

Project Report on Lease Management

DEVELOPER – (Long – Term)

Introduction:

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.

Milestone – 01 : Create Salesforce Org

Go To developers.salesforce.com/signup

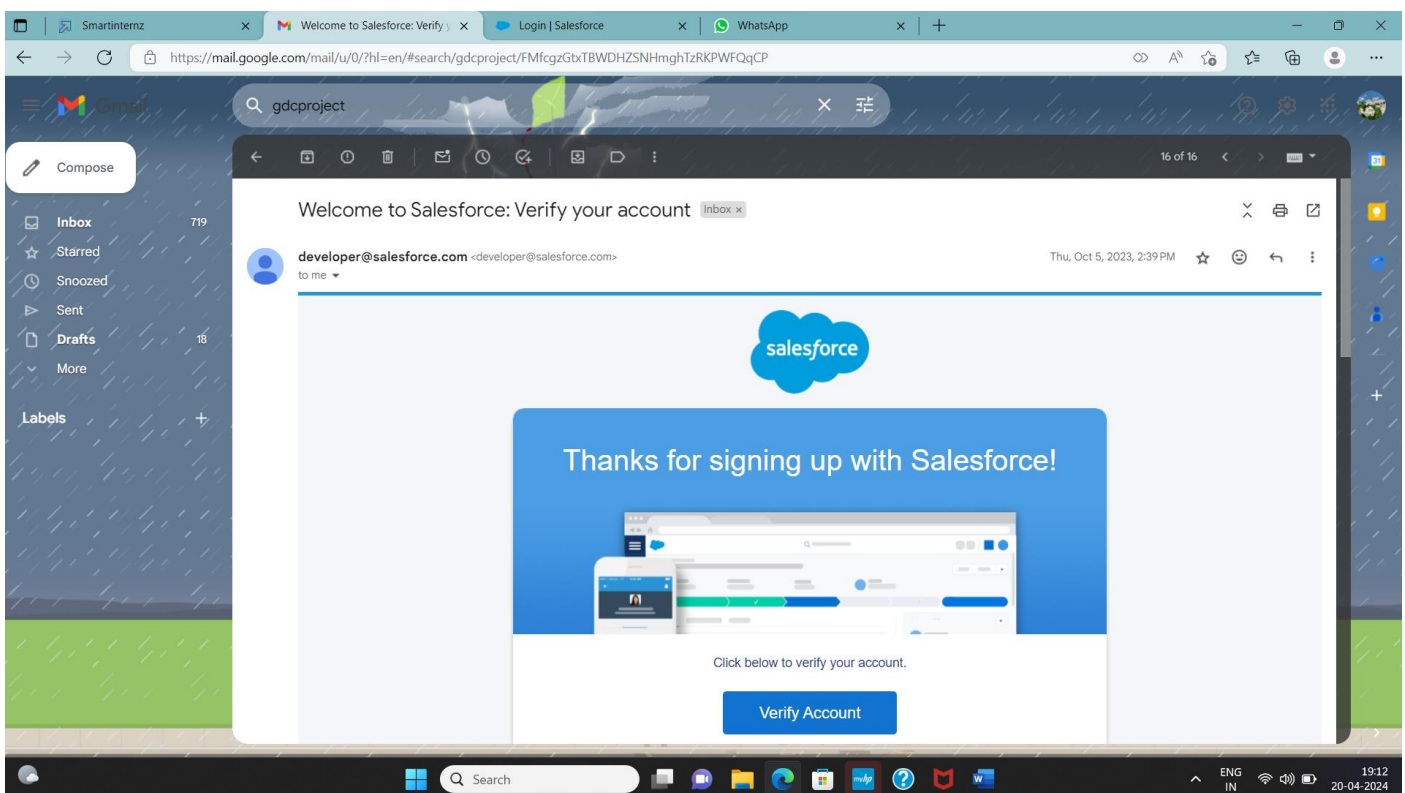
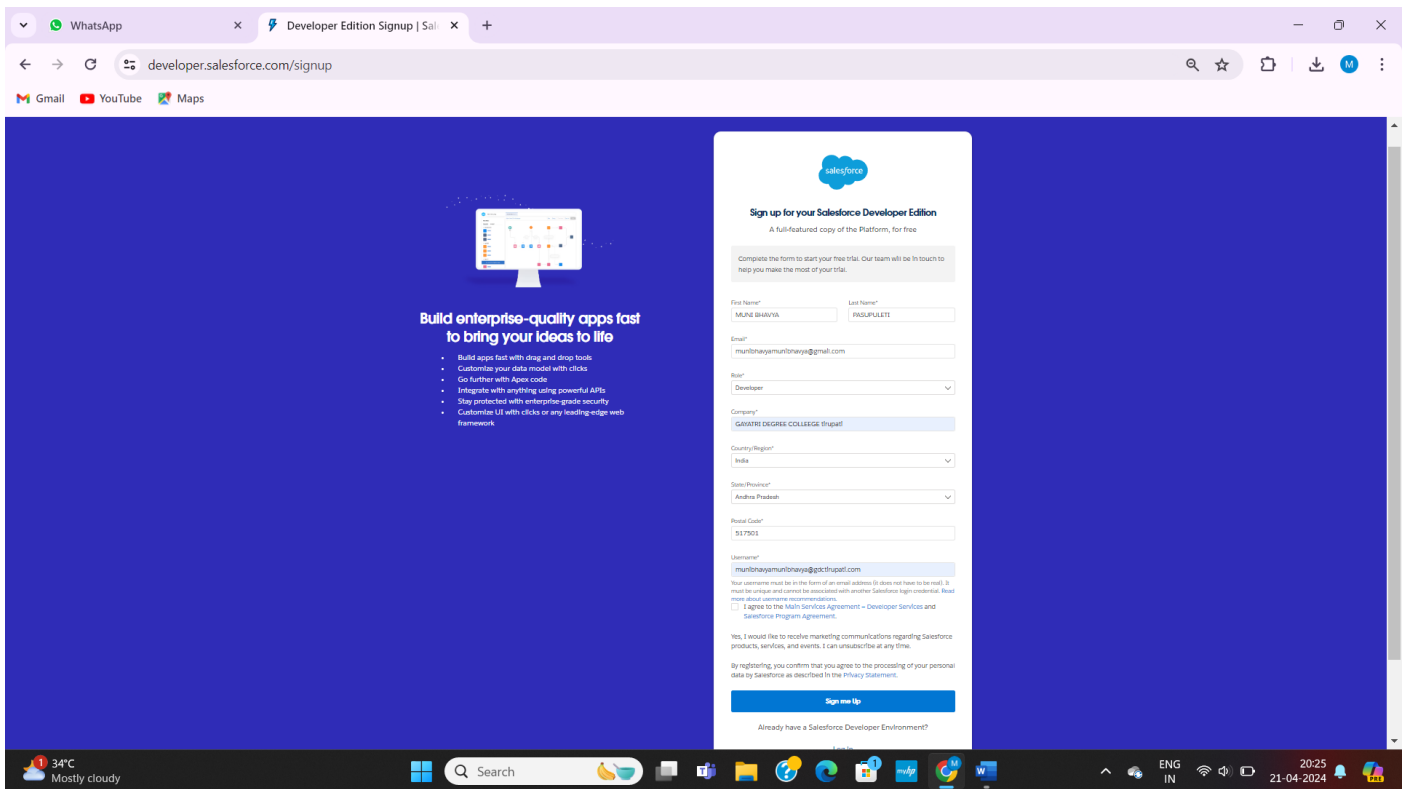
Click on sign up.

