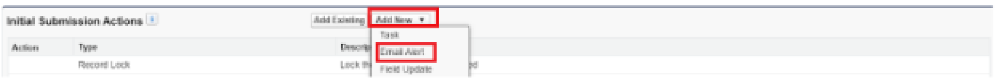


9. Click on next leave the Email template click on Next
10. From the available fields select→Tenant Name, And then add→Add it to the selected. Then Next.
    - Make sure Display approver history is checked.
    - And under security setting check the “Allow approvers to access the approval page only from within the salesforce application. (Recommended)” option
11. Submitter type Search→Owner, Allowed Submitters→Property Owner. Then Next.
    - Then click save.
    - Click on “I’ll do this later. Take me back to the listing of all approval process for this object”
    - Click go



Activity 2: Initial Submission Action

1. Under initial submission action click on add new and then select email alert.



2. Description: “Please approve my leave”
3. Unique name: auto populated
4. Email template: tenant leaving
5. Recipient type: Email field
6. Available Recipients: Email field: Email
7. From Email Address: Current User’s email
8. Click Save

Activity 3: Final Approval Action

1. Under Final approval action click on new and then select email alert.
2. Description: “Tenant leaving”.
3. unique name: auto populated
4. Email template: Leave approved
5. Recipient type: Email field
6. Available Recipients: Email field: Email
7. From Email address: Current user’s email
8. Click save

Activity 4: Final Rejection Action

1. Under Final rejection action click on new and then select email alert.
2. Description: “Your request for leave is rejected”
3. unique name: auto populated

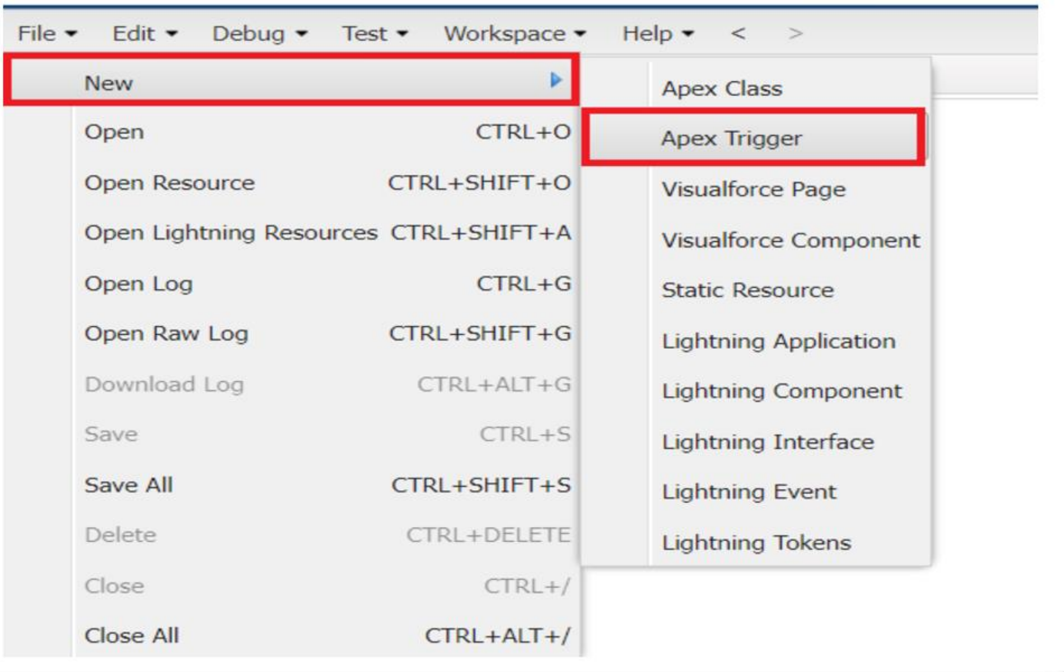
4. Email template: Leave rejected
5. Recipient type: Email field
6. Available Recipients: Email field: Email
7. From Email address: Current user’s email
8. Click save

Milestone 9: Apex Trigger

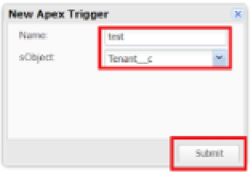
Activity 1: Create an Apex Trigger

To create a new Apex Class follow the below steps:

