

# **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](https://developers.salesforce.com/signup)

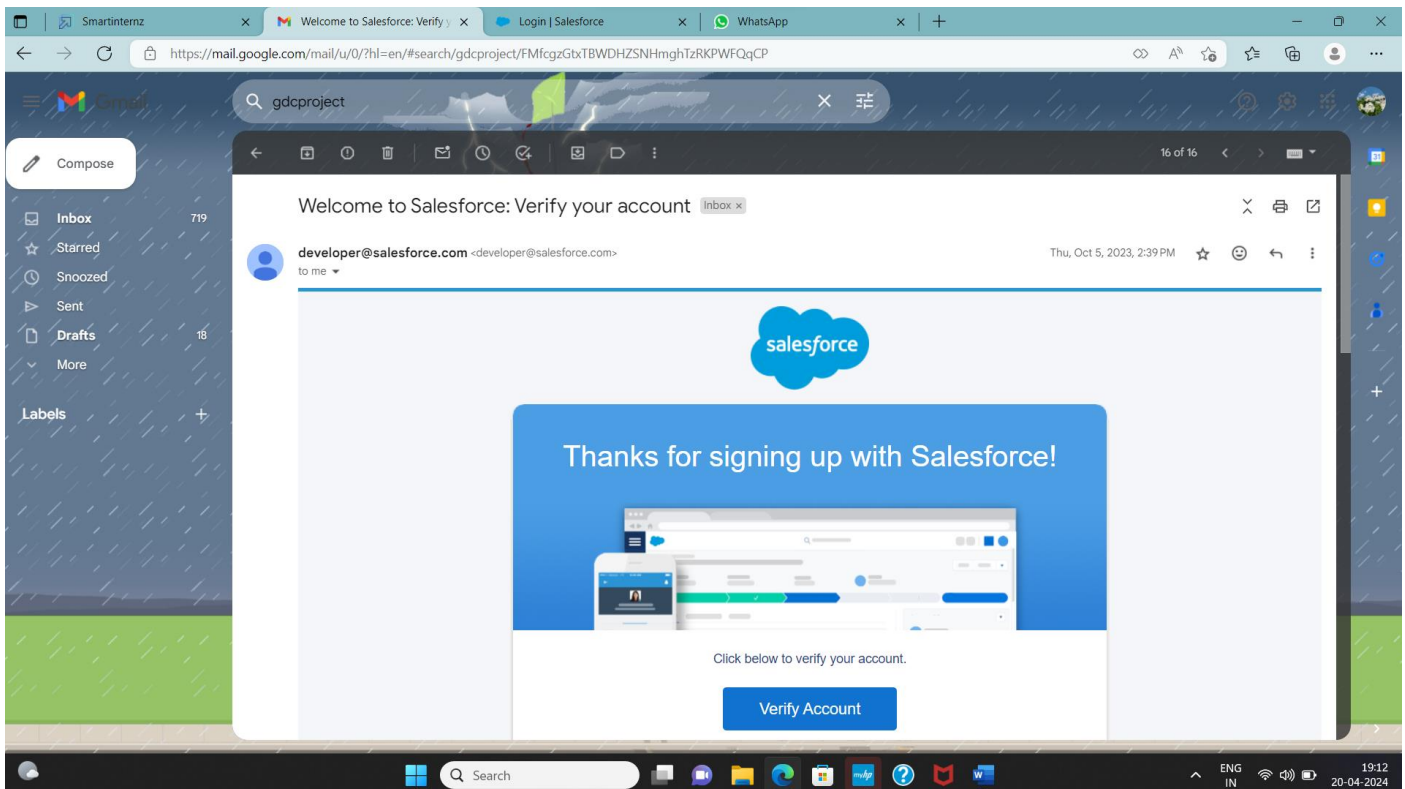
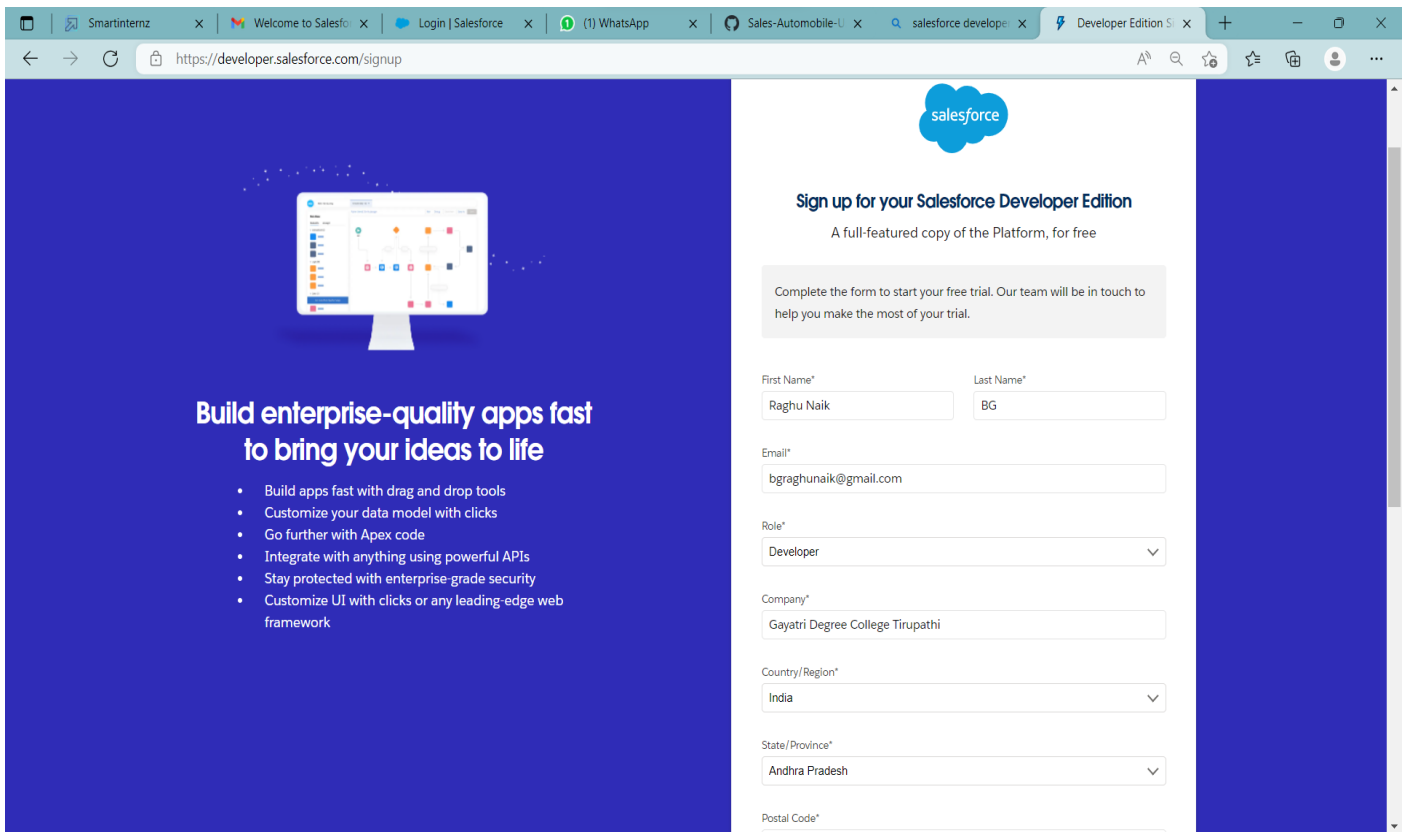
Click on sign up.

