



## **Project Title: Lease Management**

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## **Project Name: Lease Management**

### **Project overview:**

This project centers on a Lease Management System that forms a strategic partnership with Salesforce.com to develop an application dedicated to property management. The LMS application integrates all necessary functionalities to manage various processes in the real estate sector, following industry best practices. It is provided as a Software as a Service (SaaS) and can be accessed online from any device. The technological infrastructure is supported by Salesforce.com ([www.salesforce.com](http://www.salesforce.com)), which ensures secure data storage and implements necessary security protocols. The aim of this study was to design and create a cloud-based Lease Management System that offers comprehensive and summarized information on vital areas, assisting LMS administrators in their planning and decision-making processes. The system is accessible from anywhere at any time, as data is stored remotely and available to users via the Internet. This project prioritizes user-friendliness, usability, performance, and security, showcasing robustness. As a result, other property owners may consider adopting this system for improved information management, more effective decision-making, and to maintain positive client relationships, as LMS supports the management of real estate businesses.

### **Objective:**

The main objective of a leave management system is to help businesses manage employee absences in a fair and accurate way. This can be achieved by:

**Business Target:** Asset leasing is a standard approach utilized by businesses across diverse industries and sizes. This method provides multiple benefits, including increased purchasing power, decreased maintenance costs (assuming the lessee is not responsible for maintenance), and more efficient cash flow management.



### **Particular goal:**

Leasing assets has become a prevalent strategy for organizations across various sectors and sizes. This approach offers numerous benefits, including enhanced purchasing power, reduced maintenance expenses (provided the lessee is not accountable for maintenance), and improved cash flow management.

### **Enhancing the efficiency of the leave application process.**

A leave management system operates as a conduit between employees and employers, facilitating a more effective process for submitting and approving leave applications.

### **Facilitating clarity and management.**

Employees ought to have a straightforward process for applying for leave, checking their leave information, and tracking the status of their leave requests.

### **Streamlining processes by removing paper-based tasks**

Leave management systems facilitate the automation of leave requests, thereby lessening the requirement for manual processing and associated paperwork.

### **Fulfilling legal requirements.**

Compliance with state-mandated legal requirements is a fundamental aspect of any leave management system.



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## **Salesforce Key Features and Concepts Utilized**

### **Organization:**

Establishing a detailed sales plan and assigning roles to team members.

### **Sales Tactics:**

Creating and executing strategies that are clear and actionable.

### **Customer Engagement:**

Nurturing valuable relationships with key clients.

### **Sales Data Analysis:**

Reviewing historical campaign data to develop improved and more efficient campaigns.

### **Training:**

Guiding sales representatives to boost their performance and realize their maximum potential.

### **Forecasting:**

Preparing for future needs to ensure appropriate inventory and staffing levels, along with compensation planning.



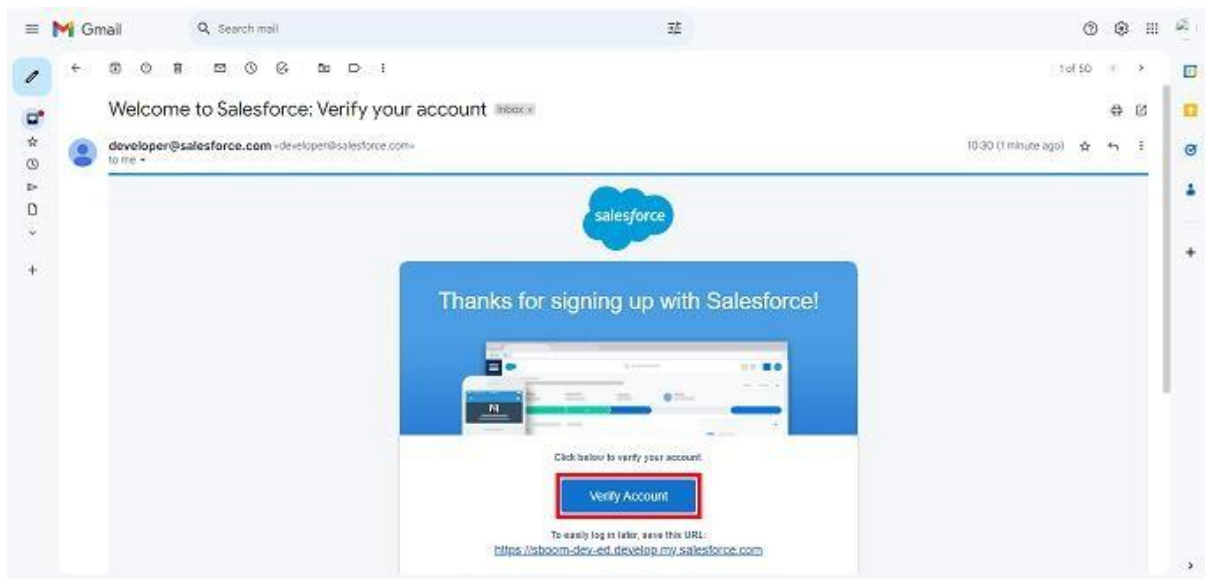
## Detailed steps to solution design

### **Step 1: Creating Developer Account and Activation**

To create a developer organization within Salesforce, start by activating your account.

