



ARUNAI ENGINEERING COLLEGE (Autonomous Institution)

Lease management

Salesforce Nan Mudhalvan Project

Submitted by:

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BACHELOR OF ENGINEERING

(DEPARTMENT Of CSE-CYBER SECURITY)

Lease management

1.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.

Lease management in Salesforce involves using the platform to store and manage lease data centrally, automate workflows, and create approval processes for efficient lease operations. It supports document management with file storage and e-signatures, and offers powerful reporting and analytics through customizable dashboards. Integrations with ERP and accounting systems enable seamless financial tracking, while third-party apps extend its lease management capabilities.

Salesforce facilitates lease lifecycle management, from creation to termination, ensuring regulatory compliance with audit trails. Mobile access allows for on-the-go updates, while its customizable interface and collaboration tools enhance productivity and communication among stakeholders.

2. OBJECTIVES: BUSINESS GOALS AND SPECIFIC OUTCOMES

Tenant Relations

- **Objective:** Maintain positive relationships with tenants for long-term retention and stability.
- **How:** Effective communication, resolving disputes quickly, addressing tenant concerns, and offering flexible lease renewal options can improve tenant satisfaction and reduce turnover.

Lease Portfolio Management

- **Objective:** Manage and track a portfolio of leases across multiple properties.
- **How:** This involves using lease management software or systems to track key dates (e.g., renewal dates, rent payment due dates), lease terms, financial obligations, and property conditions for all leased properties.

Strategic Planning

- **Objective:** Align lease management with the broader strategic goals of the organization (whether a landlord or tenant).
- **How:** This could involve evaluating lease terms that fit the long-term goals of expansion, downsizing, or other corporate strategies

Enhanced Customer and Tenant Experience

- **Goal:** Provide a seamless, transparent, and engaging experience for tenants and stakeholders.

- **How:** Utilize Salesforce's CRM capabilities to maintain detailed tenant records, communication history, and proactive notifications.

Centralized Lease Data Management

- **Goal:** Ensure all lease-related information is accessible from a single, unified platform.
- **How:** Store and manage all documents, lease terms, and payment history in Salesforce, enabling quick access and reducing data silos.

Automated Notifications and Updates

- Set up alerts and updates to notify team members about progress or deadlines related to lease management objectives.
- Use reminders and notifications to keep objectives on track and ensure timely follow-ups.

Accurate Financial Tracking and Reporting

- **Customizable Objective Setting**
 - Create specific, measurable, achievable, relevant, and time-bound (SMART) objectives related to lease management.
- **Linkage to Lease Management Metrics**
 - Connect objectives to relevant metrics within Salesforce, such as revenue from lease agreements and renewal rates.
- **Collaborative Goal Tracking**
 - Enable teams to work collaboratively towards common objectives by sharing progress updates.
- **Integrated Reporting and Dashboards**
 - Use dashboards that display key performance indicators (KPIs) related to lease objectives.
- **Alignment with Broader Strategic Objectives**

- Ensure that lease management objectives align with company-wide goals like profitability and sustainability.

3. Key Salesforce Features Utilized in Lease Management

1. Custom Objects and Fields

- a. Create custom objects to represent leases, tenants, and properties, with tailored fields for tracking lease-specific data such as terms, payment schedules, and renewal dates.

2. Workflow Rules and Process Builder

- a. Automate lease-related processes such as approval workflows, payment reminders, and notifications for lease expiration or renewals.
- b. Utilize **Salesforce Flow** for more complex automation, enabling customized processes based on lease criteria.

3. Record Types and Page Layouts

- a. Use record types to manage different types of leases (e.g., residential, commercial) with distinct layouts and data fields.
- b. Customize page layouts to ensure relevant lease details are visible to the appropriate user roles.

4. Document Management

- a. Store and manage lease agreements, amendments, and supporting documents using **Salesforce Files** or integrate with external document management systems.
- b. Use document generation tools like **Salesforce CPQ** or third-party apps to create lease documents directly within Salesforce.

5. Reports and Dashboards

- a. Build custom reports and dashboards to provide insights into lease performance, occupancy rates, and financial metrics.
- b. Utilize **Salesforce's reporting tools** to track KPIs such as lease revenue, payment history, and upcoming expirations.

6. Notifications and Alerts

- a. Set up automated email notifications, tasks, and alerts to keep stakeholders informed about important lease milestones.
- b. Use **Salesforce Chatter** to facilitate internal discussions and real-time updates on lease management activities.

7. Role-Based Access Control

- a. Ensure secure and role-specific access to lease data by leveraging Salesforce's robust **security and sharing settings**.
- b. Use **profiles and permission sets** to control who can view, edit, or manage lease records.

8. Integration Capabilities

- a. Integrate Salesforce with accounting and ERP systems for seamless financial tracking and data exchange.
- b. Use **Salesforce AppExchange** to find specialized lease management solutions or integrate with property management tools for enhanced functionality.

9. Mobile Accessibility

- a. Utilize the **Salesforce mobile app** to enable property managers and leasing agents to access and update lease information on the go, ensuring data is always up to date.

10. Einstein Analytics and AI

- a. Use **Salesforce Einstein Analytics** for predictive insights and enhanced reporting on leasing trends, vacancy forecasting, and tenant behavior analysis.
- b. Implement AI-powered chatbots or guided leasing assistance to improve tenant interactions and responses.

11. Audit Trail and Compliance

- a. Maintain an audit trail of all lease activities for compliance and transparency, using Salesforce's built-in tracking features.
- b. Automate compliance checks to ensure adherence to lease terms and regulatory requirements.

Concepts in Lease Management

Data Model Customization

- Design a lease management data model that includes relationships between leases, properties, tenants, and financial records.

Automation and Workflow Efficiency

- Implement process automations to streamline manual tasks, enhance productivity, and reduce human error.

Customer 360 View

- Leverage Salesforce's ability to create a comprehensive view of tenants and related interactions, ensuring a complete understanding of tenant needs and status.

Scalability and Flexibility

- Customize and scale the lease management solution as business needs evolve, ensuring it can adapt to manage growing lease portfolios or additional property types.

Integration Capabilities

Salesforce's open architecture allows it to integrate seamlessly with other systems, such as accounting platforms, property management tools, and payment gateways.

Reports and Dashboards

Custom reports can be created to monitor metrics such as lease occupancy rates, rent collection, and upcoming renewals. Dashboards provide a real-time snapshot of performance indicators relevant to lease management.

4. Detailed Steps to Solution Design

lease management refers to the set of rules, calculations, and automated processes that govern how leases are managed within a system like Salesforce. This logic ensures that all aspects of lease management—such as tracking, notifications, renewals, and compliance—are handled consistently and accurately. Here are key components of business logic in lease management:

Lease Lifecycle Management

- **Definition:** Automating processes from lease creation to termination

Automated Notifications and Reminders

- **Definition:** Business logic that sends alerts related to important lease events.

Payment and Invoice Management

- **Definition:** Handling the financial aspects of leases through automated billing and payment tracking.

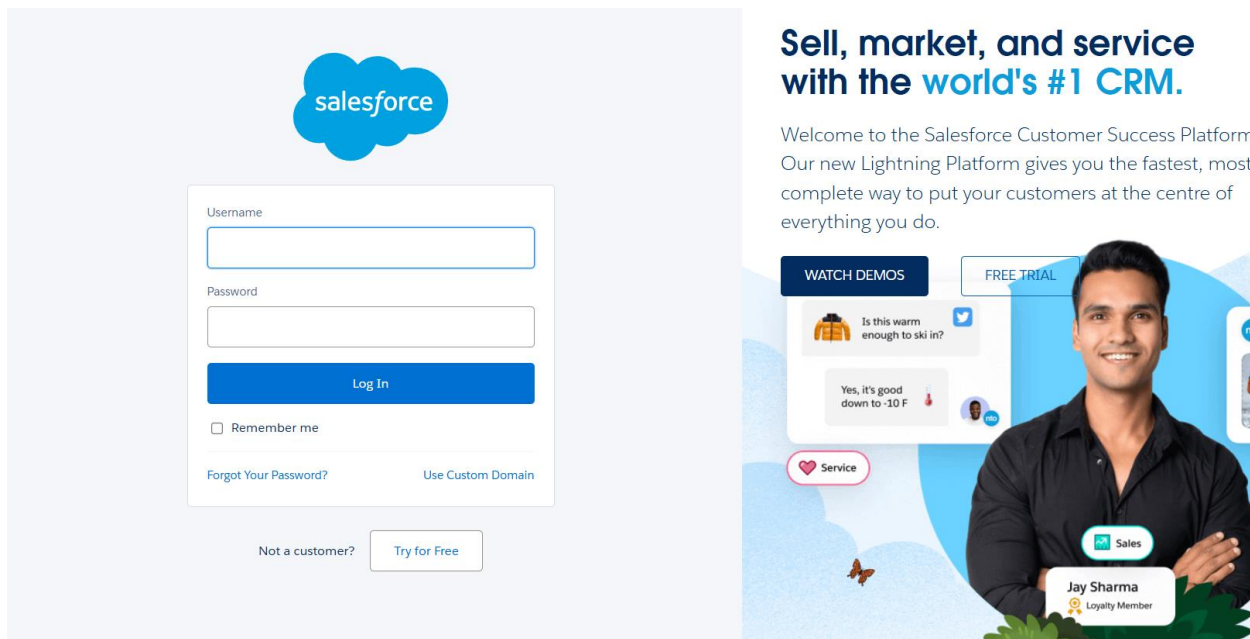
Renewal and Extension Logic

- **Definition:** Rules that handle lease renewals and extensions.