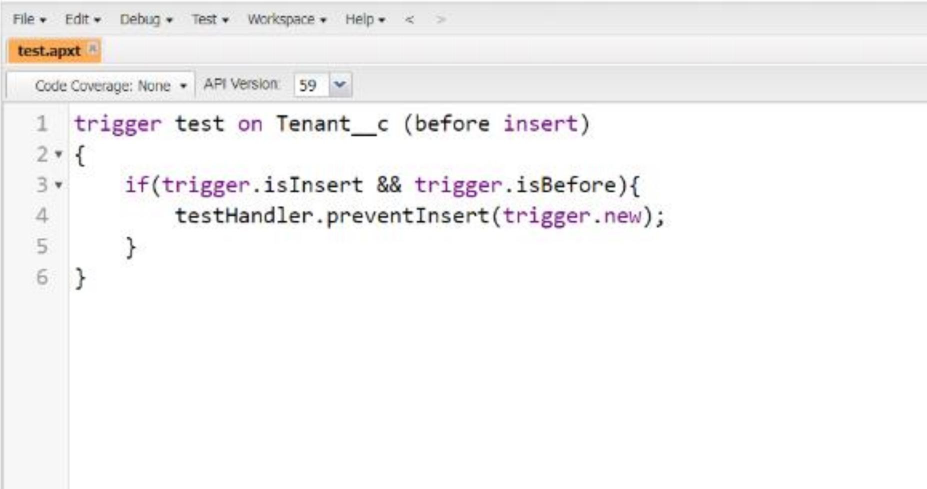
1. Click on the File→ New→Apex Class



2. Give the Apex name as “Test”, and select “Tenant_c” from the dropdown for sObject.



3. Click Submit
4. Now write the code logic here



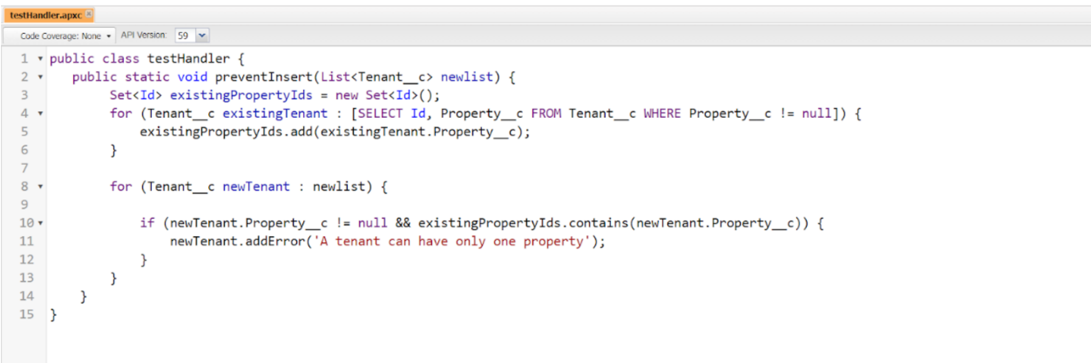
Trigger Code:

Trigger test on Tenant_c (before insert)
{
if (trigger.insert && trigger.isBefore){
testHandeler.preventInsert(trigger.new);
}
}

Activity 2: Create an Apex Handler class

To create a new Apex Class follow the below steps:

1. Click on the File→New→Apex Class
2. Enter the class name as testHandler



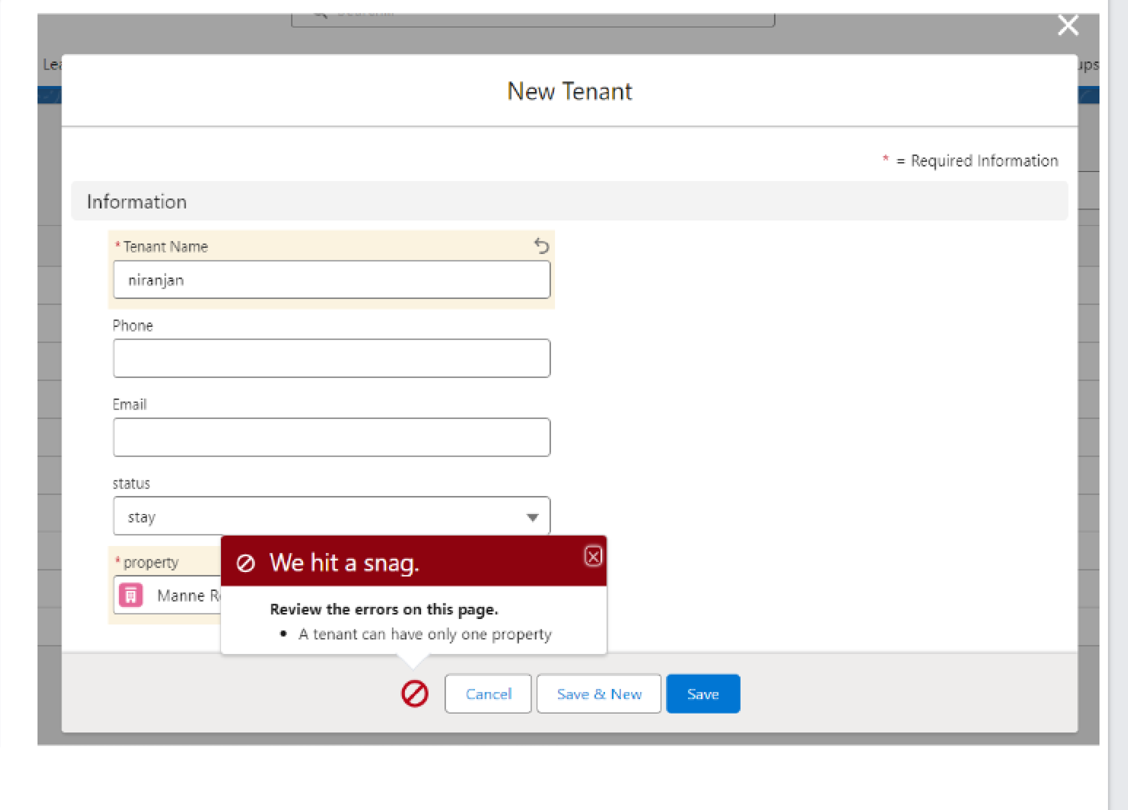
Apex Logic:

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');
          }
        }
    }
}
```

Activity 3: Testing the Trigger

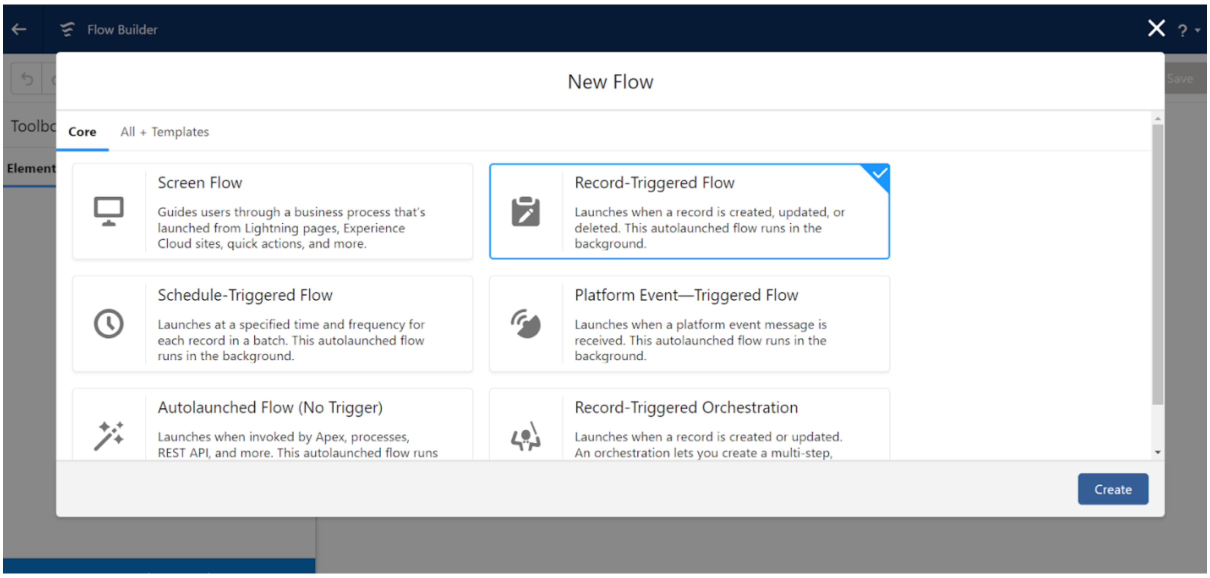
Try to create new tenant with the existing property then it shows the error



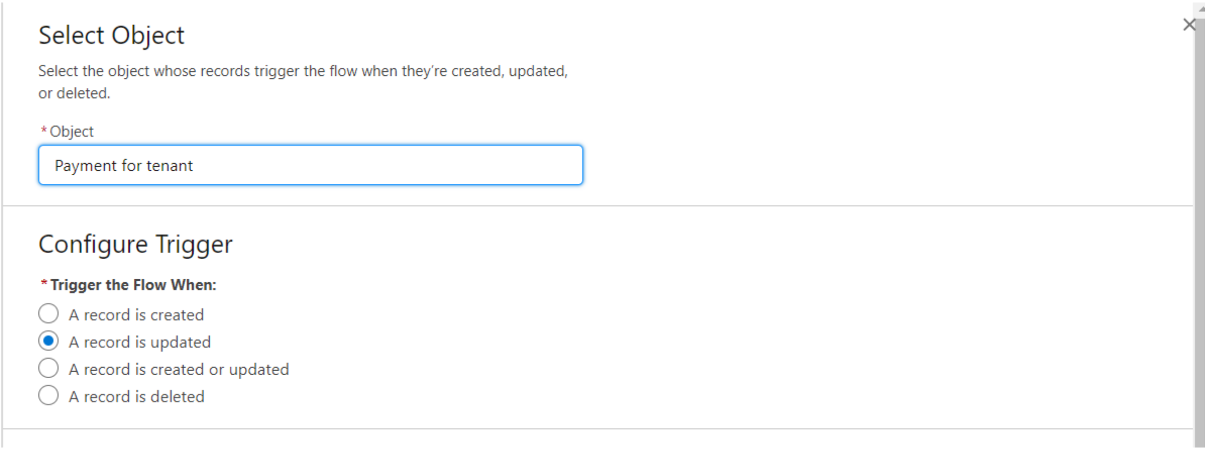
Milestone 10: Flows

Activity 1: Create Flow for Monthly Payment

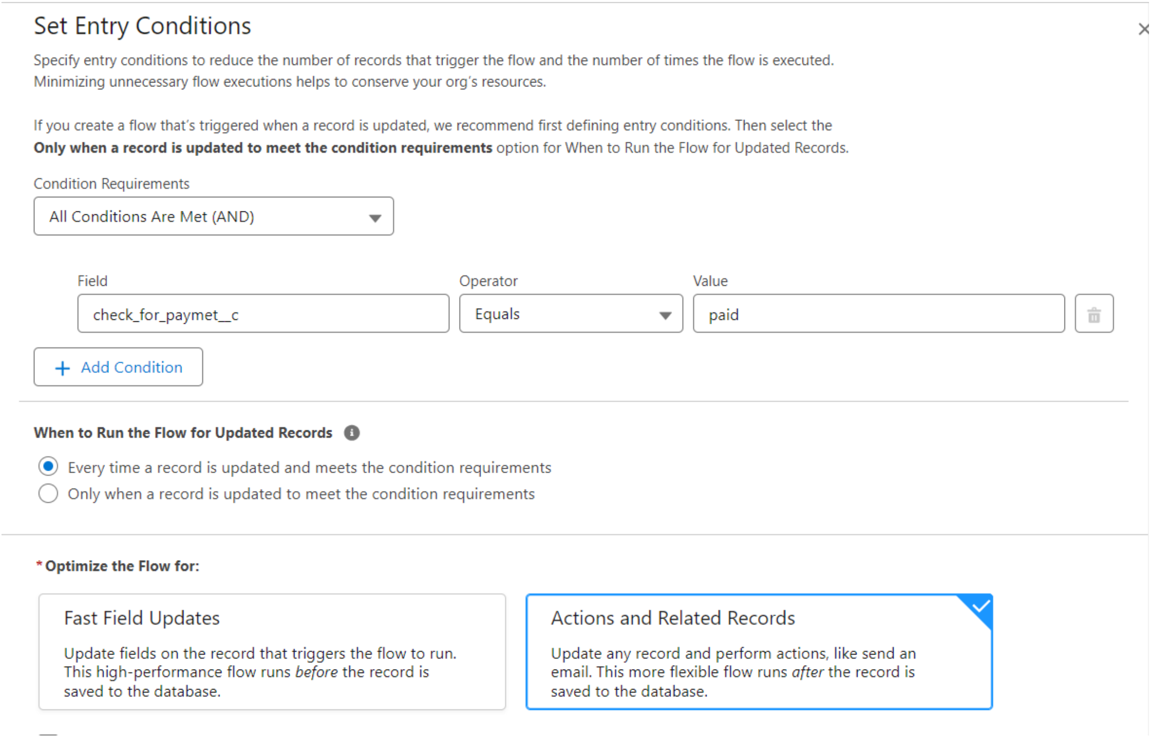
1. Go to setup→type Flow in quick find box→Click on the Flow and Select the New Flow.
2. Select the record Triggered flow. Click on create.