Click on the "Verify Account" link, then set a password and provide an answer to a security question.

After clicking "Change Password," you will be redirected to the Salesforce setup page.

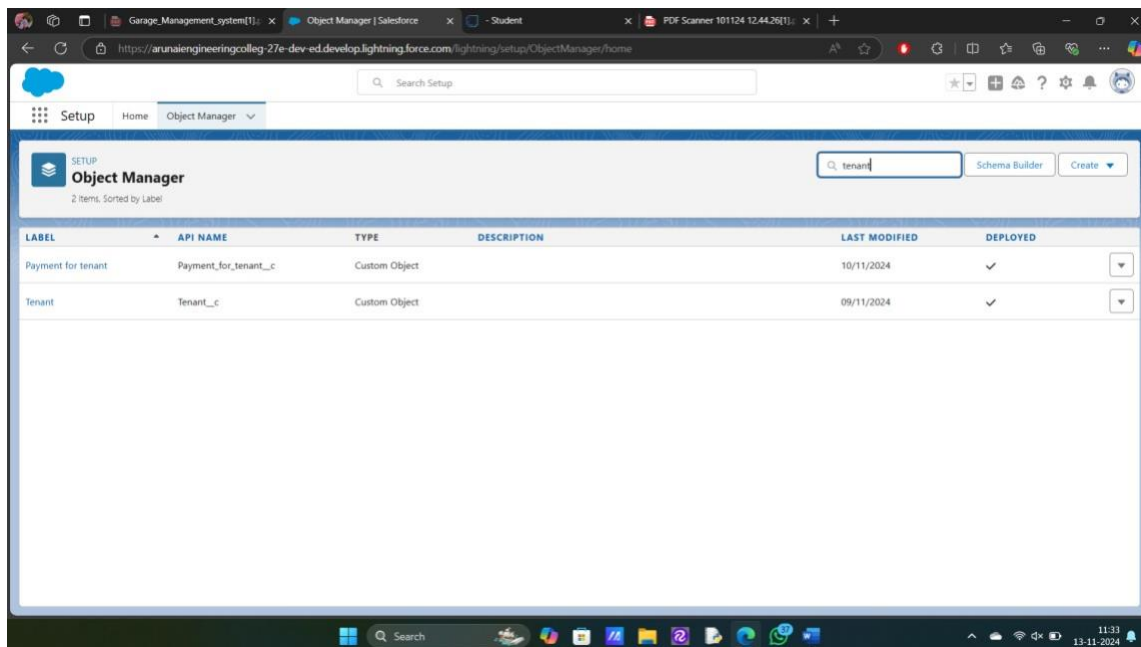




## Step 2: Create of objects

Create Property Object, tenant object, lease object and payment object.

From the setup page >> Click on Object Manager >>Click on Create >> Click on Custom Object