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 detail



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 5-10mins.
2. Click on Verify Account
3. Give a password and answer a security question and click on change password.

4. Then you will redirect to your Salesforce setup page.

Object

What Is an Object?

Salesforce objects are database tables that permit you to store data that is specific to an organization. What are the types of Salesforce objects

1. **Standard Objects:** Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.

Search Setup

Setup Home Object Manager

Object Manager
51+ Items, Sorted by Label

Quick Find Schema Builder Create

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Account	Account_c	Custom Object		06/11/2024	✓
Account	Account	Standard Object			
Activity	Activity	Standard Object			
Address	Address	Standard Object			
Alternative Payment Method	AlternativePaymentMethod	Standard Object			
API Anomaly Event Store	ApiAnomalyEventStore	Standard Object			
Appointment Category	AppointmentCategory	Standard Object			
Appointment Invitation	AppointmentInvitation	Standard Object			
Appointment Invitee	AppointmentInvitee	Standard Object			
Appointment Topic Time Slot	AppointmentTopicTimeSlot	Standard Object			
Asset	Asset	Standard Object			

Object Manager | Salesforce | All Activity History | New Tab

arunakengineeringcollege-4d-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/home

Search Setup

Setup Home Object Manager

Object Manager
51+ Items, Sorted by Label

Quick Find Schema Builder Create

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Account	Account_c	Custom Object		06/11/2024	✓
Account	Account	Standard Object			
Activity	Activity	Standard Object			
Address	Address	Standard Object			
Alternative Payment Method	AlternativePaymentMethod	Standard Object			
API Anomaly Event Store	ApiAnomalyEventStore	Standard Object			
Appointment Category	AppointmentCategory	Standard Object			
Appointment Invitation	AppointmentInvitation	Standard Object			
Appointment Invitee	AppointmentInvitee	Standard Object			
Appointment Topic Time Slot	AppointmentTopicTimeSlot	Standard Object			
Asset	Asset	Standard Object			

Custom Object

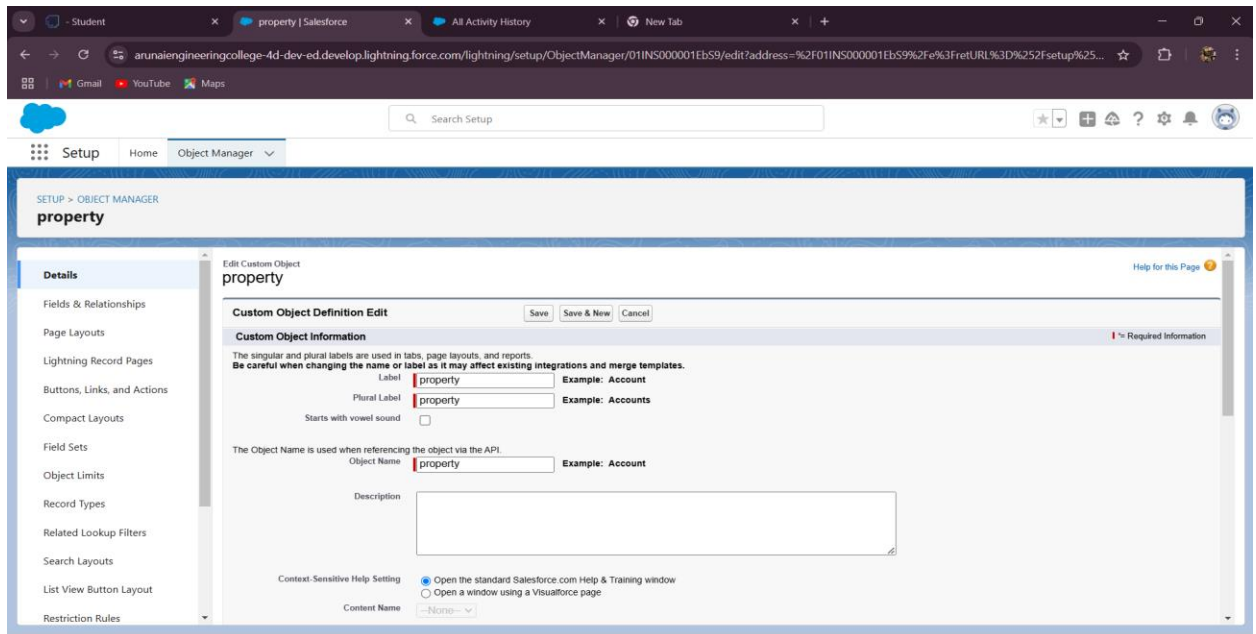
Custom Object from Custom Object

https://arunakengineeringcollege-4d-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/new

Create Property Object:

To create an object:

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



The screenshot shows the Salesforce Setup interface. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, 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 shows the 'Custom Object Definition Edit' form. The form includes fields for Label (property), Plural Label (property), Object Name (property), and a Description field. There are also checkboxes for 'Starts with vowel sound' and 'Context Sensitive Help Setting'. The 'Context Name' is set to 'None'.

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.

Create Tenant Object:

To create an object:

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

SETUP > OBJECT MANAGER

Tenant

Details

- Fields & Relationships
- 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
- Restriction Rules

Edit Custom Object

Tenant

Custom Object Definition Edit

Save Save & New Cancel

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports. Be careful when changing the name or label as it may affect existing integrations and merge templates.

Label Example: Account

Plural Label Example: Accounts

Starts with vowel sound ☐

The Object Name is used when referencing the object via the API.

Object Name Example: Account

Description

Context-Sensitive Help Setting ☒ Open the standard Salesforce.com Help & Training window ☐ Open a window using a Visualforce page

Content Name

Create Payment Object

Setup Home Object Manager

SETUP > OBJECT MANAGER

Payment for tenant

Details

- Fields & Relationships
- 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
- Restriction Rules

Edit Custom Object

Payment for tenant

Custom Object Definition Edit

Save Save & New Cancel

Custom Object Information

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Context-Sensitive Help Setting ☒ Open the standard Salesforce.com Help & Training window ☐ Open a window using a Visualforce page

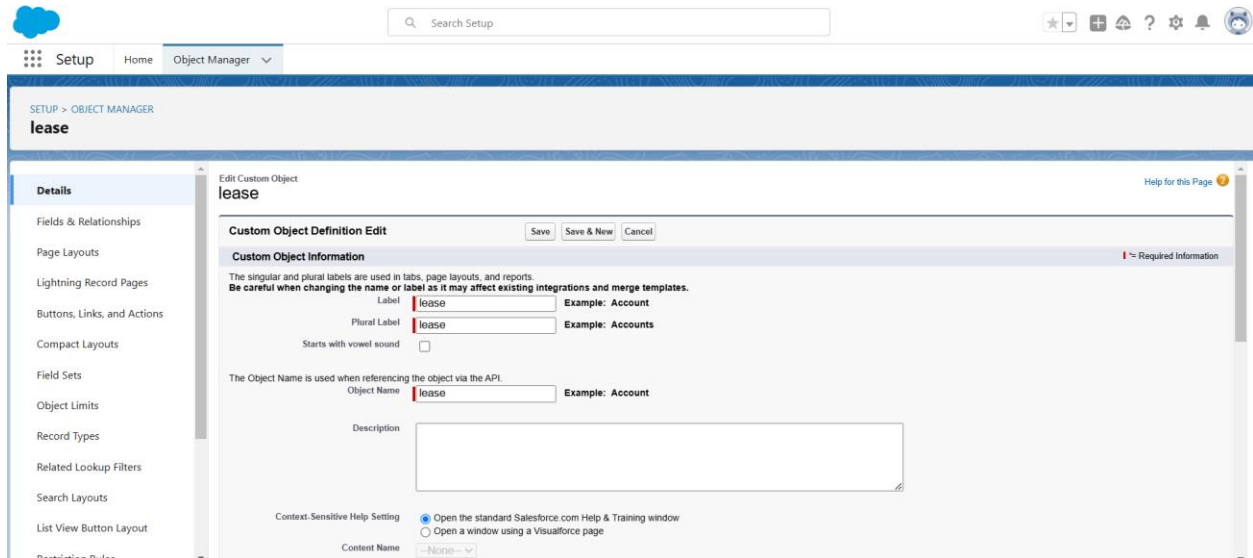
Content Name

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

Create Lease Object

To create an object:

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



The screenshot shows the Salesforce Setup page with the 'Object Manager' tab selected. The 'Custom Object Definition Edit' form for the object 'lease' is displayed. The form includes fields for Label, Plural Label, Object Name, and Description. The 'Label' field is set to 'lease', 'Plural Label' is 'leases', and 'Object Name' is 'lease'. The 'Description' field is empty. The 'Context Sensitive Help Setting' is set to 'Open the standard Salesforce.com Help & Training window'. The 'Content Name' is set to 'None'.

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

Tabs

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

Types of Tabs:

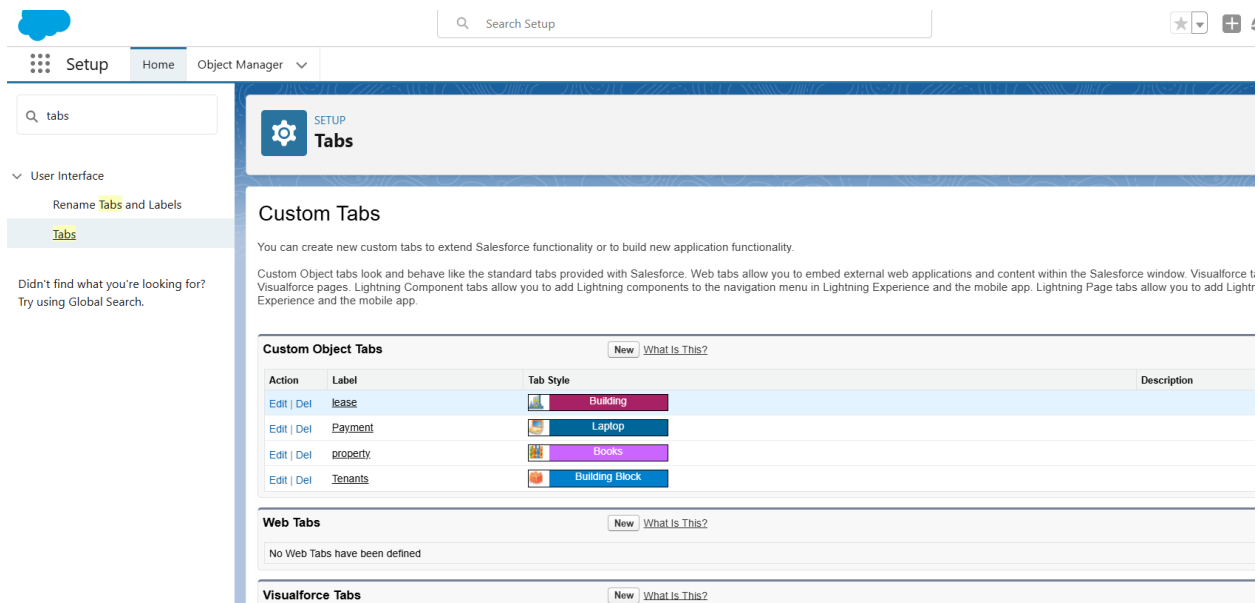
1. Custom Tabs

Custom object tabs are the user interface for custom applications that you build in salesforce.com. They look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.

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)



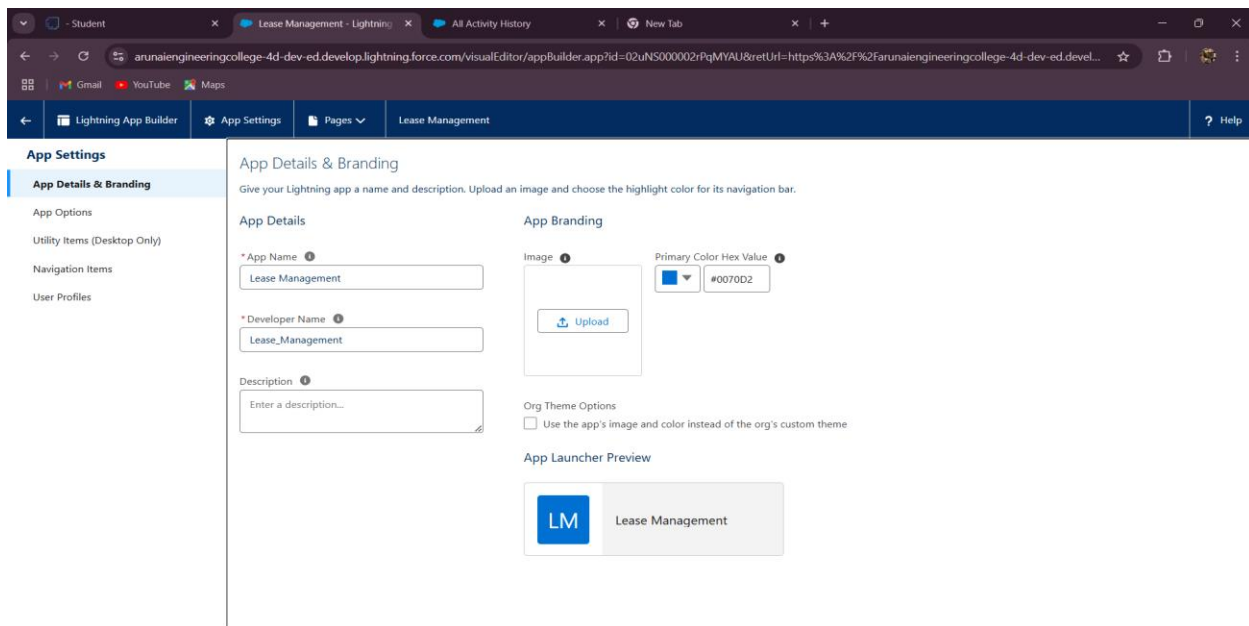
The screenshot shows the Salesforce Setup interface. The left sidebar has a search bar with 'tabs' entered. Under 'User Interface', 'Rename Tabs and Labels' is selected, and 'Tabs' is highlighted. The main content area is titled 'Custom Tabs' and includes a 'New' button and a 'What Is This?' link. Below this is a table of Custom Object Tabs:

Action	Label	Tab Style	Description
Edit Del	lease	Building	
Edit Del	Payment	Laptop	
Edit Del	property	Books	
Edit Del	Tenants	Building Block	

Below the table are sections for 'Web Tabs' (with a 'New' button and 'What Is This?' link) and 'Visualforce Tabs' (with a 'New' button and 'What Is This?' link').

The Lightning App

An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps gives users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar. Lightning apps let you brand your apps with a custom color and logo. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching between apps.



App Settings

- App Details & Branding
- App Options
- Utility Items (Desktop Only)
- Navigation Items
- User Profiles

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

* App Name ⓘ
Lease Management

* Developer Name ⓘ
Lease_Management

Description ⓘ
Enter a description...