On the sign-up form, enter the following details:

1. First name & Last name – MUNI BHAVYA PASUPULETI
2. Email –munibhavyamunibhavya@gmail.com
3. Role: **Developer**
4. Company: GAYATRI DEGREE COLLEGE - TIRUPATI
5. County: India
6. Postal Code: 517501
7. Username: munibhavyamunibhavya@gdctirupati.com8. Password : Gayatri@123

Account Activation:

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, as wait,



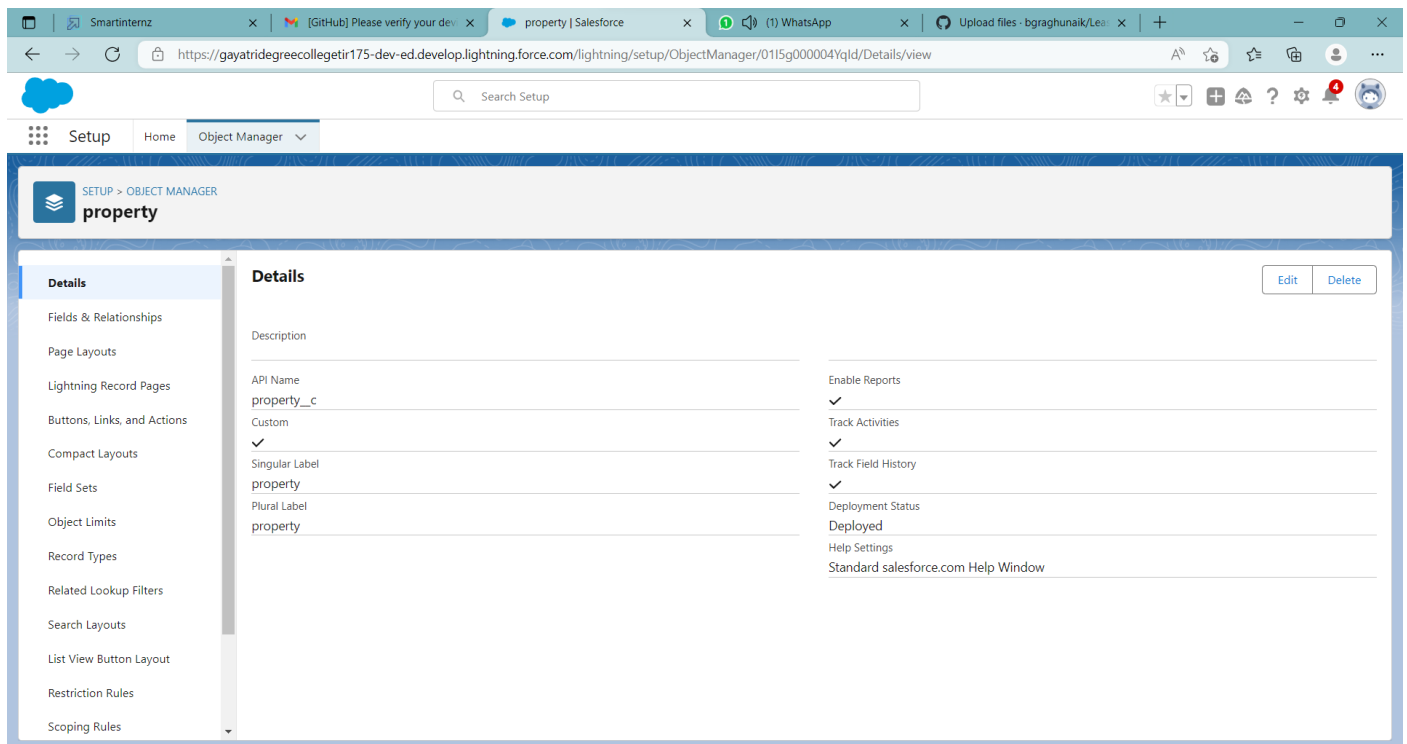
Login to Your Salesforce Account

1. Go to salesforce.com and click on login.
2. Enter the username and password that you just created.
3. After login this is the home page which you will see.

Milestone – 02: Creation of Objects :

Object – Property

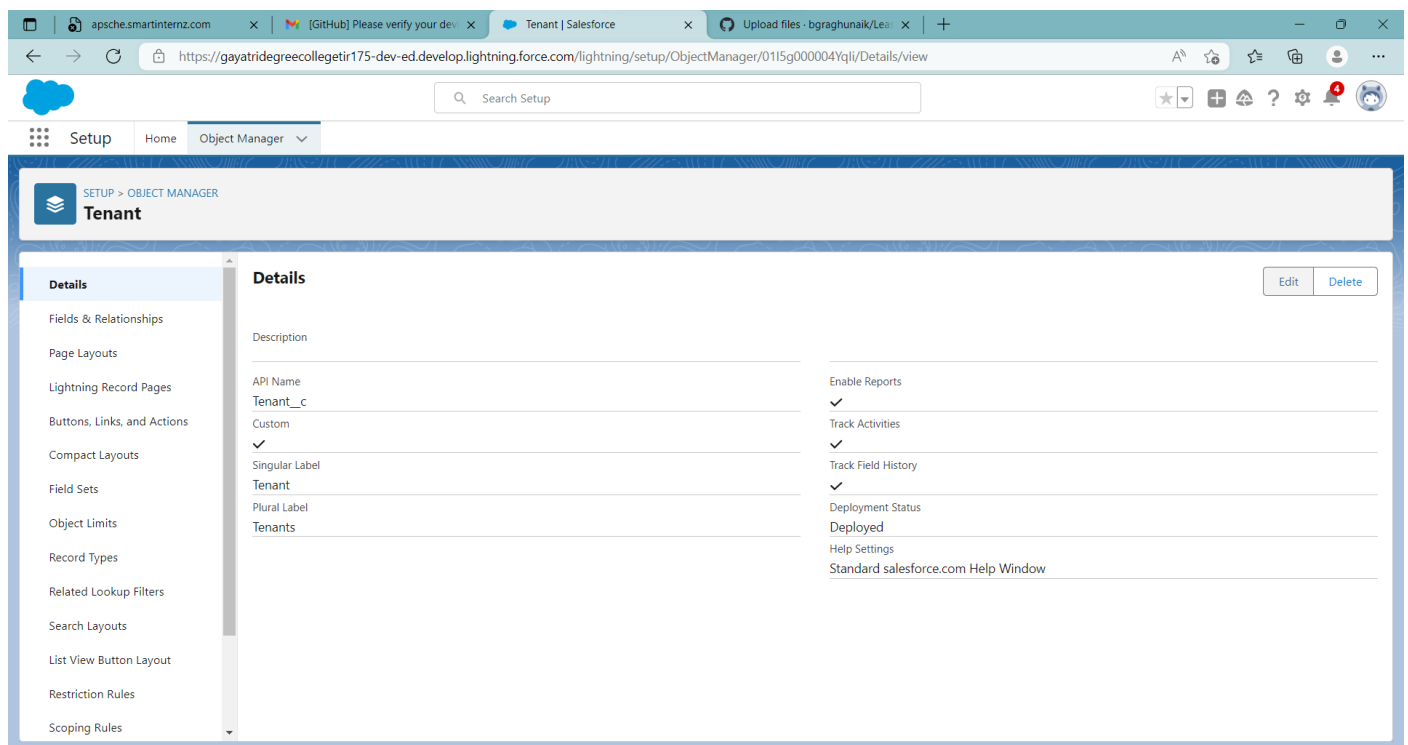
1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
5. Label: Property
6. Plural Label: Property
7. Record Name: Property Name
8. Check the Allow Reports
9. Check the Allow Search
10. Click Save



Object – Tenant

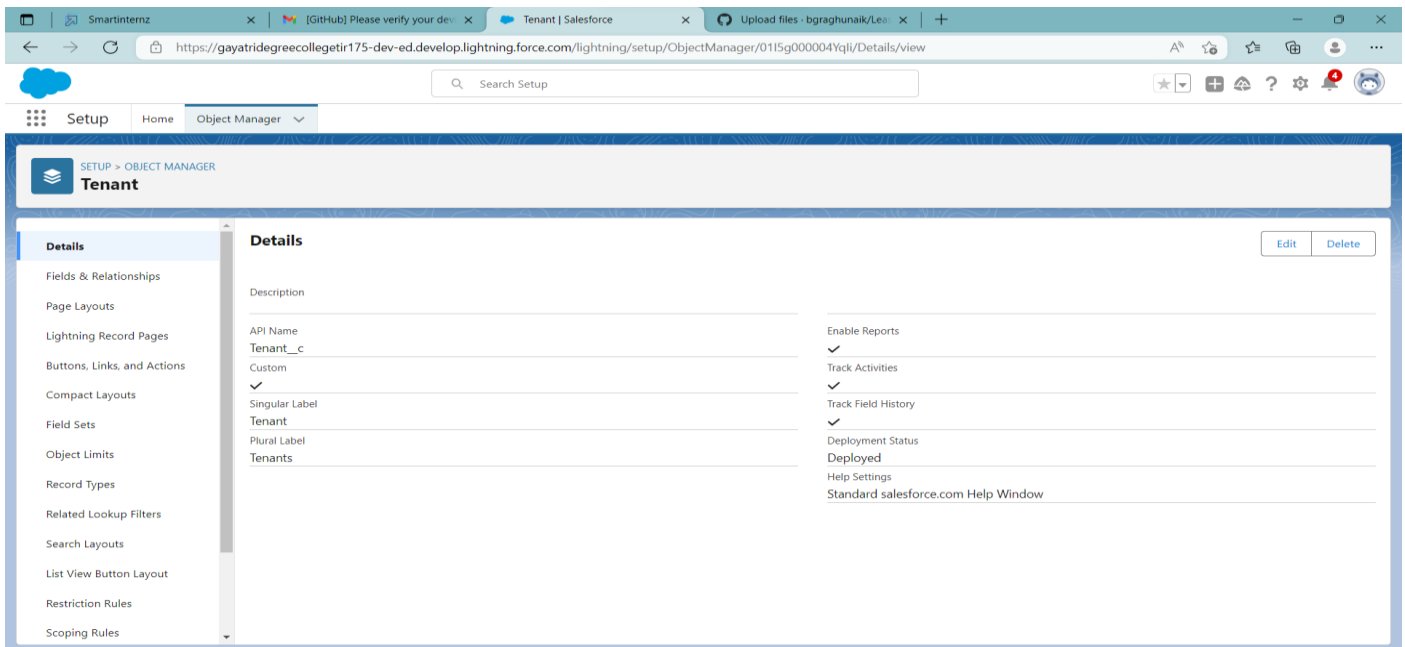
1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.