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

1. First name & Last name – **B G RAGHU NAIK**
2. Email – **bgraghunaik@gmail.com**
3. Role: **Developer**
4. Company: **GAYATRI DEGREE COLLEGE - TIRUPATI**
5. County: **India**
6. Postal Code: **517501**
7. Username: **bgraghunaik@gdcproject.com**
8. 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,



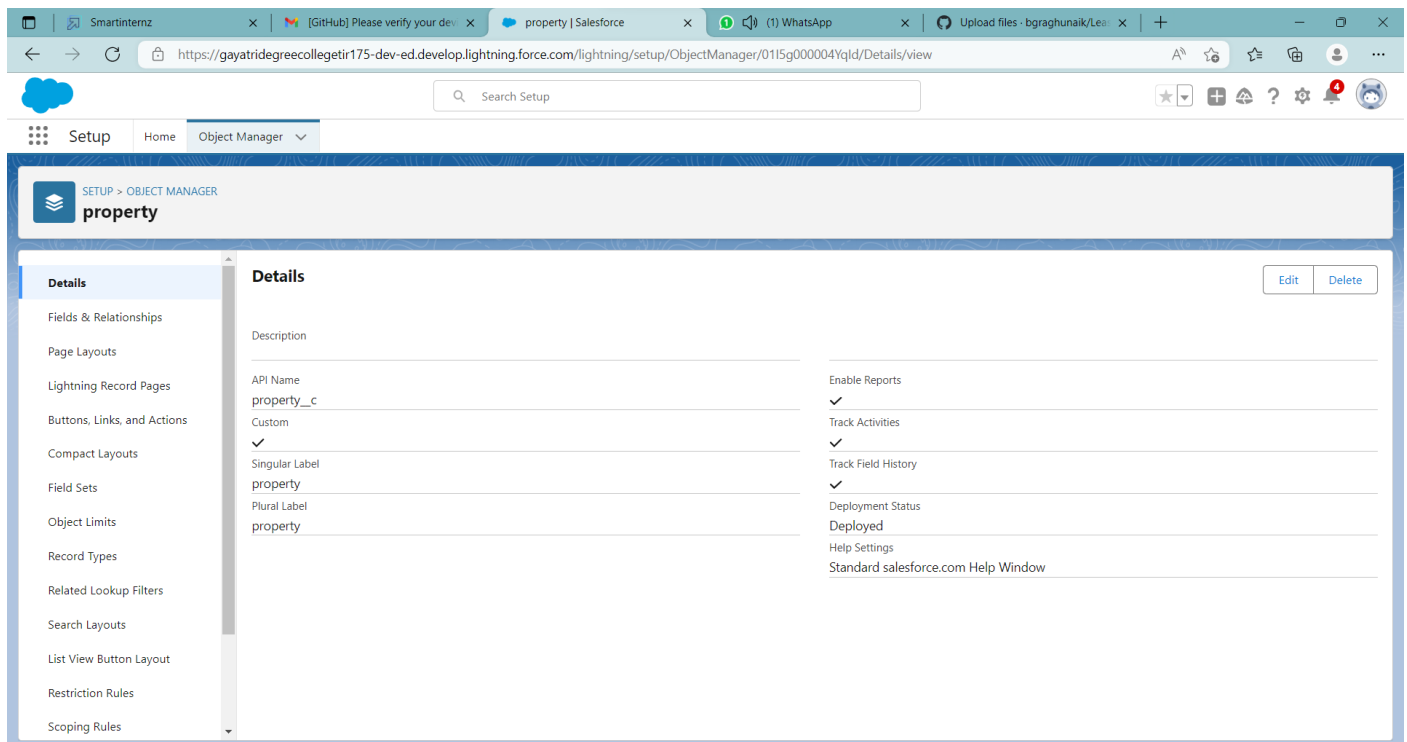
## Login to Your Salesforce Account

1. Go to [salesforce.com](https://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

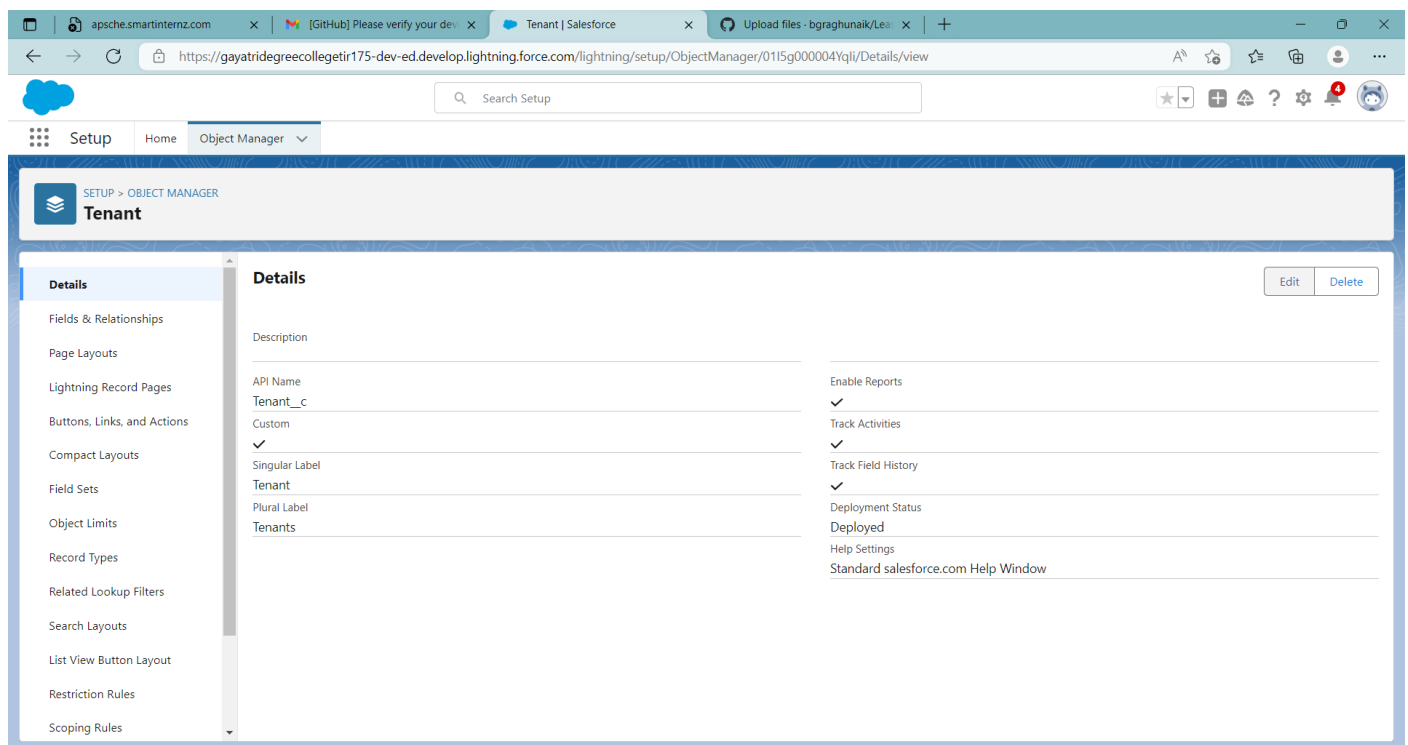
1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as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