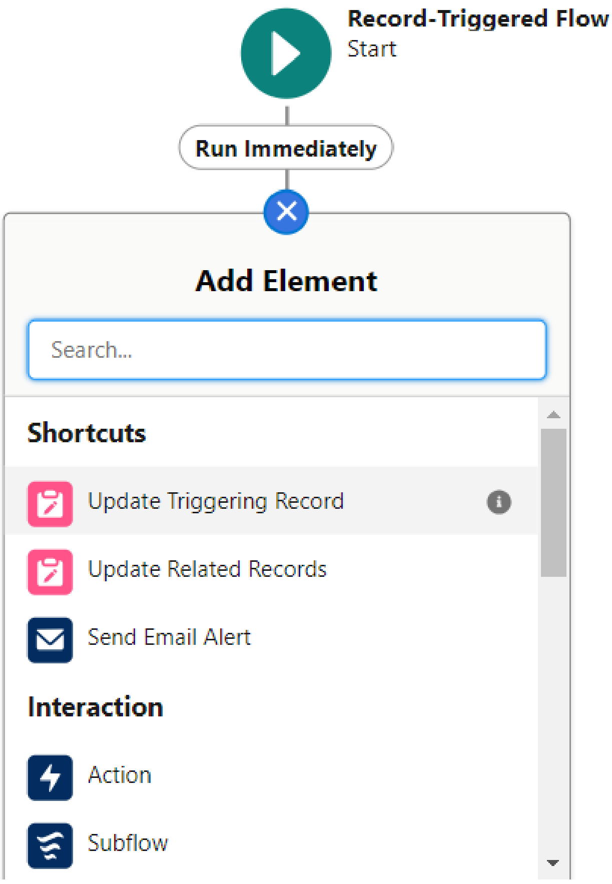
3. Under Object select ”Payment for tenant”. Click on A record is updated.



4. Set Entry Conditions
   Under condition Requirements All Conditions are met
   Field: check_for_payment_c
   Operator: Equals
   Value: paid
5. Click on: Every time a record is updated and meets the condition requirements
6. Click on: Actions and related records, done

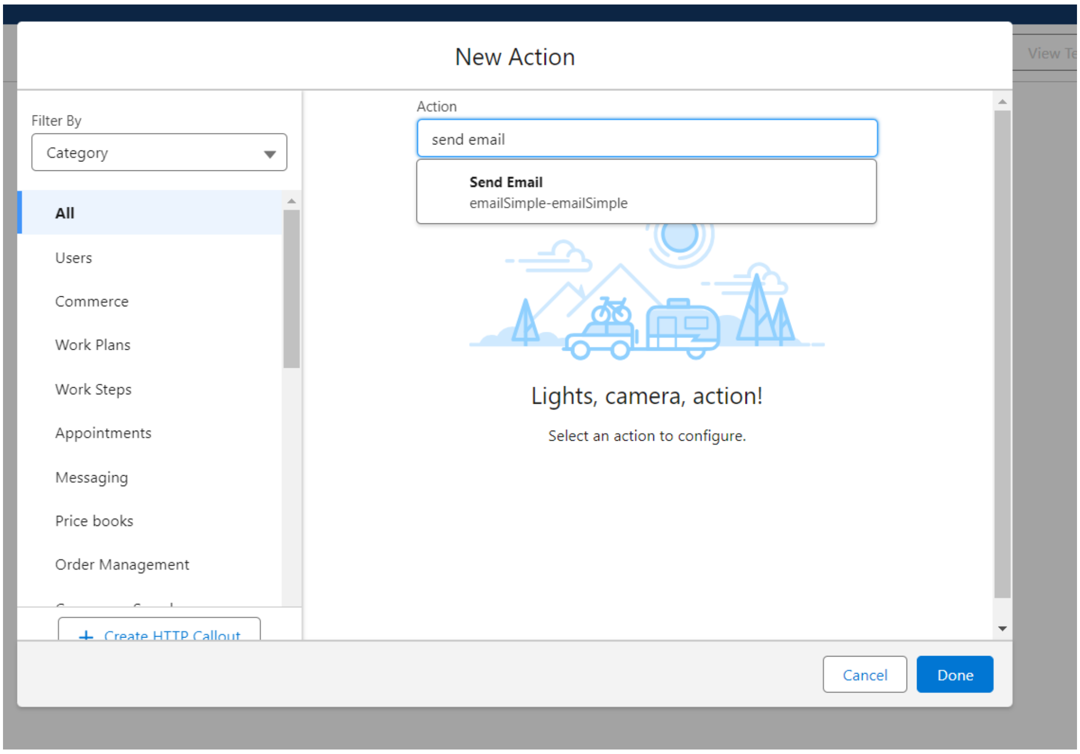


7. Under record trigger flow click on "+" icon and select action

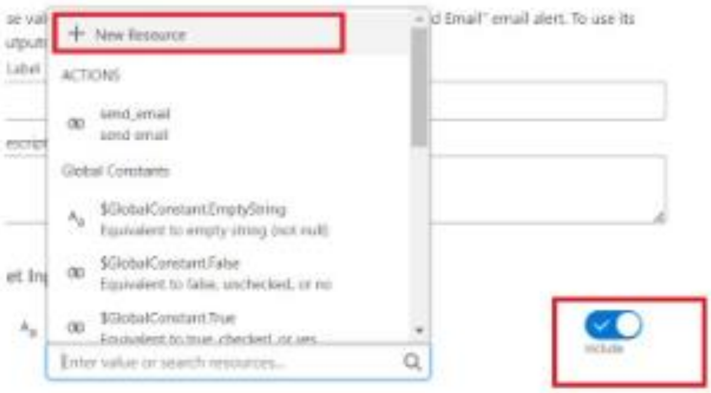