App Branding

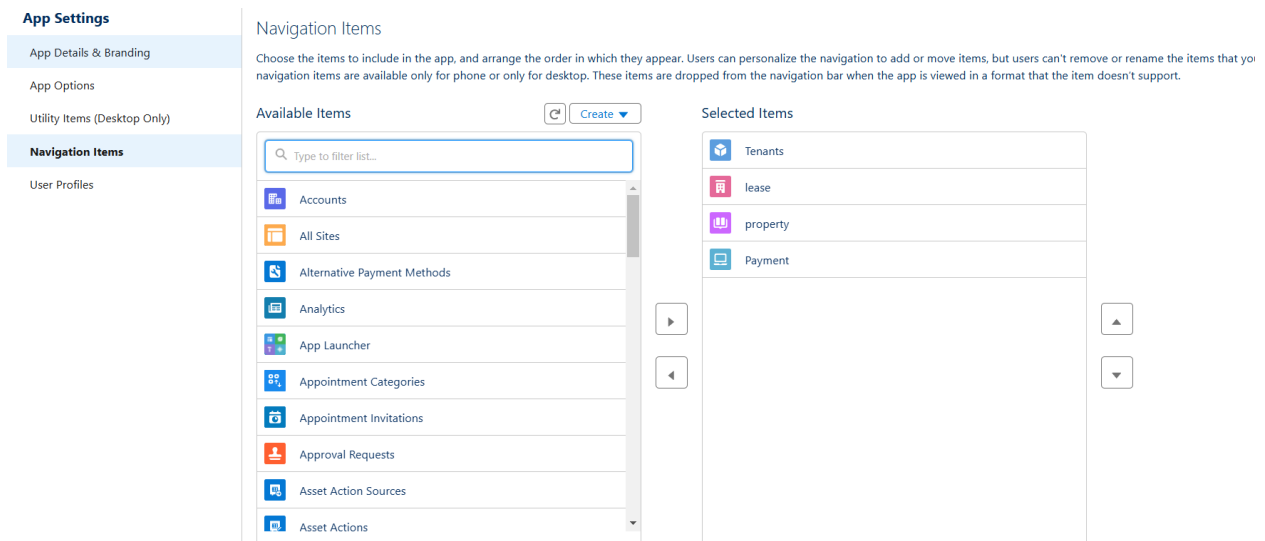
Image ⓘ
Upload

Primary Color Hex Value ⓘ
#0070D2

Org Theme Options
☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview





App Settings

- App Details & Branding
- App Options
- Utility Items (Desktop Only)
- Navigation Items**
- User Profiles

Navigation Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Available Items

Type to filter list...

- Accounts
- All Sites
- Alternative Payment Methods
- Analytics
- App Launcher
- Appointment Categories
- Appointment Invitations
- Approval Requests
- Asset Action Sources
- Asset Actions

Selected Items

- Tenants
- lease
- property
- Payment

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.

App Options

Navigation and Form Factor ⓘ

* Navigation Style

- ☒ Standard navigation
- ☐ Console navigation

* Supported Form Factors

- ☒ Desktop and phone
- ☐ Desktop
- ☐ Phone

Setup and Personalization ⓘ

Setup Experience

- ☒ Setup (full set of Setup options)
- ☐ Service Setup

App Personalization Settings

- ☐ Disable end user personalization of nav items in this app
- ☐ Disable temporary tabs for items outside of this app
- ☐ Use Omni-Channel sidebar

+Then click Next >> (App option page)Set Navigation Style as Standard Navigation >> Next.

Fields

When we talk about Salesforce, Fields represent the data stored in the columns of a relational database. It can also hold any valuable information that you require for a specific object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.

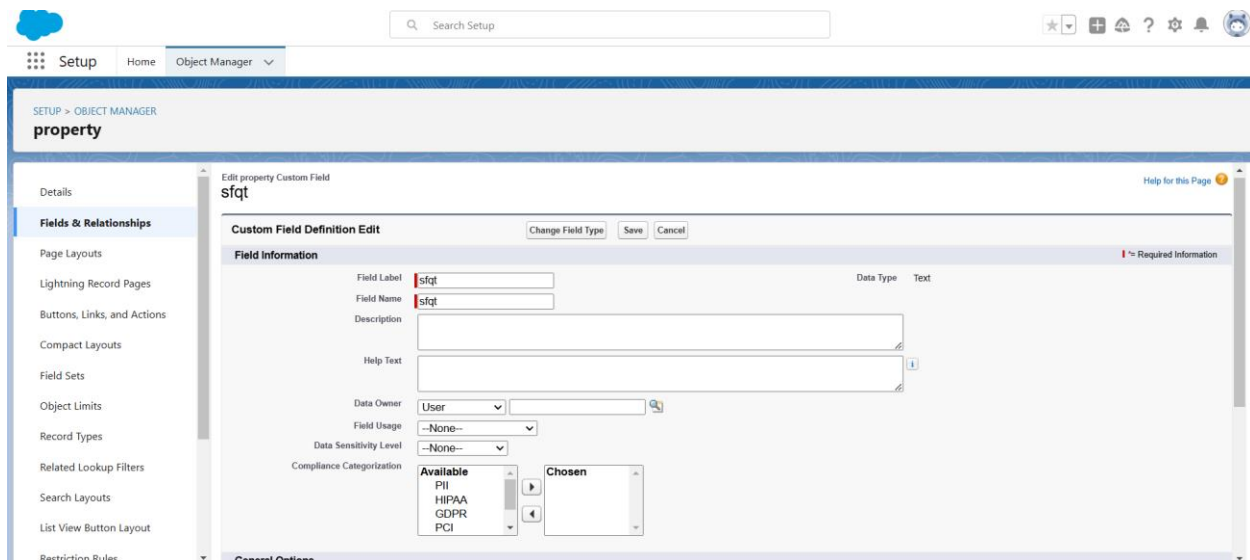
Types of Fields

1. Standard Fields
2. Custom Fields

Standard Fields:

As the name suggests, the Standard Fields are the predefined fields in Salesforce that perform a standard task. The main point is that you can't simply delete a Standard Field until it is a non-required standard field. Otherwise, users have the option to delete them at any point from the application freely. Moreover, we have some fields that you will find common in every Salesforce application.

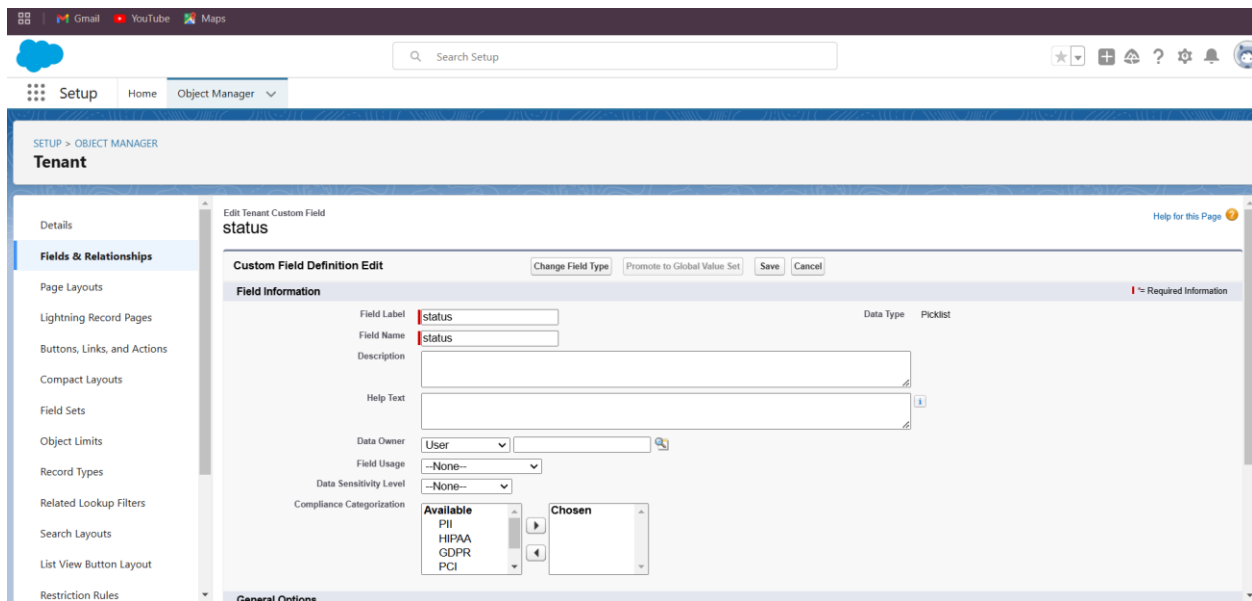
Creation of fields for the property object



The screenshot shows the Salesforce Setup interface. The breadcrumb trail is: SETUP > OBJECT MANAGER > property. The left sidebar shows the 'Fields & Relationships' section selected. The main content area is titled 'Edit property Custom Field sfqt'. Below this is the 'Custom Field Definition Edit' form. The 'Field Information' section includes fields for Field Label (sfqt), Field Name (sfqt), Description, and Help Text. The 'Data Type' is set to 'Text'. The 'Data Owner' is set to 'User'. The 'Field Usage' is set to '--None--'. The 'Data Sensitivity Level' is set to '--None--'. The 'Compliance Categorization' section shows a list of categories: PII, HIPAA, GDPR, and PCI. The 'Available' list contains PII, HIPAA, GDPR, and PCI. The 'Chosen' list is empty.