4. On the Custom Object Definition page, create the object as follows:
5. Label: Tenant
6. Plural Label: Tenants
7. Record Name: Tenant Name
8. Check the Allow Reports
9. Check the Allow Search
10. Click Save



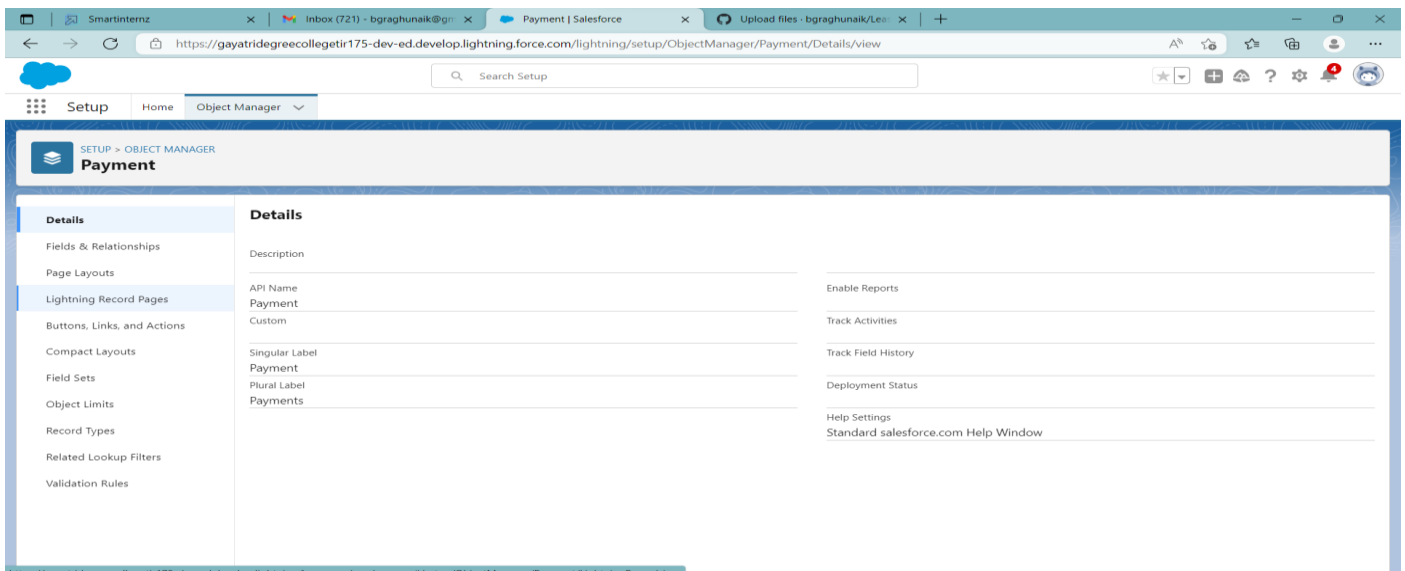
Object – Tenant

1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object
4. On the Custom Object Definition page, create the object as follows:
5. Label: Tenant
6. Plural Label: Tenants
7. Record Name: Tenant Name
8. Check the Allow Reports
9. Check the Allow Search
10. Click Save



Object – Payment for tenanat

1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
5. Label: Payment for tenanat
6. Plural Label: Payment
7. Record Name: Payment Name
8. Check the Allow Reports
9. Check the Allow Search
10. Click Save



Object – lease

1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
5. Label: lease
6. Plural Label: lease
7. Record Name: lease Name
8. Check the Allow Reports
9. Check the Allow Search
10. Click Save

Milestone – 03: What Is A Tab:

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

To create a Tab:(Property)

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

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 .

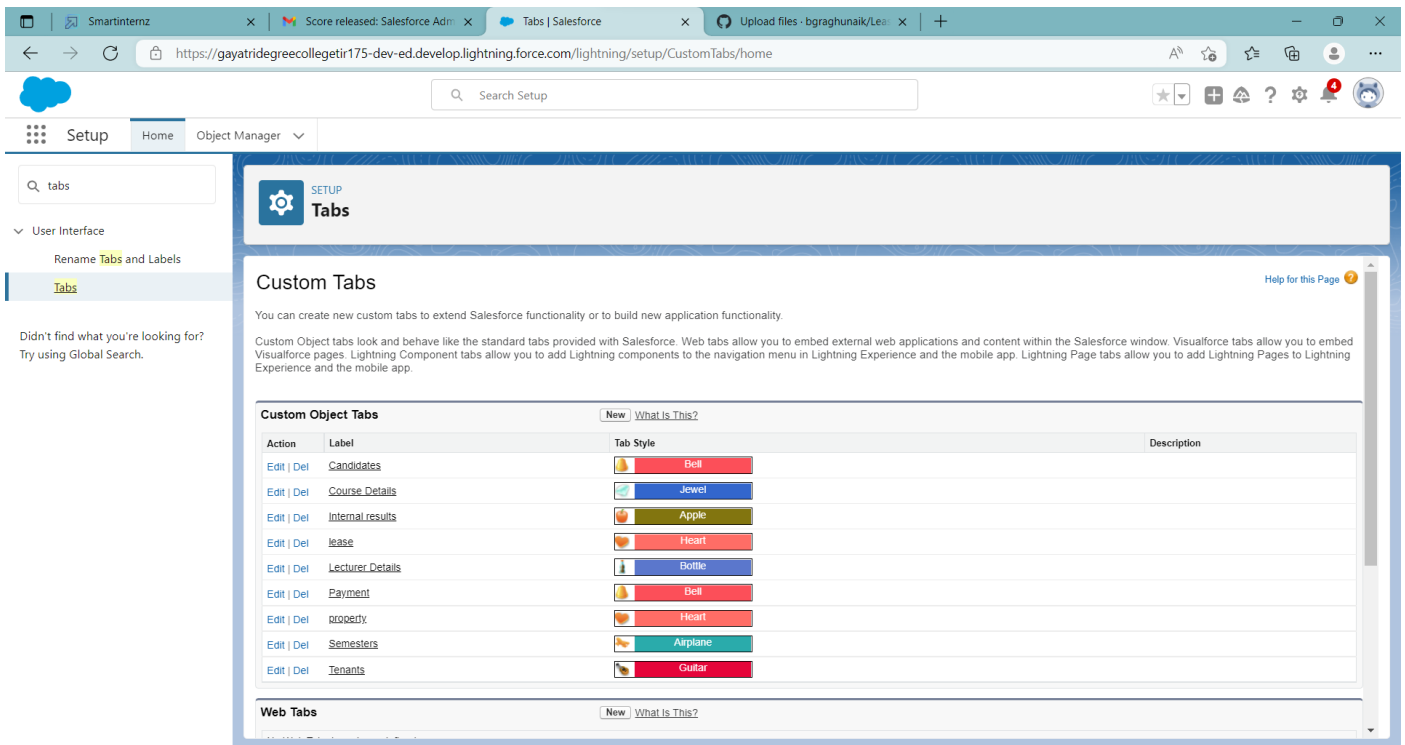
Make sure that the Append tab to users' existing personal customizations is checked.

Click save

Creating Remaining Tabs

Now create the Tabs for the remaining Objects, they are “Payment for tenant, lease, tenant”.

Follow the same steps as mentioned in Activity -1 .