In action search for send email then click on send email (check below image)

8. Label: send Email
   API Name: send_Email



9. Label: send Email
10. API Email: send_Email
11. Enable Body
12. Click on new resource



13. Under resource type select “Text Template”
    API Name: emailbody
    Under body: (Paste the below text)

Dear {!$Record.Tenant__r.Name},
We hope this email finds you well. We are writing to inform you that we have successfully received your monthly payment. Thank you for your prompt and diligent payment.

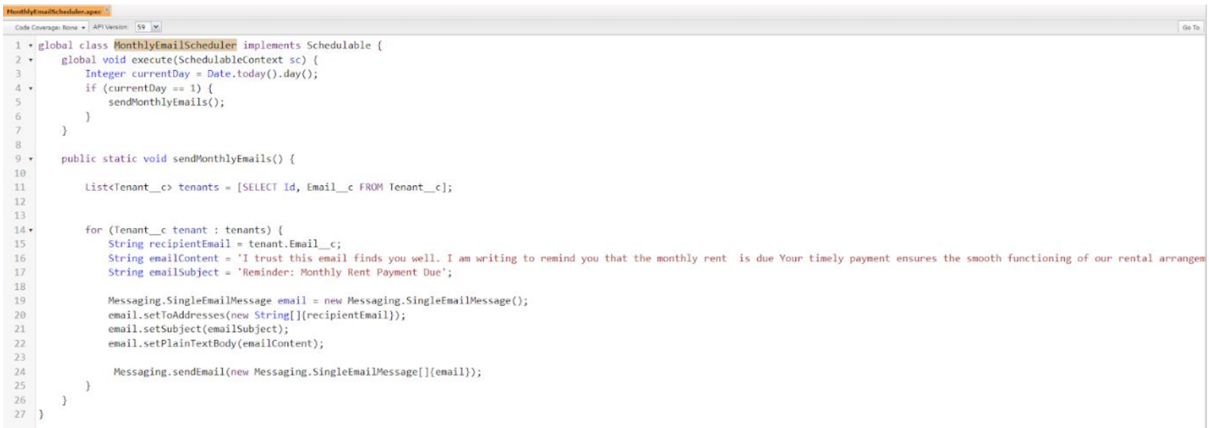
14. Click Done