Creation of fields for the Tenant object

1. Go to setup >> click on Object Now click on "Fields & Relationships" >> New
2. Select Data type as a "phone" and Click on Next
3. t Manager >> type object name(Tenant) in search bar >> click on the object.



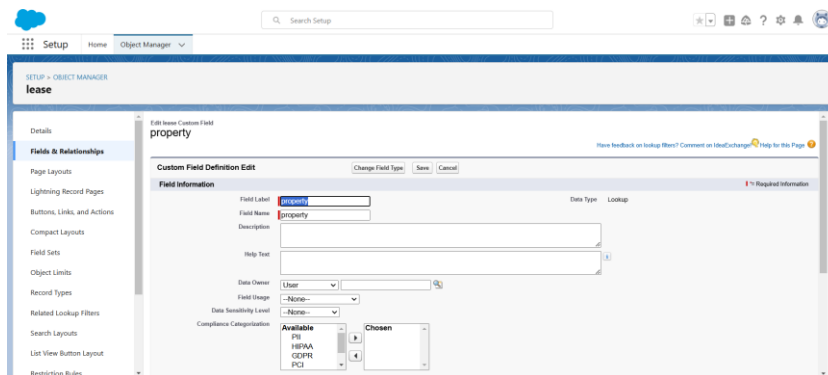
The screenshot shows the 'Edit Tenant Custom Field' interface for a field named 'status'. The field is defined with the following information:

- Field Label:** status
- Field Name:** status
- Description:** (empty)
- Help Text:** (empty)
- Data Owner:** User
- Field Usage:** --None--
- Data Sensitivity Level:** --None--
- Compliance Categorization:** Available (PII, HIPAA, GDPR, PCI) and Chosen (empty)

The interface includes a sidebar with navigation options like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The top navigation bar shows 'Setup', 'Home', and 'Object Manager'.

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



The screenshot shows the 'Edit lease Custom Field' interface for a field named 'property'. The field is defined with the following information:

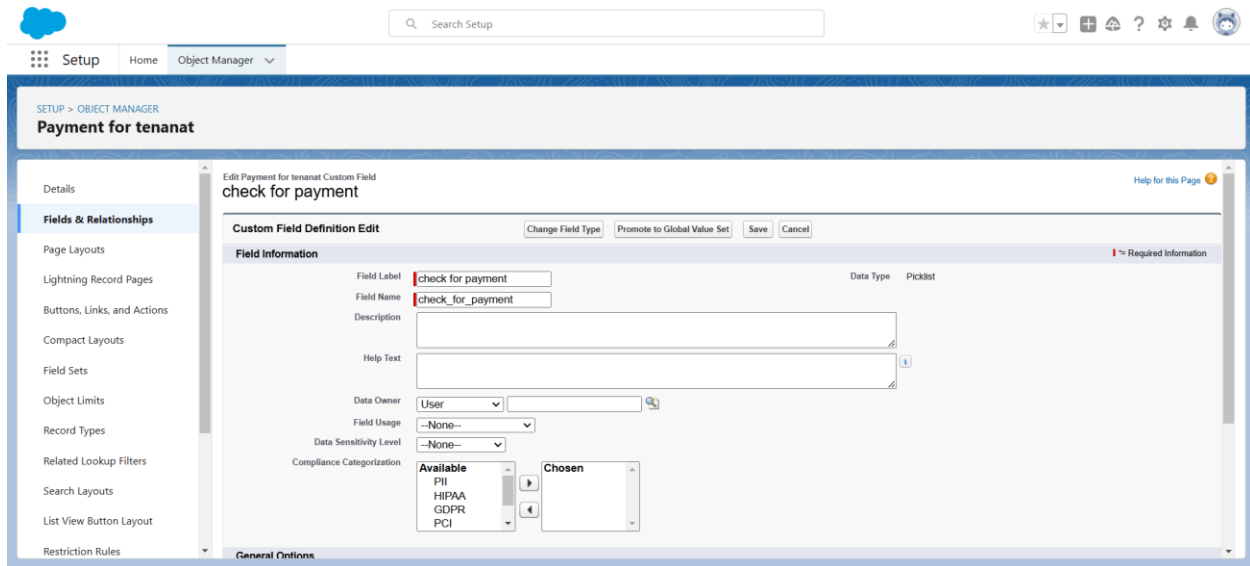
- Field Label:** property
- Field Name:** property
- Description:** (empty)
- Help Text:** (empty)
- Data Owner:** User
- Field Usage:** --None--
- Data Sensitivity Level:** --None--
- Compliance Categorization:** Available (PII, HIPAA, GDPR, PCI) and Chosen (empty)

The interface includes a sidebar with navigation options like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The top navigation bar shows 'Setup', 'Home', and 'Object Manager'.

Creation of fields for the Payment for tenant object

1. Go to setup >> click on Object Manager >> type object name (Payment for tenant) 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



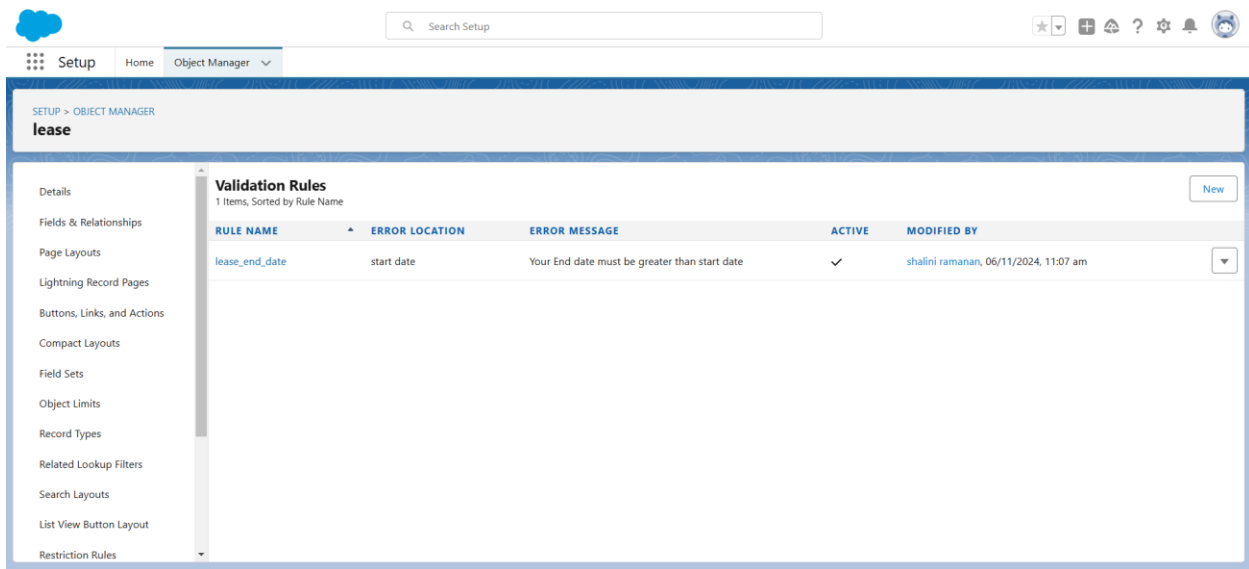
The screenshot shows the 'Custom Field Definition Edit' page for a field named 'check for payment'. The page is part of the 'Payment for tenant' object manager. The left sidebar lists various setup options, with 'Fields & Relationships' currently selected. The main area contains a form with the following fields:

- Field Label:** check for payment
- Field Name:** check_for_payment
- Description:** (empty text box)
- Help Text:** (empty text box)
- Data Owner:** User
- Field Usage:** --None--
- Data Sensitivity Level:** --None--
- Compliance Categorization:** Available (PII, HIPAA, GDPR, PCI) and Chosen (empty list)

Buttons at the top right include 'Change Field Type', 'Promote to Global Value Set', 'Save', and 'Cancel'. A 'Required Information' indicator is visible on the right side of the form.

Validation rule

Validation rules are applied when a user tries to save a record and are used to check if the data meets specified criteria. If the criteria are not met, the validation rule triggers an error message and prevents the user from saving the record until the issues are resolved.