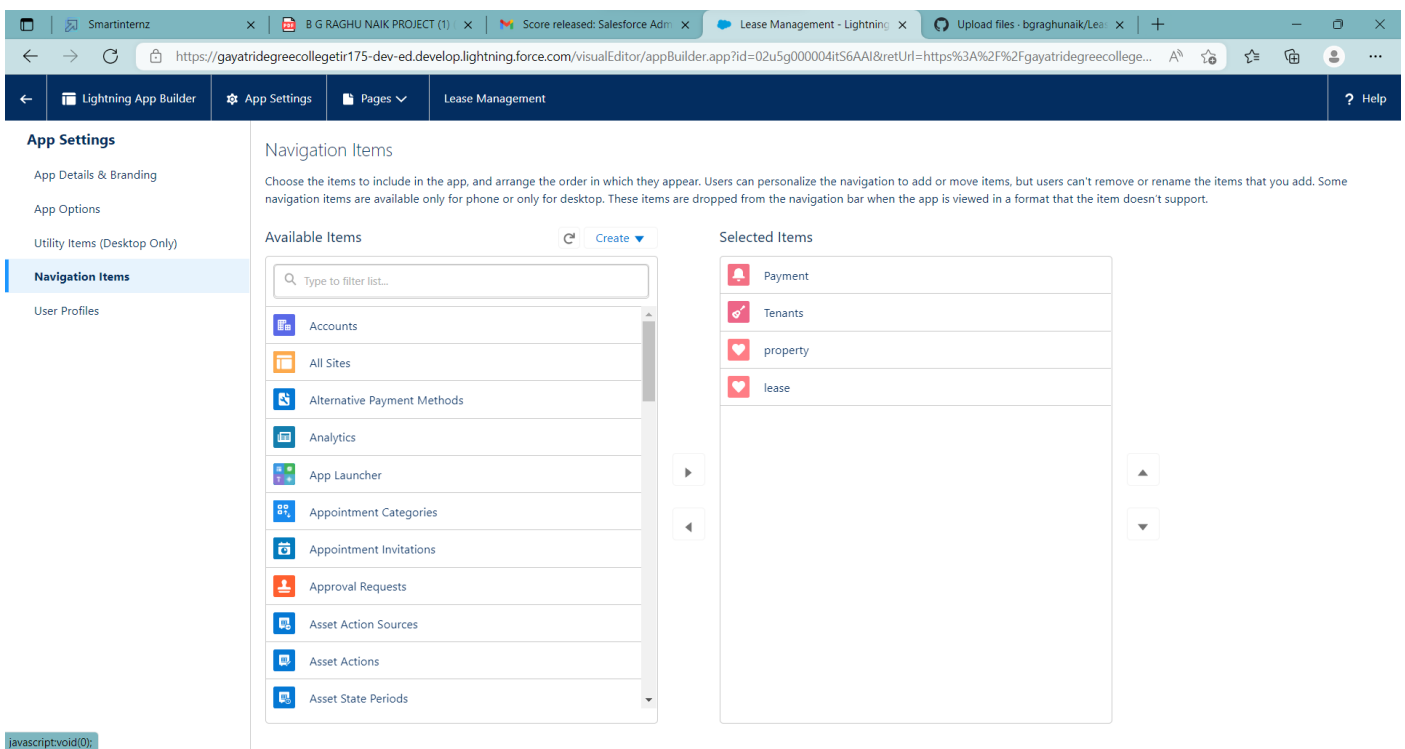
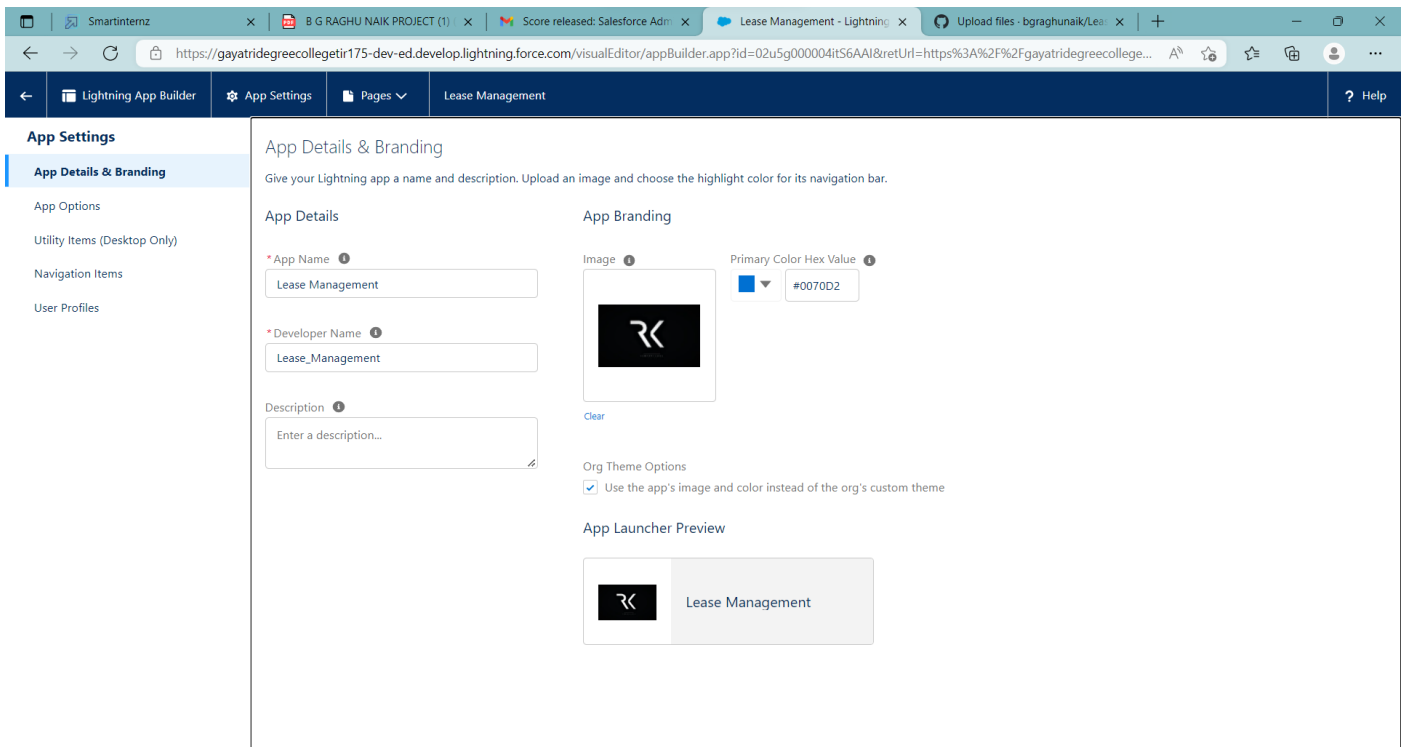


Milestone – 04: Lightning App

Create The Lease Management App

1. From Setup, enter App Manager in the Quick Find and select App Manager.
2. Click New Lightning App.
3. Enter Candidate Lease Management as the App Name, then click next
4. Under App Options, leave the default selections and click next.
5. Under Utility Items, leave as is and click Next.
6. From Available Items, Payment for tenant, Tenants, property, lease and Dashboards and move them to Selected Items.
7. Click Next.

From Available Profiles, select System Administrator and move it to Selected Profiles. Click Save & Finish



Milestone – 04: 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

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:

Field Label: Name

Field Name : gets auto generated

Length : 25

Required :check box

Click on Next >> Next >> Save and new.

2. To create another fields in an object:

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

Now click on “Fields & Relationships” >>New

Select Data type as a “Long Text” and Click on Next

Fill the Above as following:

Field Label : Address

Field Name : gets auto generated

Click on Next >> Next >> Save and new.

3. To create another fields in an object:

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

- Now click on “Fields & Relationships” >> New
- Select Data type as a “picklist” and Click on Next
- 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:

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

Now click on “Fields & Relationships” >> New

Select Data type as a “Text” and Click on Next

- Fill the Above as following:
- Field Label : sfqt
- Field Name : gets auto generated
- Length : 18
- Click on Next >> Next >> Save.

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

Click on Next >> Next >> Save and new.

To create another fields in an object:

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

Now click on “Fields & Relationships” >> New

Select Data type as a “phone” and Click on Next

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:

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

Now click on “Fields & Relationships” >>New

Select Data type as a “picklist” and Click on Next

Fill the Above as following:

Field Label : status

Field Name : gets auto generated

Enter values, with each value separated by a new line

Enter these values

Stay

Leaving

Click on Next >> Next >> Save

The screenshot shows the Salesforce Setup interface. The breadcrumb trail is 'Setup > OBJECT MANAGER'. The main heading is 'property'. The left sidebar shows the 'Fields & Relationships' section selected. The main content area displays a table of fields for the 'property' object, sorted by Field Label. The table has columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Address (Long Text Area), Created By (Lookup), Last Modified By (Lookup), Name (Text), Owner (Lookup), property Name (Text), sfqt (Text), and Type (Picklist). The 'property Name' field is marked as indexed.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Long Text Area(32768)		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Name	Name__c	Text(25)		
Owner	OwnerId	Lookup(User,Group)		✓
property Name	Name	Text(80)		✓
sfqt	sfqt__c	Text(18)		
Type	Type__c	Picklist		

Creation Of Lookup Fields

Creation of Lookup Field on Lease Object :

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

Milestone – 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.

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, Restriction Rules, and Scoping Rules. The main content area is titled 'Validation Rules' and shows a table with 1 item. The table has columns: RULE NAME, ERROR LOCATION, ERROR MESSAGE, ACTIVE, and MODIFIED BY. The row shows 'lease_end_date' as the rule name, 'start date' as the error location, 'Your End date must be greater than start date' as the error message, and a checkmark as the active status. The modified by field shows 'Raghu Naik B G, 16/04/2024, 12:08 pm'. A 'New' button is visible in the top right corner.