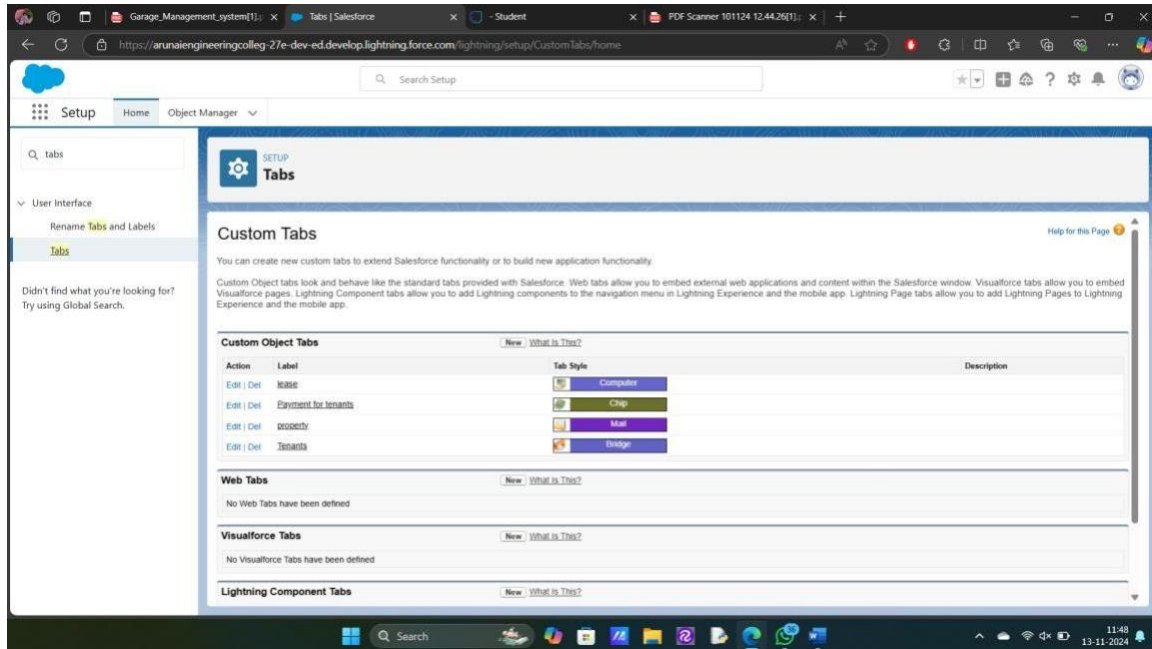


Enter the label name for the appropriate object. Then enter the Plural label name.

Enter Record Name Label and Format Record Name and Data Type.

## Step 3: Creating a Custom Tab

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

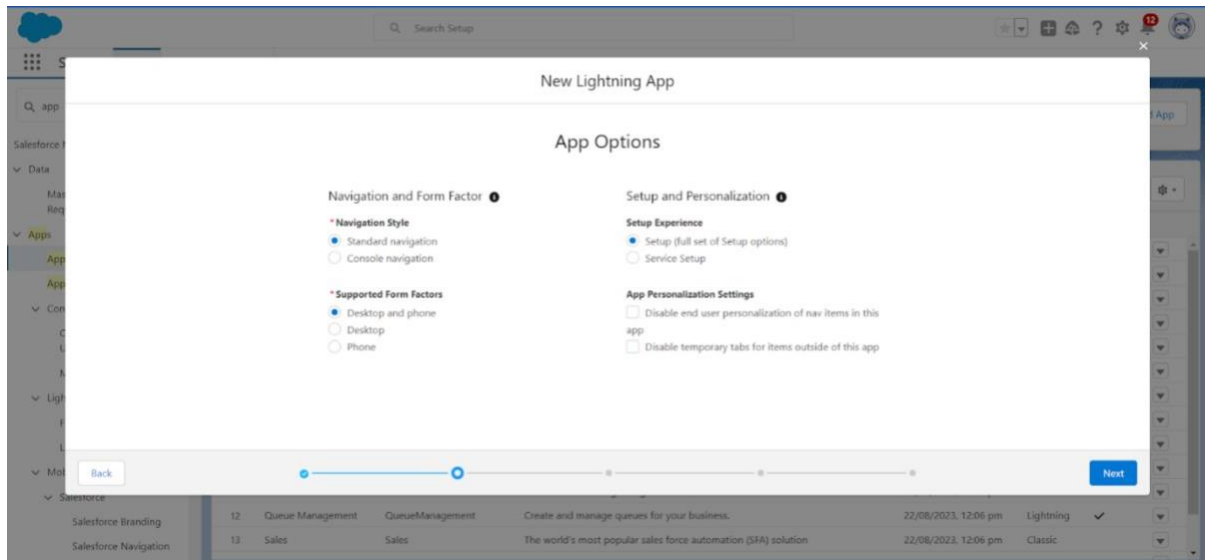


## Step 4: Create a Lightning App

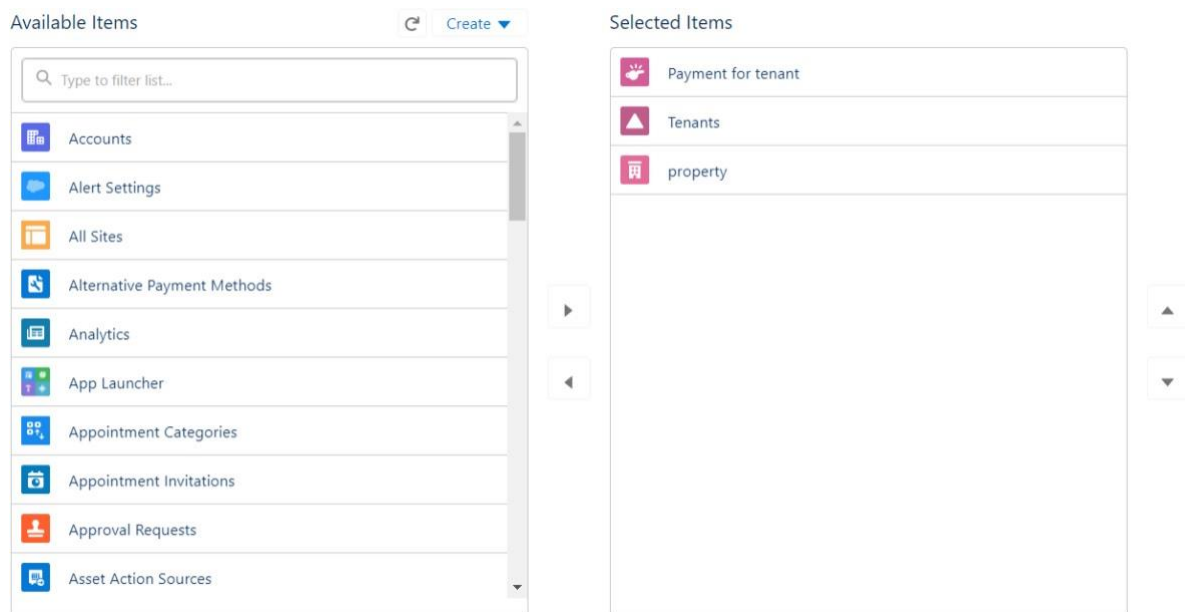
An app is a collection of items that work together to serve a particular function.