SETUP > OBJECT MANAGER

lease

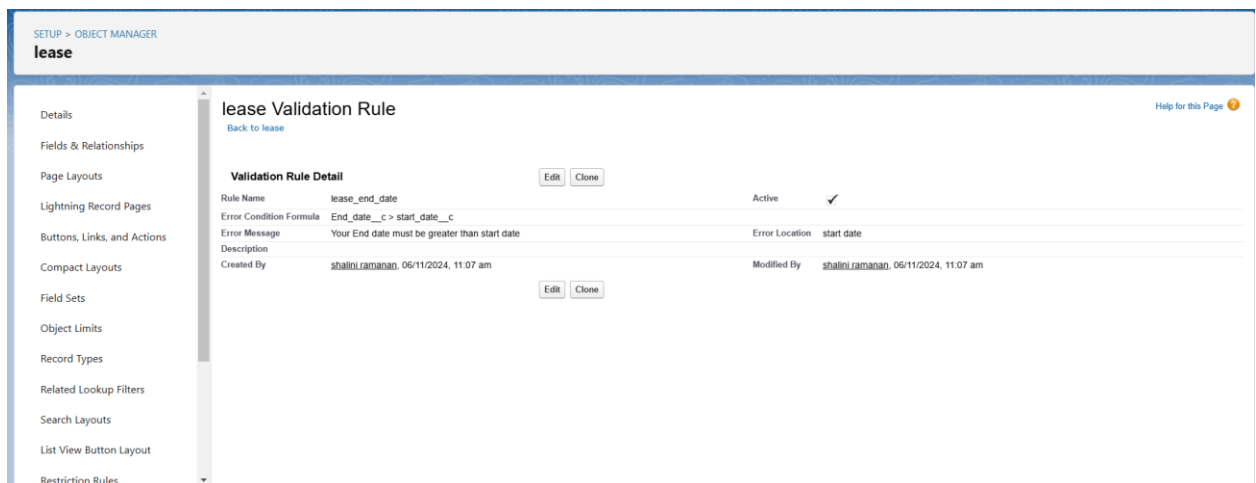
Validation Rules

1 Items, Sorted by Rule Name

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
lease_end_date	start date	Your End date must be greater than start date	✓	shalini ramanan, 06/11/2024, 11:07 am

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.



SETUP > OBJECT MANAGER

lease

lease Validation Rule

Back to lease

Validation Rule Detail

Rule Name: lease_end_date

Error Condition Formula: End_date__c > start_date__c

Error Message: Your End date must be greater than start date

Description:

Created By: shalini ramanan, 06/11/2024, 11:07 am

Modified By: shalini ramanan, 06/11/2024, 11:07 am

Active: ✓

Error Location: start date

3. Enter the Rule name as “ lease_end_date”.
4. Insert the Error Condition Formula as :
End_date__c > start_date__c

Email Templates

Create Email Template For Tenant Leaving

To create Email Template:

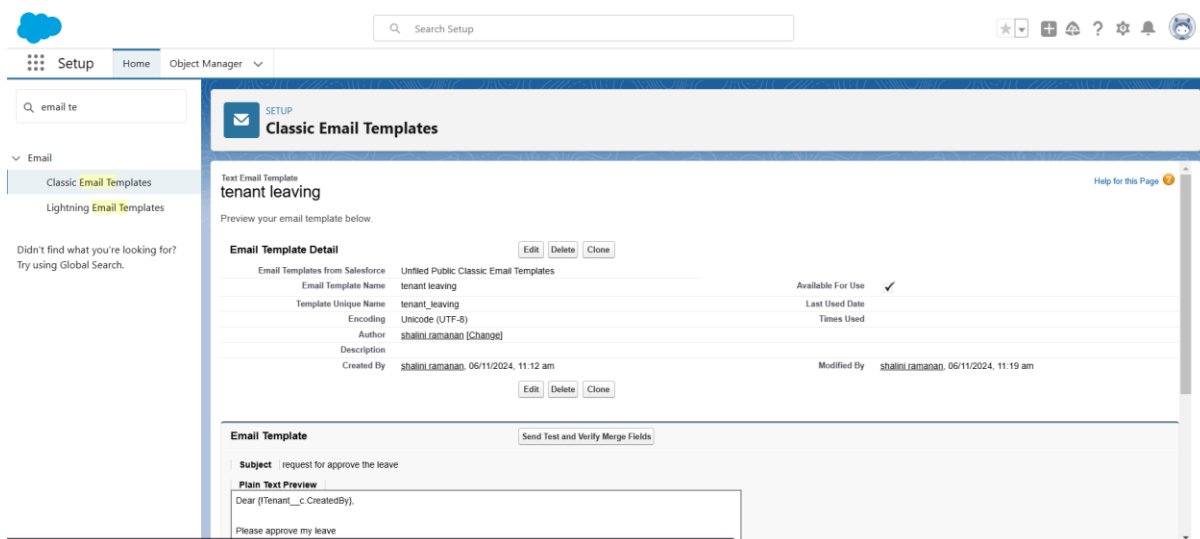
1. Go to setup in quick find box enter email template >> click on classic Email Template.

2. Click on >> New Email Template====>Choose text

Folder : Unfiled public Classic Email templates

Click on available for use

3. Email Template Name is “tenant leaving”



The screenshot displays the Salesforce 'Classic Email Templates' setup page. The left sidebar shows the navigation menu with 'Setup' selected. The main content area is titled 'Classic Email Templates' and shows the details for a template named 'tenant leaving'. The details include:

- Email Template Name:** tenant leaving
- Template Unique Name:** tenant_leaving
- Encoding:** Unicode (UTF-8)
- Author:** shalini.ramanan (Change)
- Description:** shalini.ramanan, 06/11/2024, 11:12 am
- Created By:** shalini.ramanan, 06/11/2024, 11:12 am
- Modified By:** shalini.ramanan, 06/11/2024, 11:19 am
- Available For Use:** Yes (checked)
- Last Used Date:** Times Used

Below the details, there is a section for the email template content:

Email Template [Send Test and Verify Merge Fields]

Subject: request for approve the leave

Plain Text Preview: Dear {Tenant__c.CreatedBy},
Please approve my leave

Create Email Template For Leave Approved

The screenshot shows the Salesforce Setup interface for Classic Email Templates. The left sidebar has a search bar with 'email te' and a list of options including 'Classic Email Templates'. The main content area is titled 'Classic Email Templates' and shows the details for a template named 'Leave approved'. The 'Email Template Detail' section includes fields for 'Email Template Name', 'Template Unique Name', 'Encoding', 'Author', 'Description', 'Created By', and 'Modified By'. The 'Email Template' section shows the 'Subject' and 'Plain Text Preview' of the email template.

Email Template Detail

Field	Value
Email Template Name	Leave approved
Template Unique Name	Leave_approved
Encoding	Unicode (UTF-8)
Author	shalini.ramanan [Change]
Description	
Created By	shalini.ramanan, 06/11/2024, 11:13 am
Modified By	shalini.ramanan, 06/11/2024, 11:18 am

Email Template

Subject Leave approved

Plain Text Preview

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

Approval Process

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.

The screenshot shows the Salesforce Setup interface for Approval Processes. The left sidebar has a search bar with 'approva' and a list of options including 'Approval Processes'. The main content area is titled 'Approval Processes' and shows the details for a process named 'Tenant: check for vacant'. The 'Process Definition Detail' section includes fields for 'Process Name', 'Unique Name', 'Description', 'Entry Criteria', 'Record Eligibility', 'Approval Assignment Email Template', 'Initial Submitters', and 'Created By'. The 'Initial Submission Actions' section shows a table of actions.