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
lease_end_date	start date	Your End date must be greater than start date	✓	Raghu Naik B G, 16/04/2024, 12:08 pm

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

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 shows the 'Validation Rule Edit' page in Salesforce Setup. The page title is 'lease Validation Rule'. Below the title, there is a description: 'Define a validation rule by specifying an error condition and a corresponding error message. The error condition is written as a Boolean formula expression that returns true or false. When the formula expression returns true, the save will be aborted and the error message will be displayed. The user can correct the error and try again.' The page has a 'Validation Rule Edit' section with fields for 'Rule Name' (lease_end_date), 'Active' (checked), and 'Description'. Below this is the 'Error Condition Formula' section. It includes an example: 'Example: Discount_Percent__c > 0.30' and a note: 'Display an error if Discount is more than 30%. If this formula expression is true, display the text defined in the Error Message area.' The formula field contains 'End_date__c > start_date__c'. To the right of the formula field is a 'Functions' dropdown menu showing a list of functions: ABS, ACOS, ADDMONTHS, AND, ASCII, ASIN, and a 'Quick Tips' section with a link to 'Operators & Functions'.

Milestone – Email Templates

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”
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

The screenshot displays the Salesforce 'Classic Email Templates' setup interface. The left sidebar shows the navigation menu with 'Email' selected. The main content area shows the 'tenant leaving' template. The 'Email Template Detail' section includes fields for 'Email Template Name' (tenant leaving), 'Template Unique Name' (tenant_leaving), 'Encoding' (Unicode (UTF-8)), 'Author' (Raghu Naik B.G.), 'Description' (request for approve the leave), 'Created By' (Raghu Naik B.G.), and 'Modified By' (Raghu Naik B.G.). The 'Available For Use' checkbox is checked. The 'Email Template' section shows the subject 'request for approve the leave' and the body text 'Dear {!Tenant__c.CreatedBy}, Please approve my 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 : Unfiled public Classic Email templates

Click on available for use

3. Email Template Name is “Leave approved”

4. Template Unique Name : Auto populated

5. Subject : ” Leave approved”

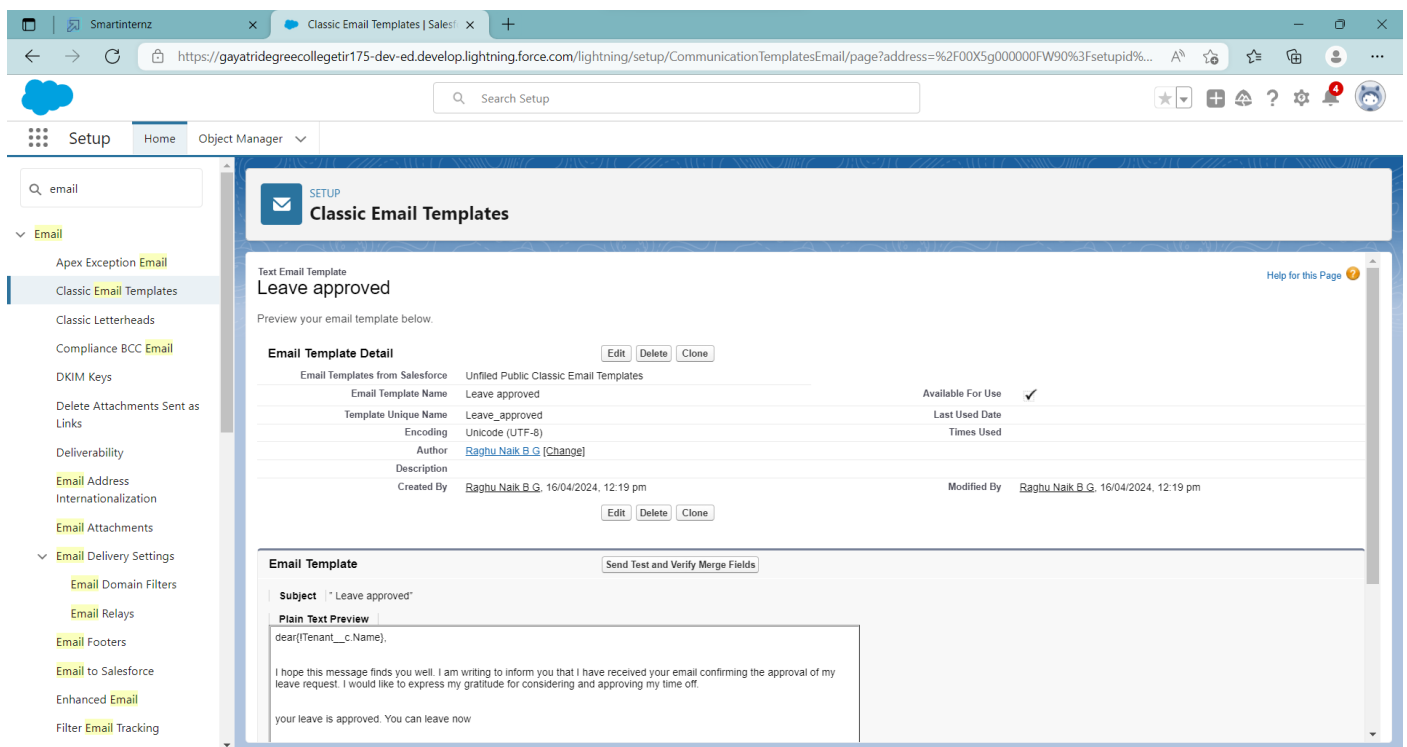
6. Email body :

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



The screenshot displays the Salesforce Classic Email Templates setup interface. The left sidebar shows the navigation menu with 'Email' selected. 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, and Description. The 'Email Template' section shows the subject and body text. The 'Plain Text Preview' section shows the rendered email body.

Email Template Detail	
Email Template Name	Leave approved
Template Unique Name	Leave_approved
Encoding	Unicode (UTF-8)
Author	Raghu Naik B.G. [Change]
Description	
Created By	Raghu Naik B.G. 16/04/2024, 12:19 pm
Modified By	Raghu Naik B.G. 16/04/2024, 12:19 pm

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 leave request. I would like to express my gratitude for considering and approving my time off.

your leave is approved. You can leave now

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 “Leave rejected”

4. Template Unique Name : Auto populated

5. Subject : ” Leave rejected”

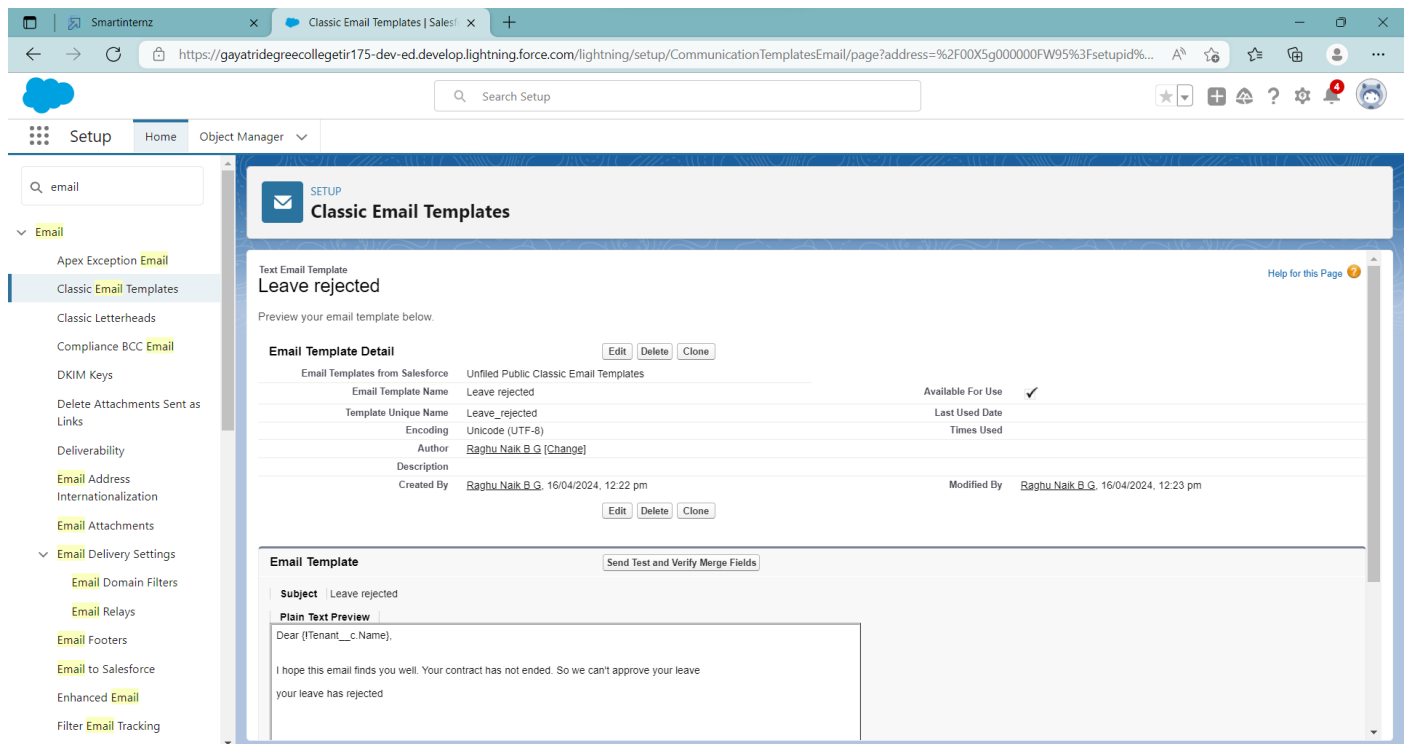
6. Email body :

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



The screenshot shows the Salesforce Classic Email Templates setup page. The left sidebar lists various setup options under the 'Email' category. The main content area displays the template name, unique name, encoding, author, and description. Below this, there is a section for the email template content, including a subject line and a plain text preview.