15. Enable recipient address list paste this?
16. Click Done
17. Enable subject
    Paste this→Confirmation of Successful Monthly Payment
18. Click on Save
    Flow label: monthly payment
    Flow API Name: monthly_payment
19. Click on Activate

Milestone 11: Schedule Apex Class

Activity 1: Create an Apex Class

To create a new Apex Class follow the below steps:

1. Click on the file >> New >> Apex Class.
2. Enter class name as MonthlyEmailScheduler.



Apex Logic:

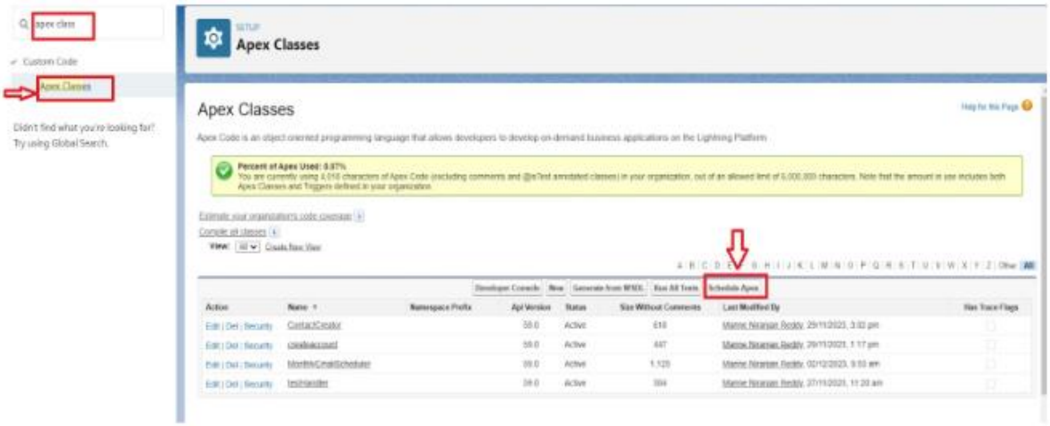
```