Process Definition Detail

Field	Value
Process Name	check for vacant
Unique Name	check_for_vacant
Description	Tenant: status NOT EQUAL TO Leaving
Entry Criteria	Administrator OR Current Approver
Record Eligibility	Allow Submitters to Recall Approval Requests
Approval Assignment Email Template	
Initial Submitters	Tenant Owner, User, shalini.ramanan
Created By	shalini.ramanan, 13/11/2024, 10:01 am
Modified By	shalini.ramanan, 14/11/2024, 7:21 pm

Initial Submission Actions

Action	Type	Description
Record Lock		Lock the record from being edited
Email Alert		PLEASE APPROVE THE REQUEST

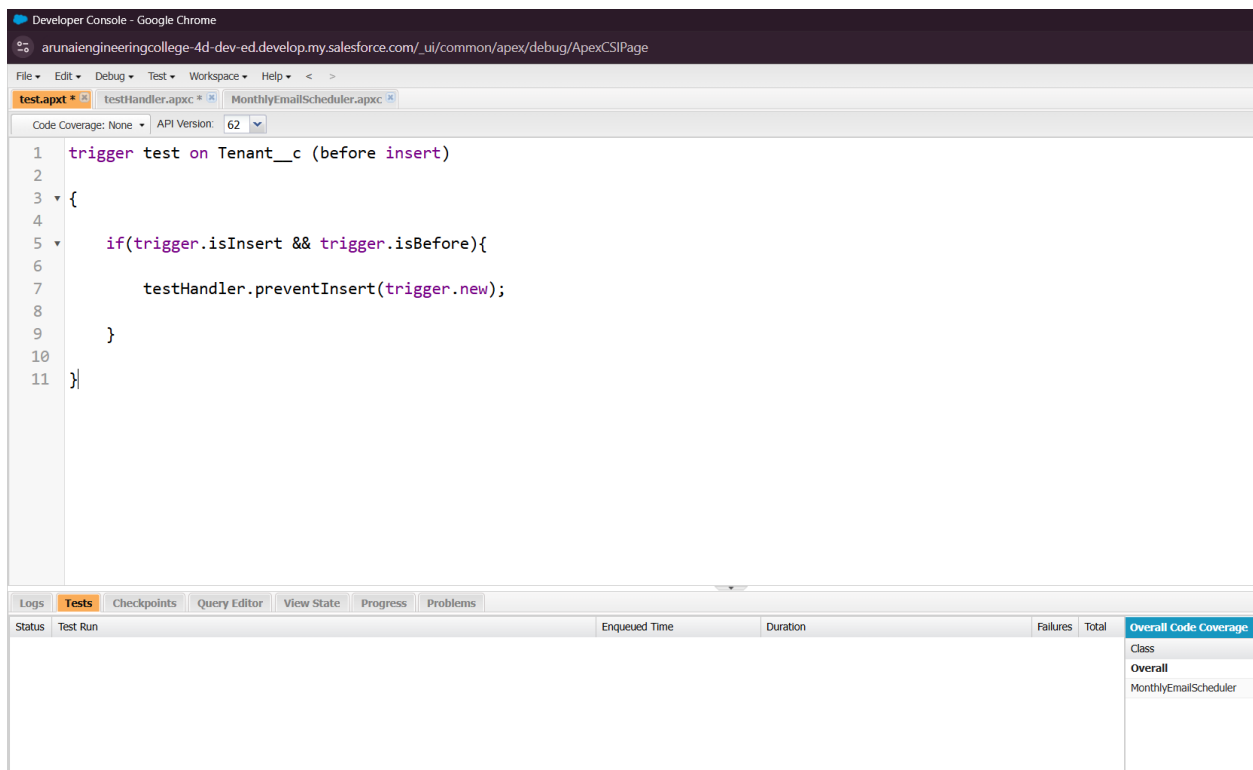
Manage Approval Process For >> "Tenant" from the drop down.

5. Testing and Validation

UNIT TESTING

Apex Trigger

1. To create a new Apex Class follow the below steps:
Click on the file >> New ? Apex Class.



The screenshot shows the Salesforce Developer Console interface. The top bar indicates the user is logged in as 'arunaiengineeringcollege-4d-dev-ed.develop.my.salesforce.com'. The editor displays an Apex Trigger named 'test.apxt' with the following code:

```

1  trigger test on Tenant__c (before insert)
2
3  {
4
5      if(trigger.isInsert && trigger.isBefore){
6
7          testHandler.preventInsert(trigger.new);
8
9      }
10
11 }

```

Below the code editor, the 'Tests' tab is active, showing a table of test run results:

Status	Test Run	Enqueued Time	Duration	Failures	Total	Overall Code Coverage
						Class
						Overall
						MonthlyEmailScheduler

Trigger Code:

```

trigger test on Tenant__c (before insert)
{
    if(trigger.isInsert && trigger.isBefore){
        testHandler.preventInsert(trigger.new);
    }
}

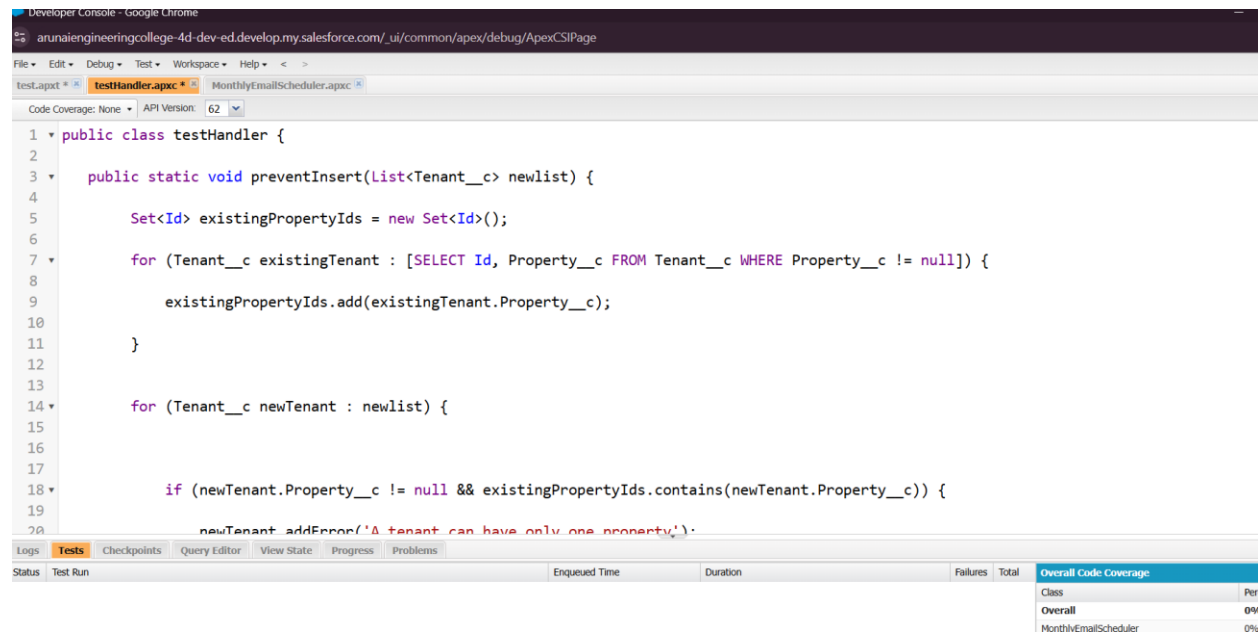
```


an Apex Handler class

To create a new Apex Class follow the below steps:

Click on the file >> New >> Apex Class.

2. Enter class name as testHandler.



```

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         for (Tenant__c newTenant : newList) {
14
15
16
17             if (newTenant.Property__c != null && existingPropertyIds.contains(newTenant.Property__c)) {
18
19                 newTenant.addError('A tenant can have only one property');
20
21             }
22         }
23     }
24 }

```

Status	Test Run	Enqueued Time	Duration	Failures	Total	Overall Code Coverage
						Class
						Overall
						MonthlyEmailScheduler