Classic Email Templates

Text Email Template
Leave rejected

Preview your email template below.

Email Template Detail

Field	Value
Email Template Name	Leave rejected
Template Unique Name	Leave_rejected
Encoding	Unicode (UTF-8)
Author	Raghu Naik B.G. [Change]
Description	
Created By	Raghu Naik B.G. 16/04/2024, 12:22 pm
Modified By	Raghu Naik B.G. 16/04/2024, 12:23 pm

Email Template

Subject: Leave rejected

Plain Text Preview

Dear {!Tenant__c.Name},

I hope this email finds you well. Your contract has not ended. So we can't approve your leave
your leave has rejected

Milestone – 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.

Records submitted for approval are approved by the user(s) in the organization. These users are called Approvers. A single Approval process is bound to a single object because when a rule is defined, this object influences the fields that will be available to set the criteria.

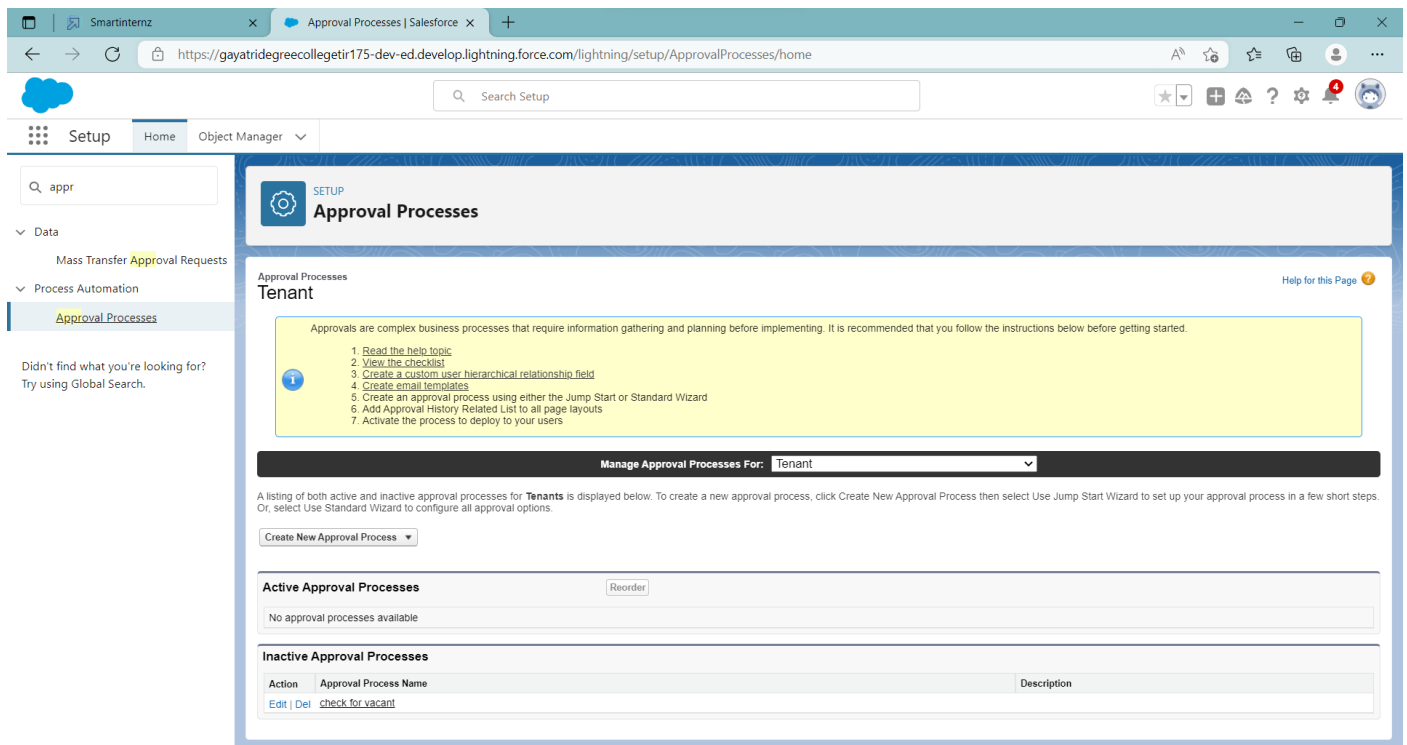
An approval process consists of finalizing the basic properties of the approval process (as shown in the below image), approval steps, and actions to be executed.

Actions In Salesforce Approval Process

To create fields in an object:

- 1.Go to setup >> Approval Processes in quick find bar>>click on it.
- .Manage Approval Process For >> “Tenant” from the drop down.

3. Click on “Create New Approval Process” >> Use standard setup wizard.



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 field, 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

Click on next leave the email template click on next

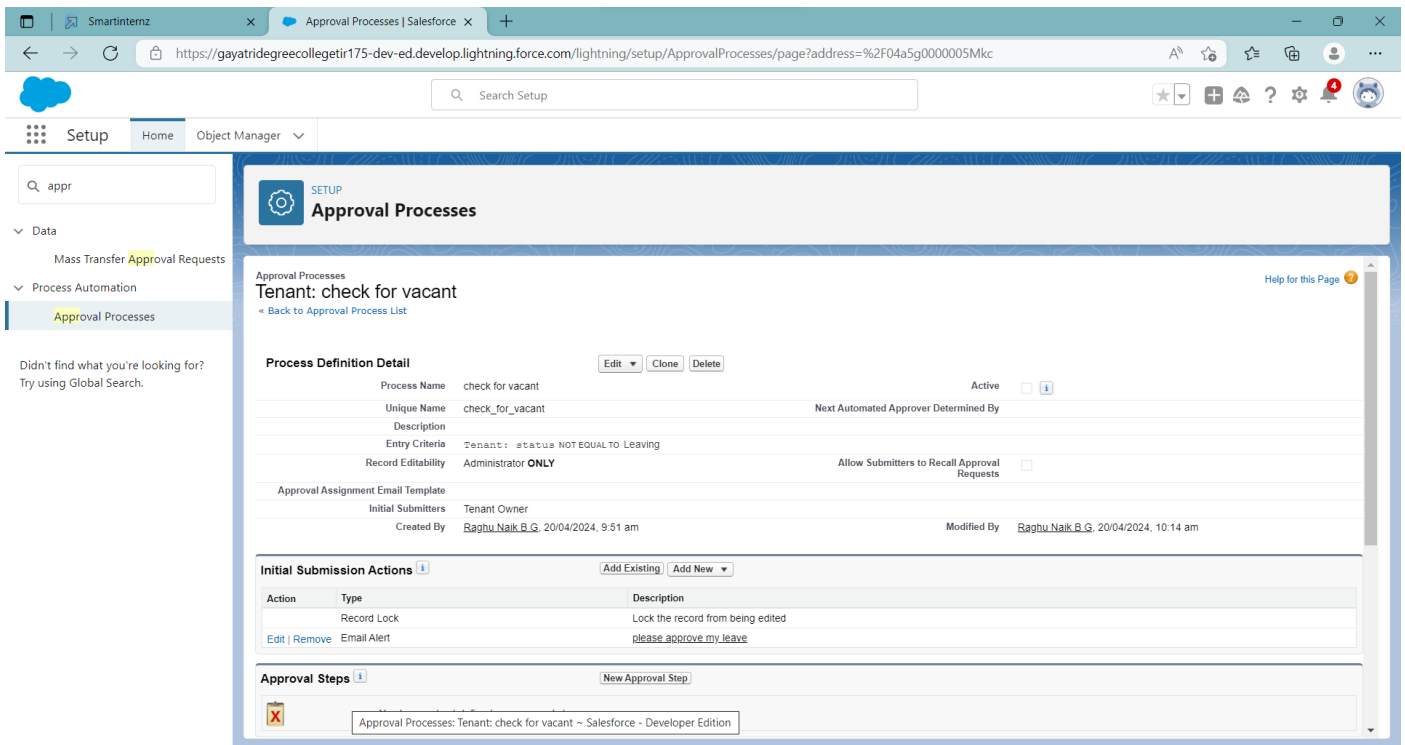
10. From the available fields select >> Tenant Name, and then add >> Add it to the selected. Then Next.