global class MonthlyEmailScheduler implements Schedulable {
   global void execute(SchedulableContext sc) {
      Integer currentDay = Date.today().day();
      if (currentDay == 1) {
         sendMonthlyEmails();
      }
   }
   public static void sendMonthlyEmails() {
      List<Tenant__c> tenants = [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});
        }
    }
}
```

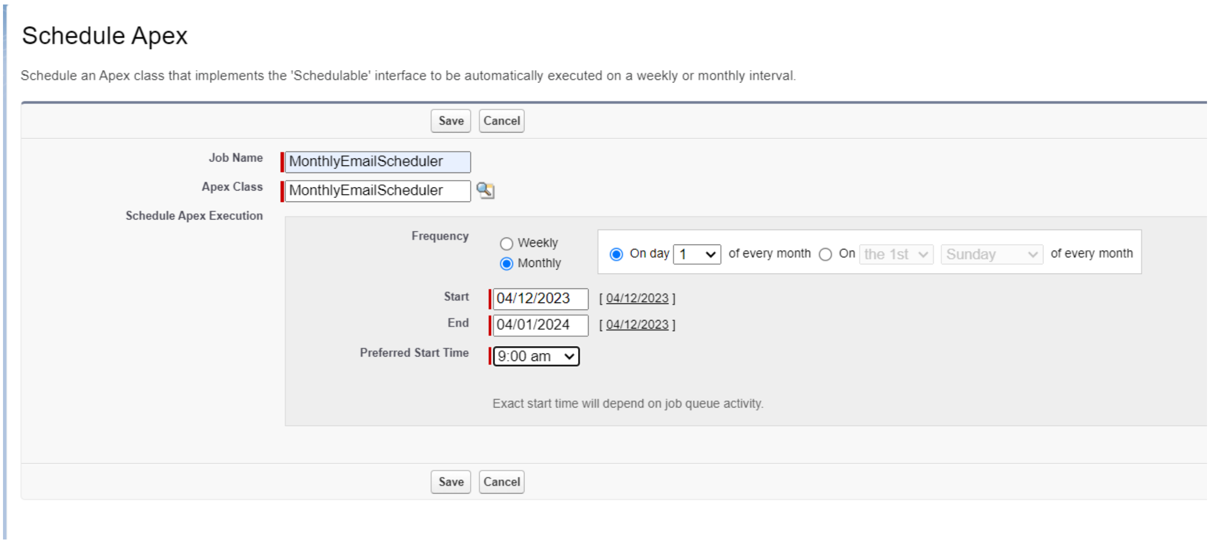
3. Save the code.

Activity 2: Schedule Apex Class

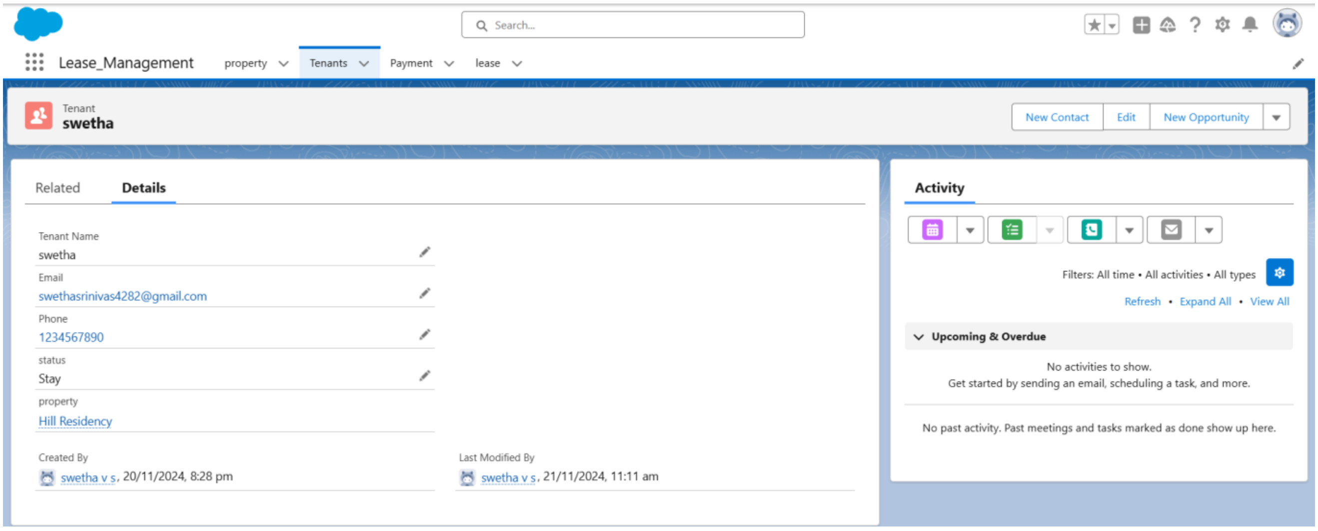
1. Enter Apex class in quick find box
2. Select schedule Apex