### To create a Tab:( Property)

- Goto set up page. Search tabs on quick find bar click new under custom tab.
- The first step is to select object property and tab style.
- Make sure that the Append tab to users' existing personal customizations is checked. Click save



Create a lightning app with an App Name of “Lease Management”



## Step 5: Field Creation

Creation of fields for the property object, Tenant object, Lease object, Payment for tenant object, Lookup object.





Go to setup then click on Object Manager to type object name(Tenant) in search bar and click on the object.

- Field Label : Email
- Field Name : gets auto generated
- Click on required check box
- Click on Next >> Next >> Save and new.

- Field Label : start date
- Field Name : gets auto generated
- Click on Next >> Next >> Save and new.

The screenshot shows the Salesforce Setup interface. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area is titled 'property' and 'New Custom Field'. It shows 'Step 2. Enter the details' with a progress bar indicating 'Step 2 of 4'. The form includes fields for 'Field Label' (Name), 'Length' (25), 'Field Name' (Name), and 'Description'. There are checkboxes for 'Required' (checked), 'Unique' (unchecked), and 'External ID' (unchecked). A 'Help Text' field is also present. The bottom of the screen shows the Windows taskbar with various application icons and the system clock displaying 13:58 on 13-11-2024.

## Step 6: Validation rules

To create a validation rule to an Lease Object.

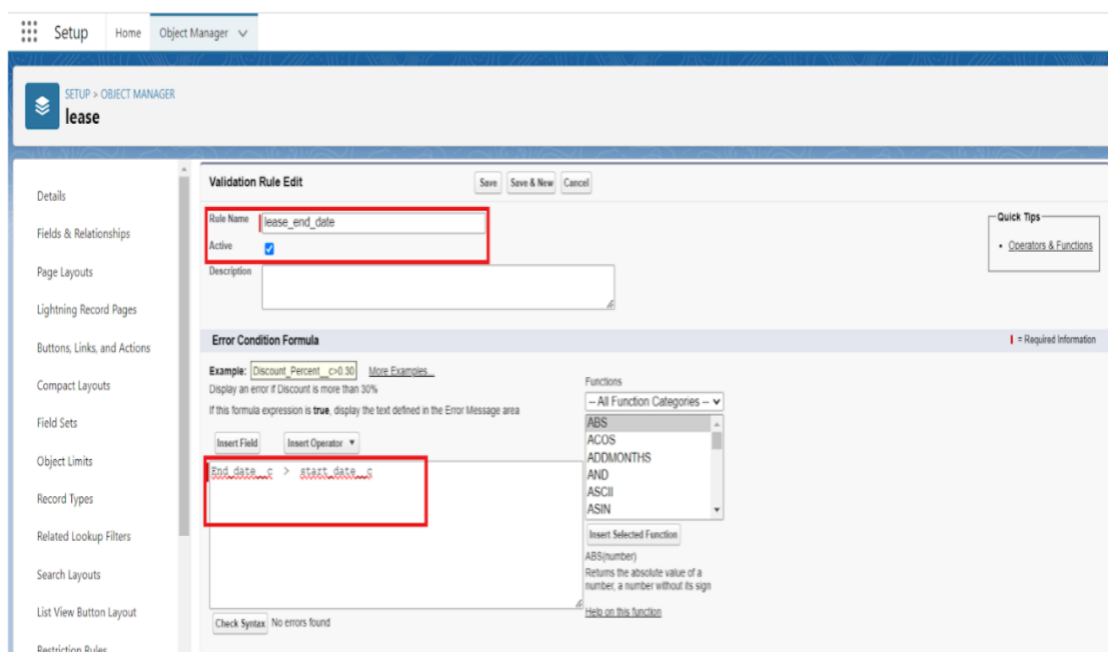
Go to the setup page click on object manager from drop down click edit for Lease object.