Make sure Display approver history is checked.

And under security settings 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.



Final Rejection Action

1. Under final rejection action click on add 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 - Apex Trigger :

Use case:

The tenant and property are in a master-detail relationship, wherein each tenant is associated with only one property. When a tenant attempts to create a new record with an existing property, an error should be displayed, indicating that a tenant can have only one property.

Write a code to achieve this requirement using Salesforce developer skills to fulfill the Managers requirement.

Create An Apex Trigger

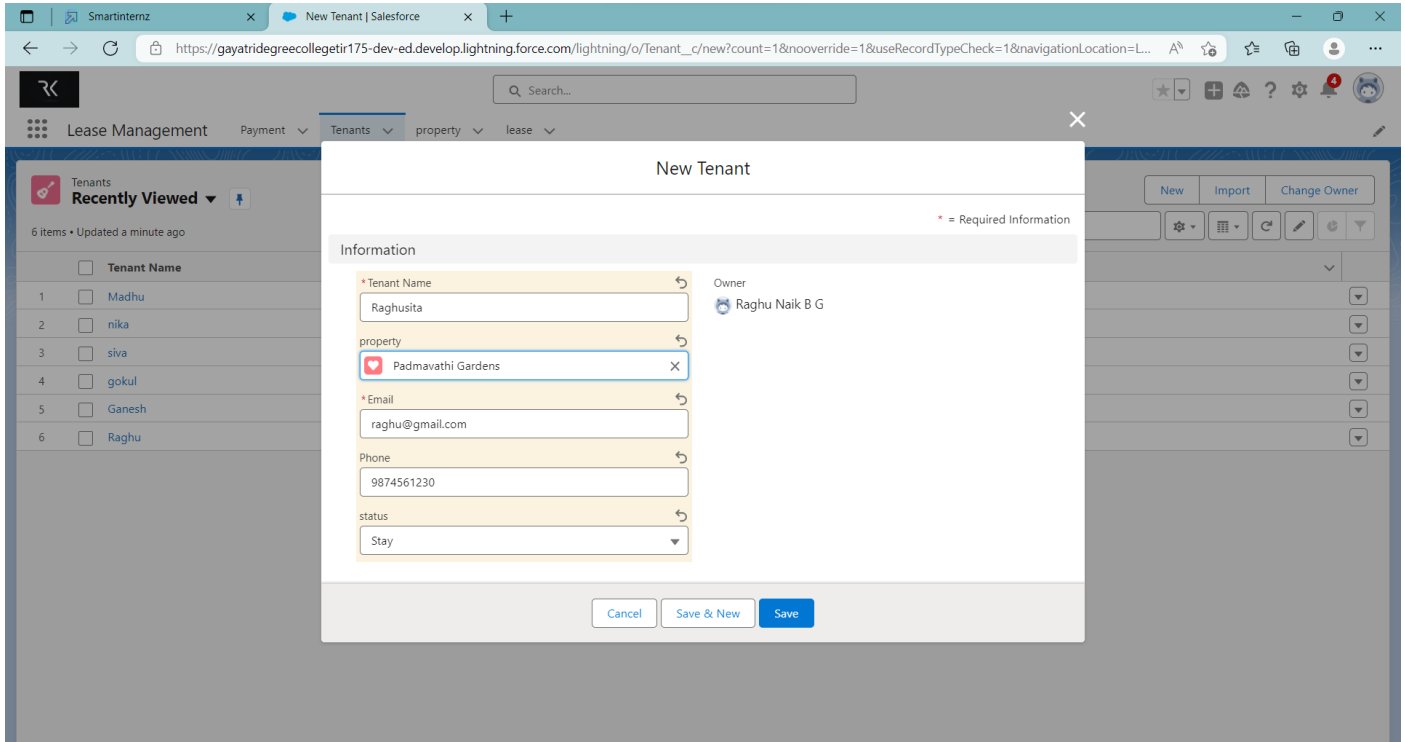
1. To create a new Apex Class follow the below steps:

Click on the file >> New ? Apex Class.

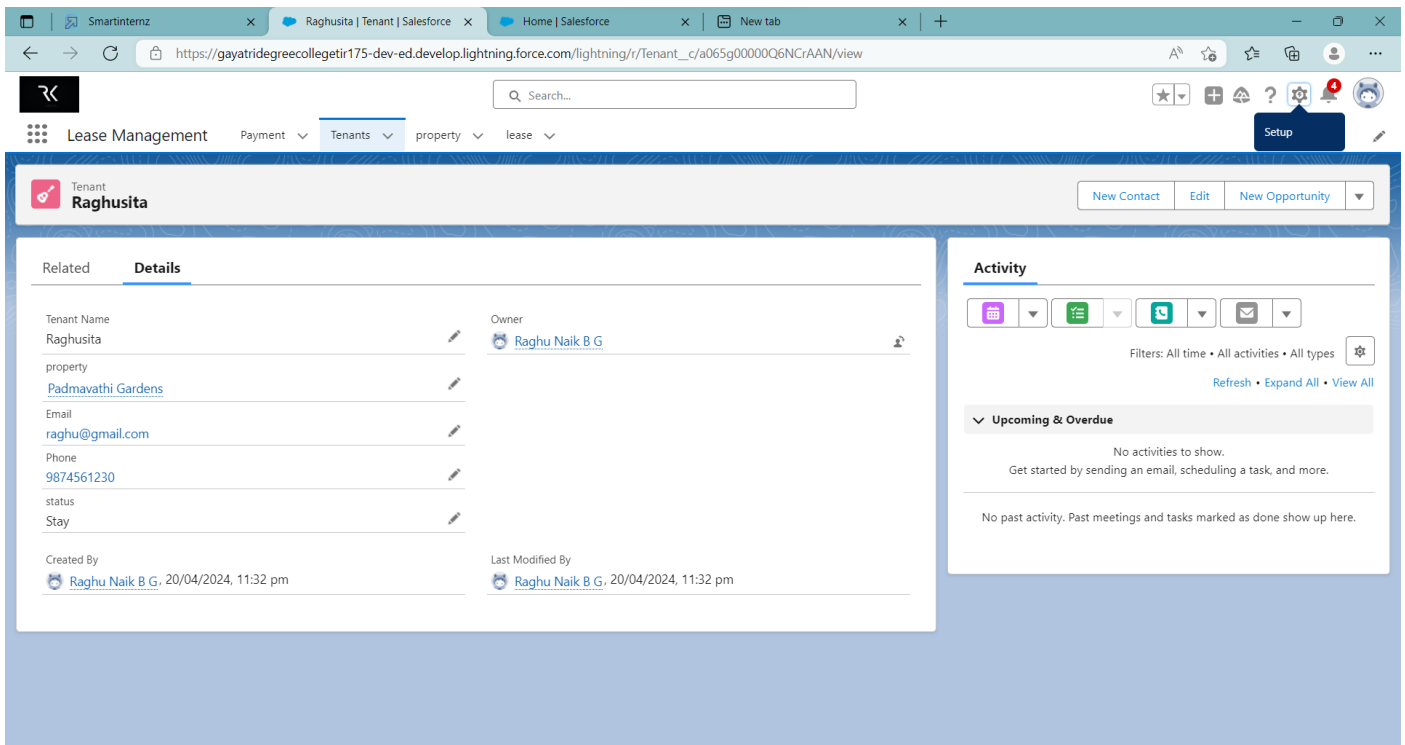
2. Give the Apex Trigger name as “test”, and select “Tenant__c” from the dropdown for Object.

3. Click Submit.

Now write the code logic here



The screenshot shows the 'New Tenant' form in a Salesforce application. The form is titled 'New Tenant' and has a 'Cancel' button and a 'Save & New' button. The form fields are: Tenant Name (Raghusita), property (Padmavathi Gardens), Email (raghu@gmail.com), Phone (9874561230), and status (Stay). The Owner is Raghu Naik B G. The form is part of a 'Lease Management' application.