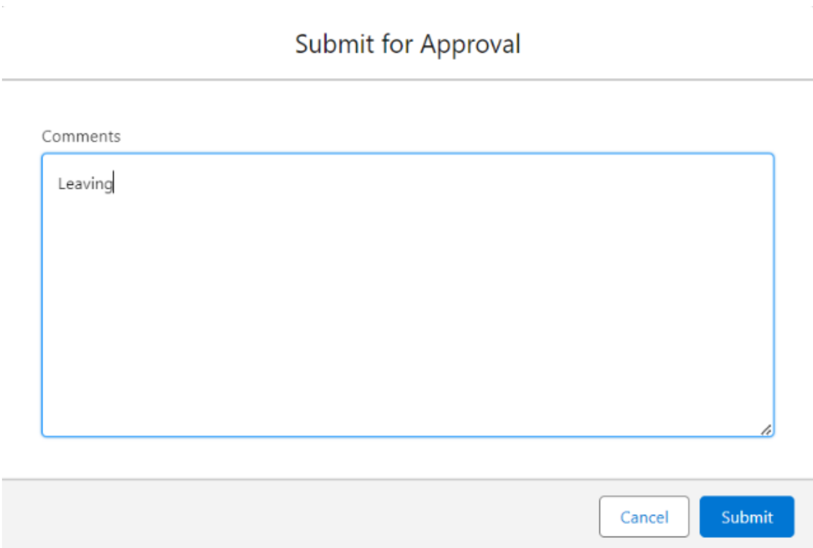
3. Enter job Name: MonthlyEmailScheduler
4. Apex class: MonthlyEmailScheduler
5. Frequency: Monthly===>select on day 1
6. Start date: 04/12/2023
7. End date: 04/01/2024
8. Preferred start time: 09:00 am
9. Save

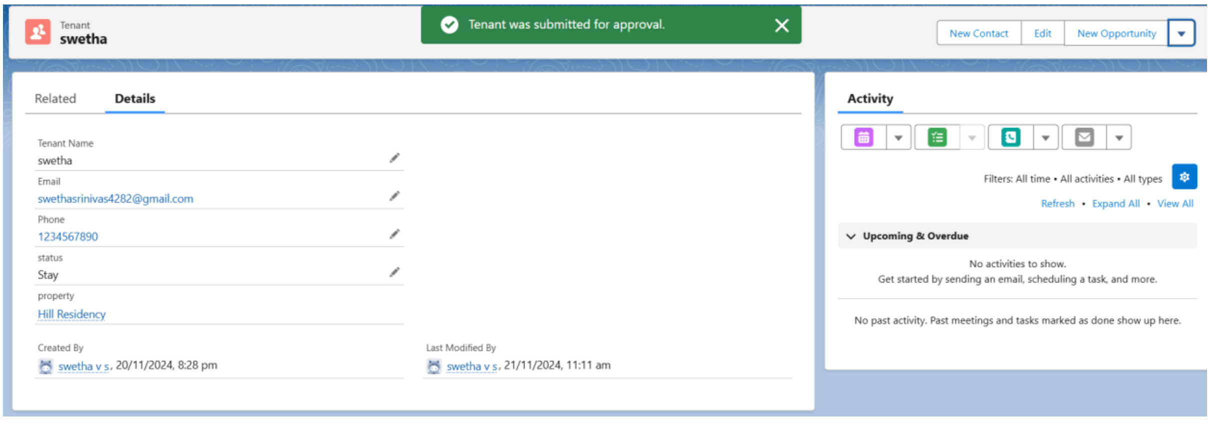


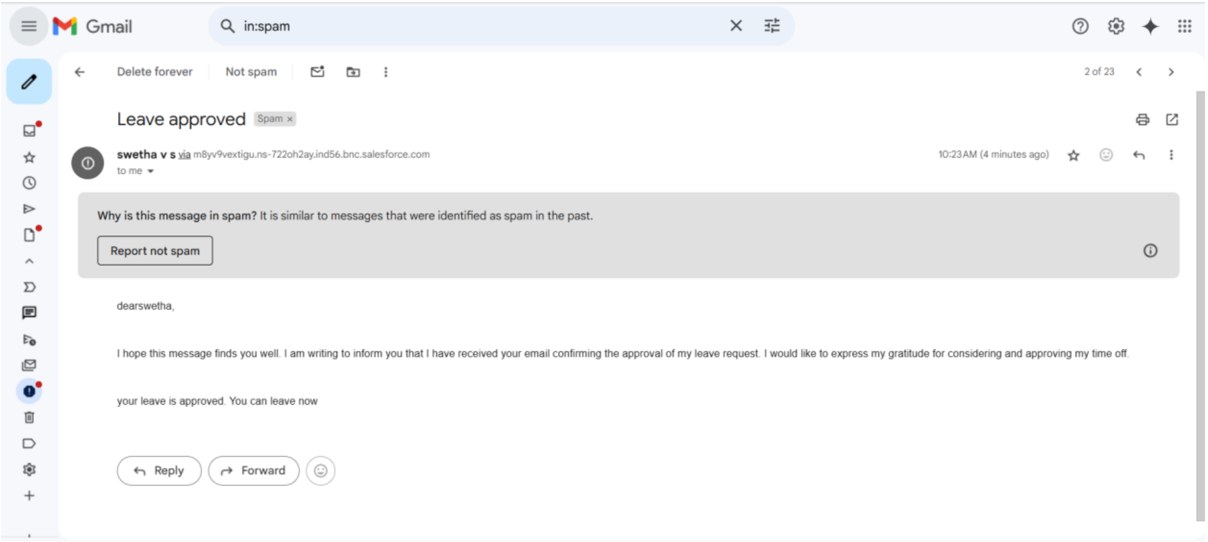
Testing the Approval Process



Entry any comment and click on submit







You will find notification like this and You will get an email Check
Note: Similarly do for reject also you will get mail and notification.