Click on the validation rule.click new

Rule name= lease\_end\_date

- Insert the Error Condition Formula as :  
$$\text{End\_date\_c} > \text{start\_date\_c}$$

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.

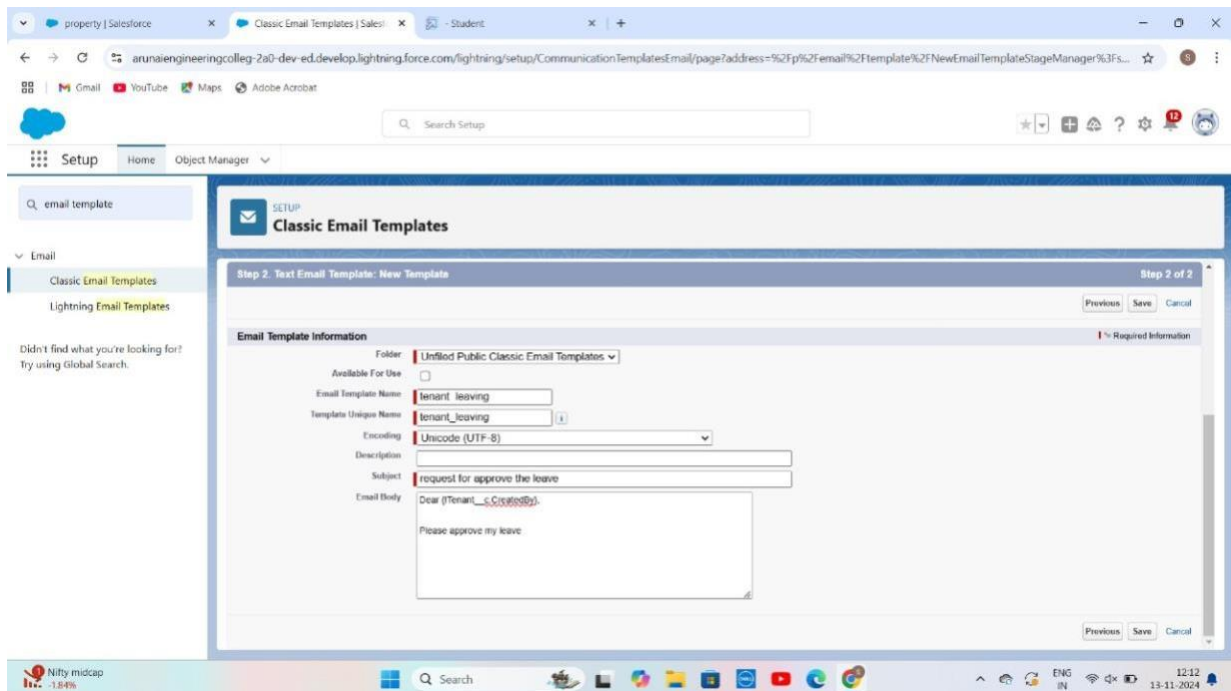


The screenshot displays the 'Validation Rule Edit' interface in Salesforce. The 'Rule Name' field is highlighted with a red box and contains the text 'lease\_end\_date'. The 'Active' checkbox is checked. The 'Error Condition Formula' section shows an example formula 'Discount\_Percent\_\_c > 0.30' and the user-defined formula 'End\_date\_\_c > start\_date\_\_c', which is also highlighted with a red box. A list of functions is visible on the right, including ABS, ACOS, ADDMONTHS, AND, ASCII, and ASIN. The 'Check Syntax' button at the bottom indicates 'No errors found'.

## Step 7: Email templates

### 1. Create Email Template For Tenant Leaving

- Go to setup in quick find box enter email template, click on classic Email template.
- Then click on new email template choose text
- Email template name: tenant leaving
- Template unique name: Auto populated
- Subject: request for approve the leave
- Email body:  
Dear {!Tenant\_\_c.CreatedBy},  
Please approve my leave.
- Save.



The screenshot shows the Salesforce Classic Email Template creation interface. The browser address bar indicates the URL: `arunaiengineeringcolleg-2a0-dev-ed.develop.lightning.force.com/lightning/setup/CommunicationTemplatesEmail/page?address=%2Fp%2Femail%2Ftemplate%2FNewEmailTemplateStageManager%3Fs...`. The left sidebar shows the navigation menu with "Setup" selected. The main content area is titled "Classic Email Templates" and shows "Step 2 of 2: Text Email Template: New Template". The "Email Template Information" section includes the following fields:

- Folder: Unified Public Classic Email Templates
- Available For Use: ☐
- Email Template Name: tenant\_leaving
- Template Unique Name: tenant\_leaving (1)
- Encoding: Unicode (UTF-8)
- Description:
- Subject: request for approve the leave
- Email Body: Dear {!Tenant\_\_c.CreatedBy},  
Please approve my leave.