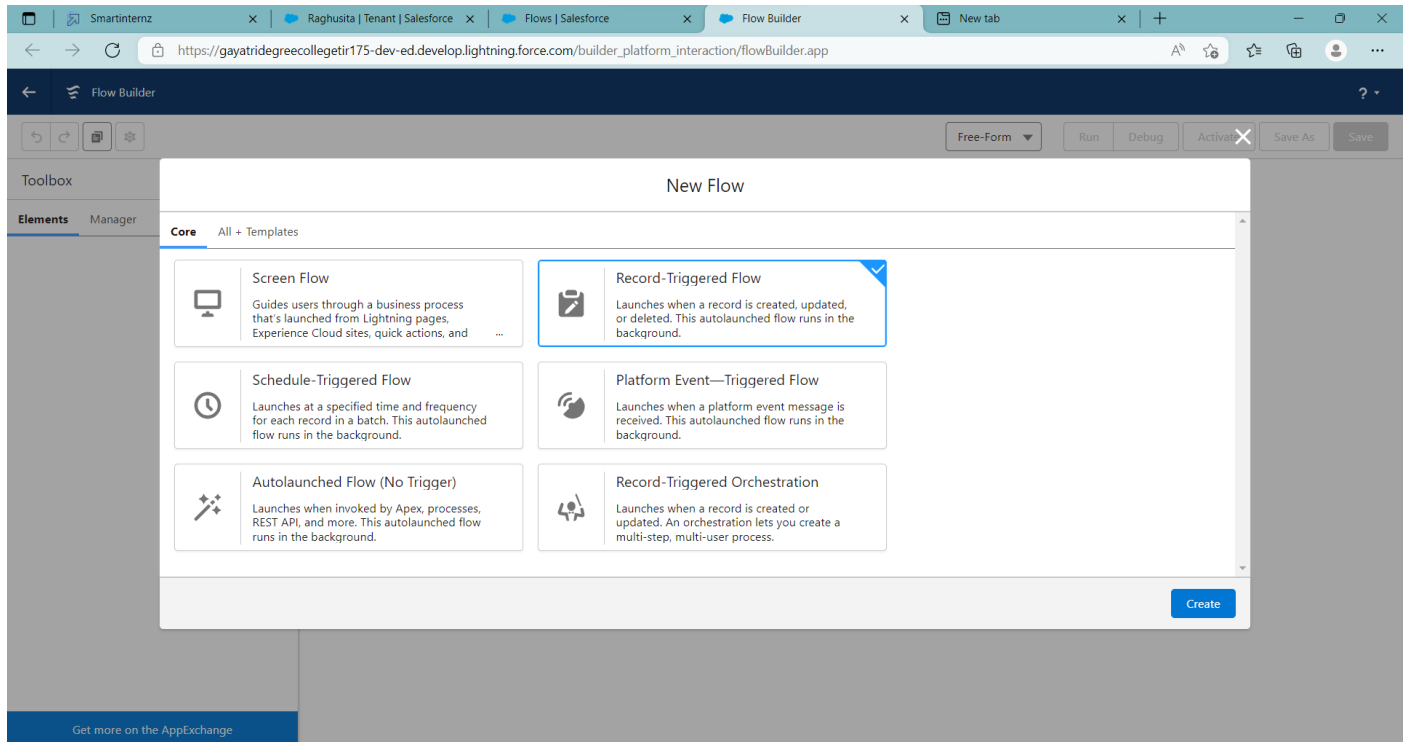


The screenshot shows the 'Tenant Details' page for Raghusita in a Salesforce application. The page has a 'Related' section with a list of tenants and an 'Activity' section with a list of activities. The tenant's details are: Name (Raghusita), property (Padmavathi Gardens), Email (raghu@gmail.com), Phone (9874561230), and status (Stay). The Owner is Raghu Naik B G. The page also shows a 'Related' section with a list of tenants and an 'Activity' section with a list of activities.

Milestone – Flows :

What is a flow ?

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

Go to setup >> type Flow in quick find box >> Click on the Flow and Select the New Flow.

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

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

8. Label : send email

API Name : send_email

Select Object

Select the object whose records trigger the flow when they're created, updated, or deleted.

* Object
Payment for tenant

Configure Trigger

* Trigger the Flow When:

- ☒ A record is created
- ☐ A record is updated
- ☐ A record is created or updated
- ☐ A record is deleted

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
None

* Optimize the Flow for:

9. Label : send email

10. API Name : send_email

11. Enable Body

12. Click on new resource

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.

Edit Send Email
send_email (send_email)

Use values from earlier in the flow to set the inputs for the "Send Email" core action. To use its outputs later in the flow, store them in variables.

Set Input Values for the Selected Action

A₁ Body ☒ include
{!emailbody}

A₂ Email Template ID ☐ Don't include

A₃ Log Email on Send ☐ Don't include

A₄ Recipient Address Collection ☐ Don't include

A₅ Recipient Address List ☒ include
{!\$Record.null__NotFound.Email__c}

A₆ Recipient ID ☐ Don't include

A₇ Related Record ID ☐ Don't include

14. Click Done.

15. Enable recipient Address List

Paste this `{!$Record.Tenant__r.Email__c}`

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

Click on activate

Milestone - Schedule Class :

Create An Apex Class

1. To create a new Apex Class follow the below steps:

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

2. Enter class name as MonthlyEmailScheduler.

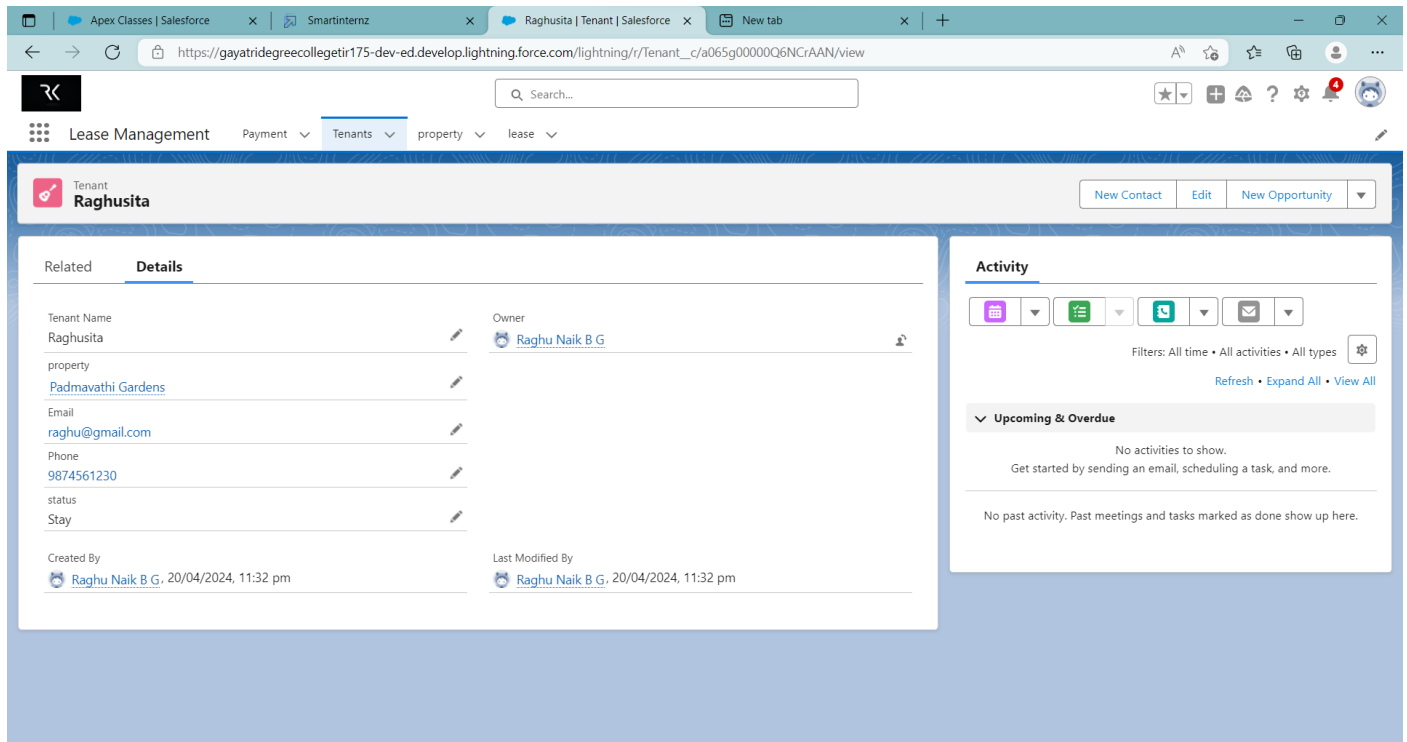
The screenshot displays the Salesforce 'Schedule Apex' configuration page. The 'Job Name' field is populated with 'MonthlyEmailScheduler'. The 'Frequency' is set to 'Weekly', and the 'Recurs every week on' dropdown is open, showing 'Saturday' selected. The 'Start' date is '20/04/2024', the 'End' date is '20/05/2024', and the 'Preferred Start Time' is '--None--'. The left sidebar shows the 'Setup' menu with 'Apex Classes' selected. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'.

Schedule Apex Class

Enter Apex class in quick find box

Select schedule Apex

Milestone- TEST PROJECT REVIEW :



THE END