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);
        }

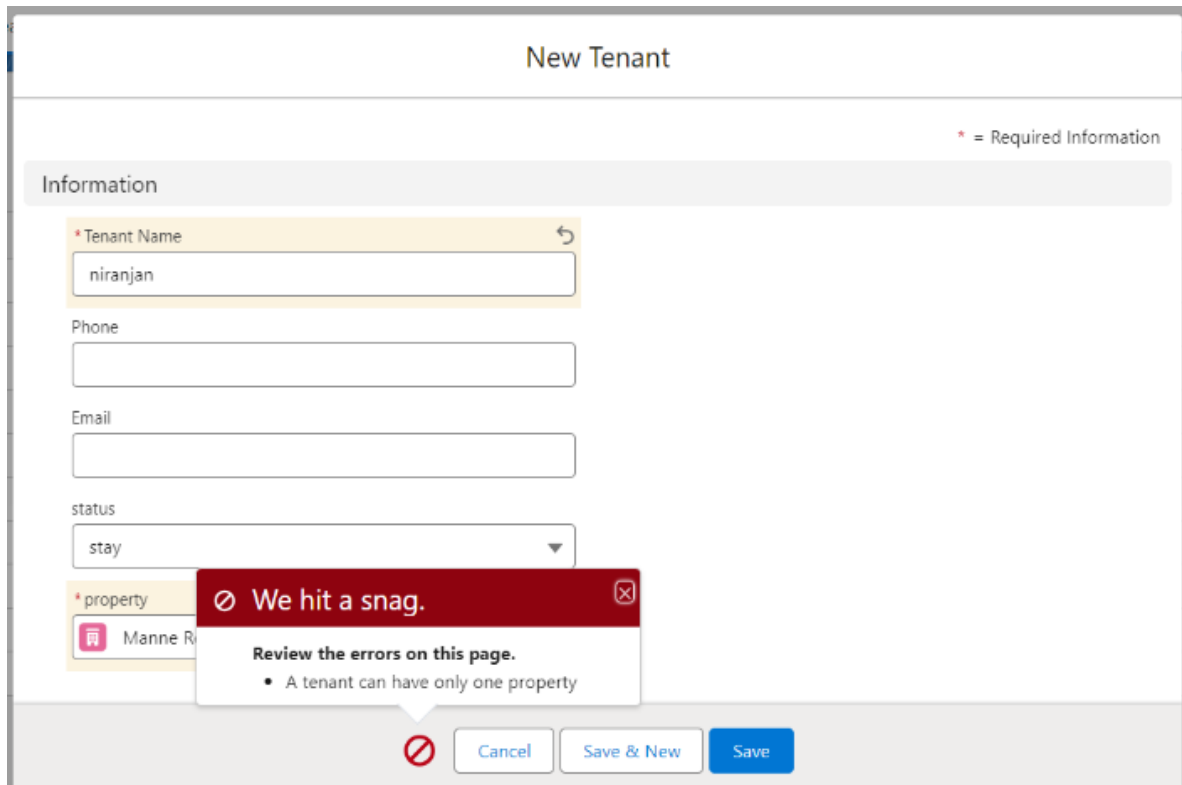
        for (Tenant__c newTenant : newList) {

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

```

Testing the Trigger

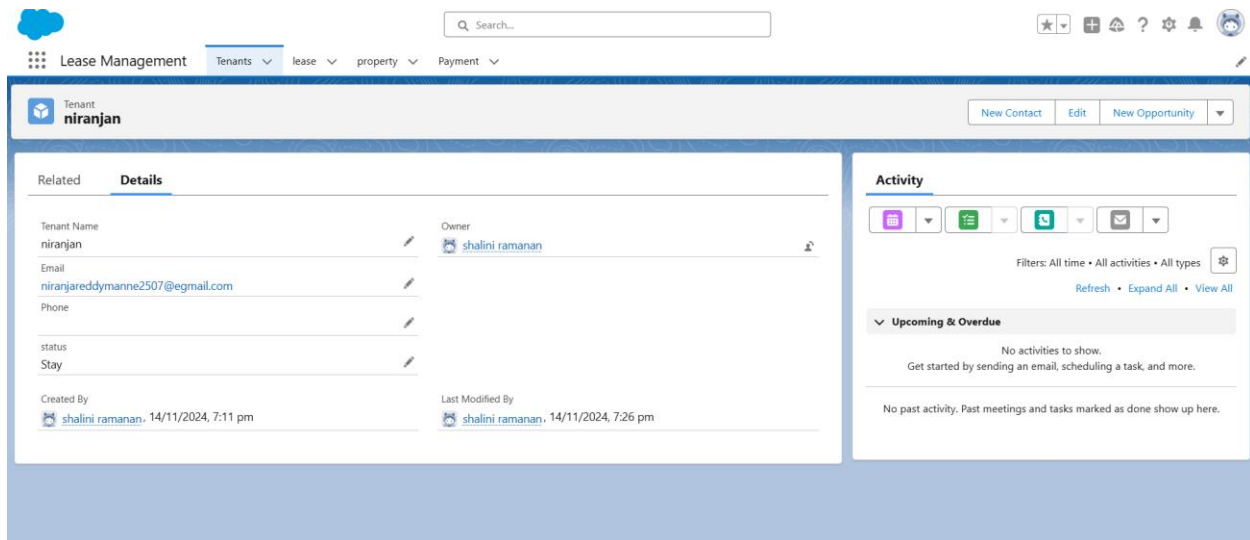
Try to create new tenant with the existing property then it shows the error



The screenshot shows a web form titled "New Tenant". The form has a header section with the title and a legend indicating that an asterisk (*) denotes required information. Below the header is a section titled "Information" containing several input fields: "Tenant Name" (with the value "niranjan"), "Phone", "Email", and a "status" dropdown menu (set to "stay"). The "property" field is also present, showing a selection for "Manne R". A red error message box is overlaid on the form, stating "We hit a snag." and "Review the errors on this page." with a bullet point indicating "A tenant can have only one property". At the bottom of the form, there are three buttons: "Cancel", "Save & New", and "Save".

User Interface Testing.

Testing the approval process



1. UI Testing Objectives

- Verify that the interface is intuitive and easy to navigate.
- Ensure that all UI components such as forms, buttons, and dashboards work as intended.
- Confirm that data input and retrieval are accurate and user interactions trigger the appropriate backend processes.
- Check for visual consistency and adherence to design standards.

2. Components to Test

2.1 Lease Record Page

- **Forms:** Verify that input forms for lease details capture data correctly and validate fields as per business requirements (e.g., required fields like *Lease Start Date* and *End Date*).
- **Tabs and Sections:** Ensure that sections displaying property and tenant information load correctly and show accurate, real-time data.

6. Key Scenarios Addressed by Salesforce in the Implementation Project

Salesforce provides a robust platform to address a variety of use cases and scenarios in lease management, ensuring efficient, automated, and transparent processes. Here, we outline the key scenarios Salesforce can handle during the implementation of lease management:

1. Lease Creation and Onboarding

- **Use Case:** Streamlining the process of creating and onboarding new lease agreements.
- **Solution:** Salesforce automates data capture through customizable forms, dynamic fields, and workflows that simplify lease creation. The platform ensures that all necessary lease terms, tenant details, and property information are accurately documented.

2. Lease Renewal and Extension Management

- **Use Case:** Managing timely renewals and lease extensions.
- **Solution:** Salesforce's automated reminders and scheduling features notify leasing managers and tenants of upcoming expirations. Custom processes and workflows can be configured to automatically extend or create new leases based on predefined criteria.

3. Payment Tracking and Invoicing

- **Use Case:** Ensuring timely and accurate billing, along with tracking payment statuses.
- **Solution:** With Salesforce, invoices are generated automatically according to lease payment schedules. Integration with payment gateways allows tracking and logging of payment receipts, overdue notices, and late fees, enhancing transparency and financial accuracy.

4. Tenant Communication and Engagement

- **Use Case:** Facilitating seamless communication with tenants for updates and notifications.
- **Solution:** Salesforce provides multiple channels for tenant engagement, such as automated emails and notifications regarding lease terms, payment schedules, and maintenance updates. The platform's communication tools ensure tenants are informed and interactions are logged for easy follow-up.

5. Lease Compliance and Regulatory Checks

- **Use Case:** Adhering to lease regulations and legal compliance.
- **Solution:** Salesforce incorporates validation rules and automated workflows to check that leases comply with local and federal regulations. These include rent increase limits, notification requirements, and other legal standards to minimize risk.

6. Maintenance and Issue Tracking

- **Use Case:** Managing and tracking maintenance requests related to leased properties.
- **Solution:** Salesforce allows for the creation of cases tied to lease records for maintenance requests, ensuring they are prioritized and resolved efficiently. The platform tracks service-level agreements (SLAs) and provides visibility into issue status and resolution.

7. Reporting and Analytics

- **Use Case:** Generating detailed reports for lease performance, tenant payment history, and occupancy rates.
- **Solution:** Salesforce's built-in reporting and dashboard features enable real-time insights into key performance indicators (KPIs). Customizable reports provide leasing managers with data on revenue forecasts, upcoming renewals, and outstanding payments.

7. Conclusion

Summary of Achievements:

The implementation of Salesforce for lease management has led to significant improvements in the approval request testing process. Automated workflows, custom validation rules, and structured

approval paths ensure that lease-related approval requests are handled with speed and accuracy.

- **Organized Data Management:**
Custom objects, fields, and tabs were created for structured and efficient lease tracking.
- **Process Automation:**
Triggers, validation rules, and scheduled classes were implemented to streamline recurring tasks, including monthly payments and notifications.
- **Enhanced Communication:**
Approval workflows and email templates were designed to automate tenant communications, improving clarity and tenant satisfaction.
- **Data-Driven Decision-Making:**
Custom reports and dashboards provide stakeholders with real-time insights, enabling faster and more informed decision-making.