At the bottom of the form, there are "Previous", "Save", and "Cancel" buttons. The system status bar at the bottom shows the time as 12:12 on 13-11-2024.



## 2. Create Email Template For Leave Approved

- Go to setup in quick find box enter email template >> click on classic Email Template.
- Click on >> New Email Template====>Choose text
- Email Template Name=Leave approved
- Template Unique Name : Auto populated
- Subject =Leave approved
- 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.

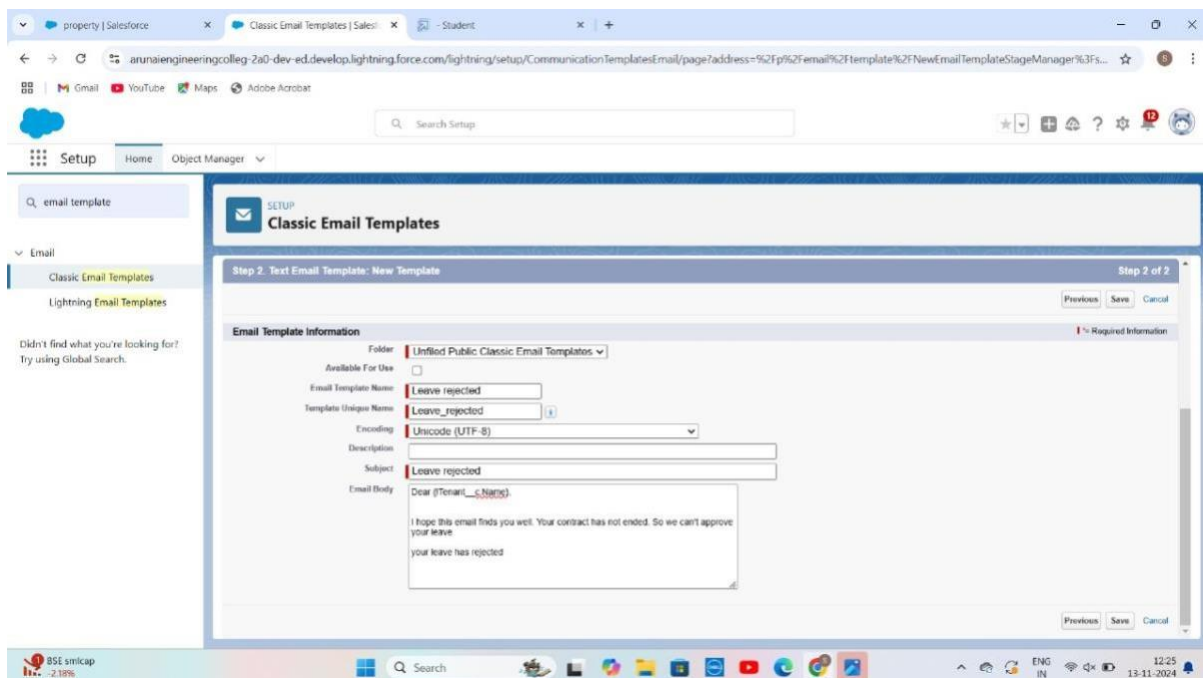
Your leave is approved. You can leave now.

- Save

The screenshot shows the Salesforce Classic Email Template setup page. The browser address bar displays a URL from a development instance. The left sidebar shows the 'Setup' menu with 'Email' expanded, highlighting 'Classic Email Templates'. The main content area is titled 'Classic Email Templates' and shows 'Step 2. Text Email Template: New Template'. The 'Email Template Information' section includes fields for 'Folder' (Unfiled Public Classic Email Templates), 'Email Template Name' (Leave approved), 'Template Unique Name' (tenant\_leaving), 'Encoding' (Unicode (UTF-8)), 'Description', 'Subject' (Leave approved), and 'Email Body'. The email body text is: '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'. The page has 'Previous', 'Save', and 'Cancel' buttons at the bottom right. The Windows taskbar at the bottom shows the time as 12:21 on 13-11-2024.

### 3. Create Email Template For rejection for leave

- Go to setup in quick find box enter email template >> click on classic Email Template.
- Click on >>New Email Template===>Choose text
- Email Template Name=Leave rejected
- Subject : " Leave rejected"
- 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
- Saved



The screenshot shows the Salesforce 'Classic Email Templates' setup page. The left sidebar has a search bar with 'email template' and a list of options including 'Classic Email Templates' and 'Lightning Email Templates'. The main content area is titled 'Classic Email Templates' and shows 'Step 2. Text Email Template: New Template'. The form fields are as follows:

- Folder:** Unified Public Classic Email Templates
- Available For Use:** ☐
- Email Template Name:** Leave rejected
- Template Unique Name:** Leave\_rejected
- Encoding:** Unicode (UTF-8)
- Description:**
- Subject:** Leave rejected
- 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

Buttons for 'Previous', 'Save', and 'Cancel' are visible at the bottom right of the form.



## Step 8:Approval Process

### What Is Approval Process In Salesforce?

The Approval Process is an automated process that an org uses to approve records in Salesforce. For example, When In the organization, someone is not able to decide a particular thing then he can ask someone else for approval. So, for such frequent cases or situations, one can define the approval process. So, Users can take benefit of such an approval process whenever needed.

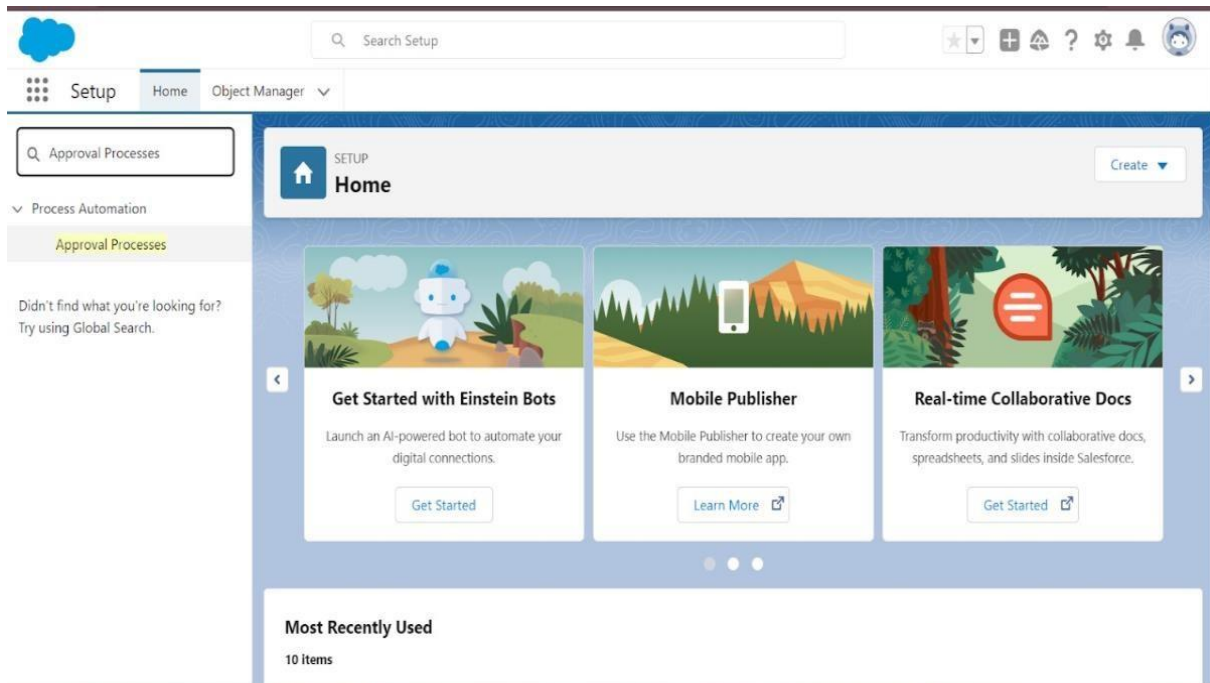
There are 4 actions,

1. Initial Submission Actions
2. Final Approval Actions
3. Final Rejection Actions
4. Recall Actions.

An approval process consists of finalizing the basic properties of the approval process (as shown in the below image), approval steps, and actions to be executed.

#### 1. Create Approval Process For check for vacant.

- Go to setup >> Approval Processes in quick find bar>>click on it.
- Manage Approval Process For >> “Tenant” from the drop down.
- Click on “Create New Approval Process” >> Use standard setup wizard
- Process Name “check for vacant” >> Click Next.
- Field “Tenant:status” >> Operator : Not equals , Value >> Click on the lookup filter icon and select “Leaving”.
- 6.Click insert field,then click Next.



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

**Approval Processes**

Approval Process Edit  
check for vacant

Help for this Page

**Step 3. Specify Approver Field and Record Editability Properties** Step 3 of 6

Previous Save Next Cancel

When you define approval steps, you can assign approval requests to different users. One of your options is to use a user field to automatically route these requests. If you want to use this option for any of your approval steps, select a field from the picklist below. Also, when a record is in the approval process, it will always be locked-- only an administrator will be able to edit it. However, you may choose to also allow the currently assigned approver to edit the record.

**Select Field Used for Automated Approval Routing**

Next Automated Approver Determined By **--None--**

Use Approver Field of property Owner ☐

**Record Editability Properties**

☒ Administrators **ONLY** can edit records during the approval process.

☐ Administrators **OR** the currently assigned approver can edit records during the approval process.

Previous Save Next Cancel





- Click on next leave the email template click on next
- Submitter type Search>>Owner, Allowed Submitters>>Property Owner. Then Next.
- Then click on Save.

- Click on “I’ll do this later. Take me back to the listing of all approval process for this object”
- Click go.

## 2.Initial Submission Action:

- Under initial submission action click on add new and then select email alert.
- Description: “please approve my leave”.
- Unique name: auto populated.
- Email template: tenant leaving.
- Recipient type: Email field.



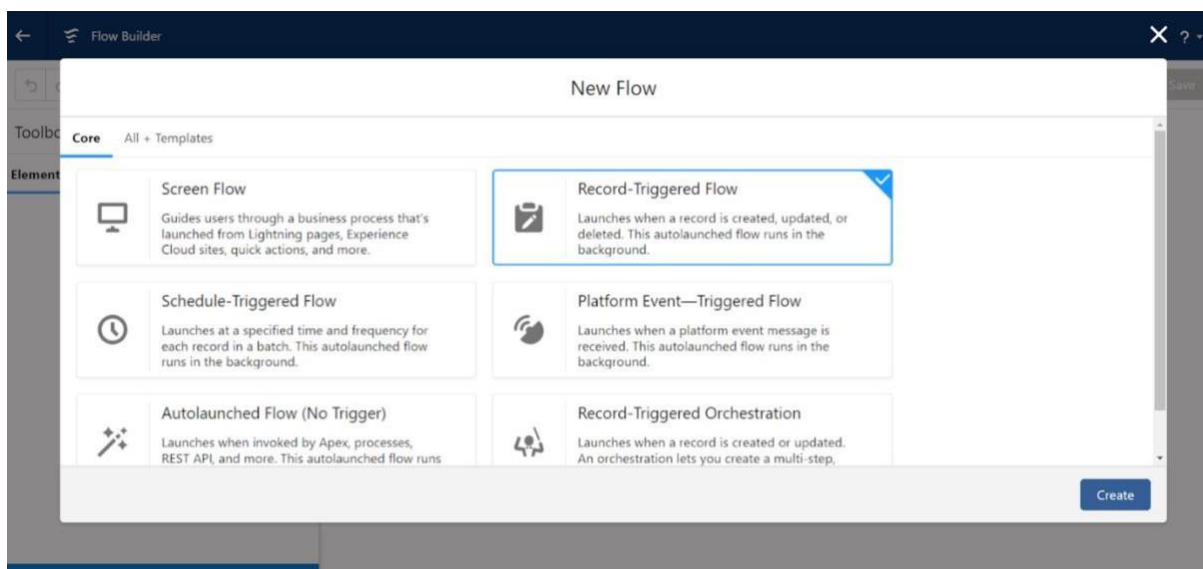


## Step 8: Flows

In Salesforce, a flow is a tool that automates complex business processes. Simply put, it collects data and then does something with that data. Flow Builder is the declarative interface used to build individual flows.

### Create Flow for monthly payment

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



Click on: Every time a record is updated and meets the condition requirements Click on: Actions and related records is done



### Set Entry Conditions

Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.

If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the **Only when a record is updated to meet the condition requirements** option for When to Run the Flow for Updated Records.

Condition Requirements

All Conditions Are Met (AND)

Field

check\_for\_paymet\_c

Operator

Equals

Value

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 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.

## Test and validation:

Testing and validation in lease management can involve a variety of activities, including:

### **Lease validation services:**

Help property management companies ensure that lease agreements are legal and enforceable. These services can help identify issues and verify the terms and conditions of a lease.

### **Test planning and execution:**

This involves executing and monitoring validation tests according to a test plan and design. It also includes verifying and validating the test results, and recording and reporting any issues or defects.



### **Test objectives and criteria:**

These should be defined clearly and explicitly before starting testing and validation. They should align with the project's goals, scope, specifications, and the needs and expectations of the stakeholders and users.

### **Validation testing:**

This is used to verify that the final product meets the expectations and requirements of the customers and stakeholders. It usually happens after the product is fully developed and focuses on confirming that it works as intended in real-world scenarios.

### **Conclusion:**

Lease financing is an excellent choice for those who find it challenging to secure funds through debt financing. It allows asset holders to lease their properties to businesses in need, fostering a beneficial relationship between the lessor and the lessee. Our CRM-based lease management system enhances this process by helping users identify suitable locations for both residential and commercial use. This initiative is advantageous for residential clients as well as business owners.