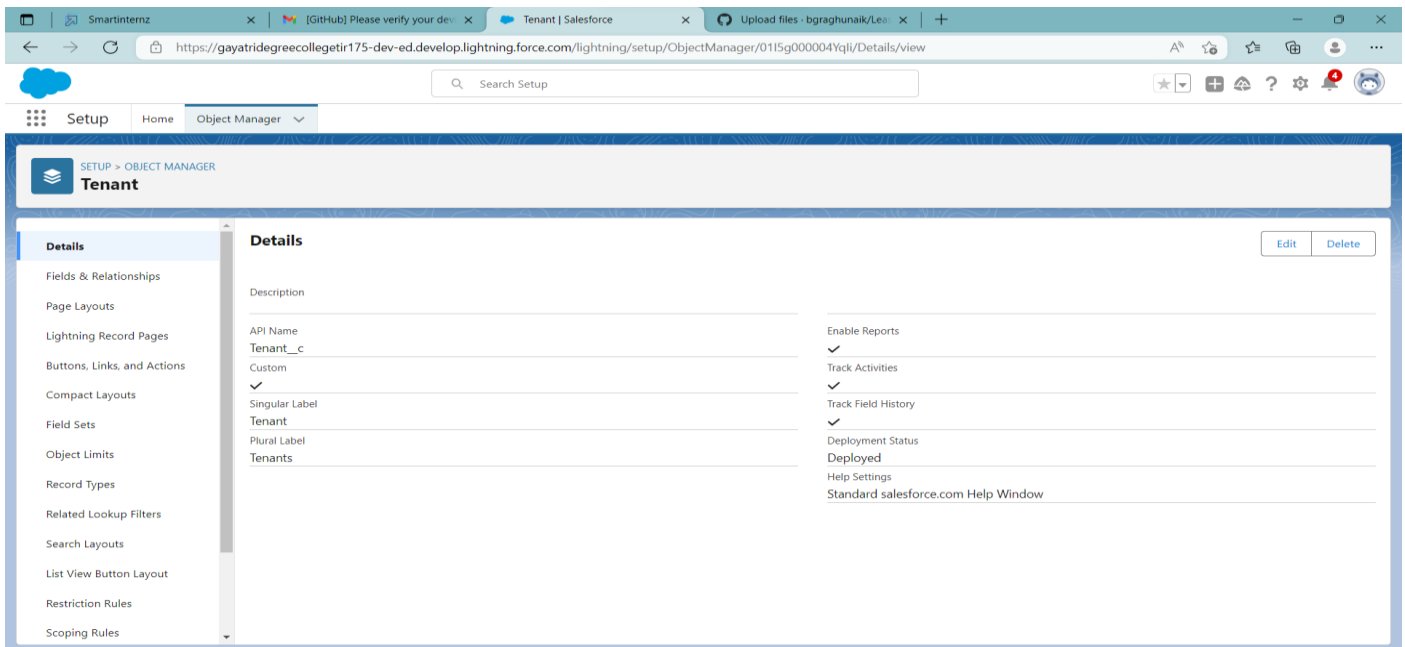
1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.

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



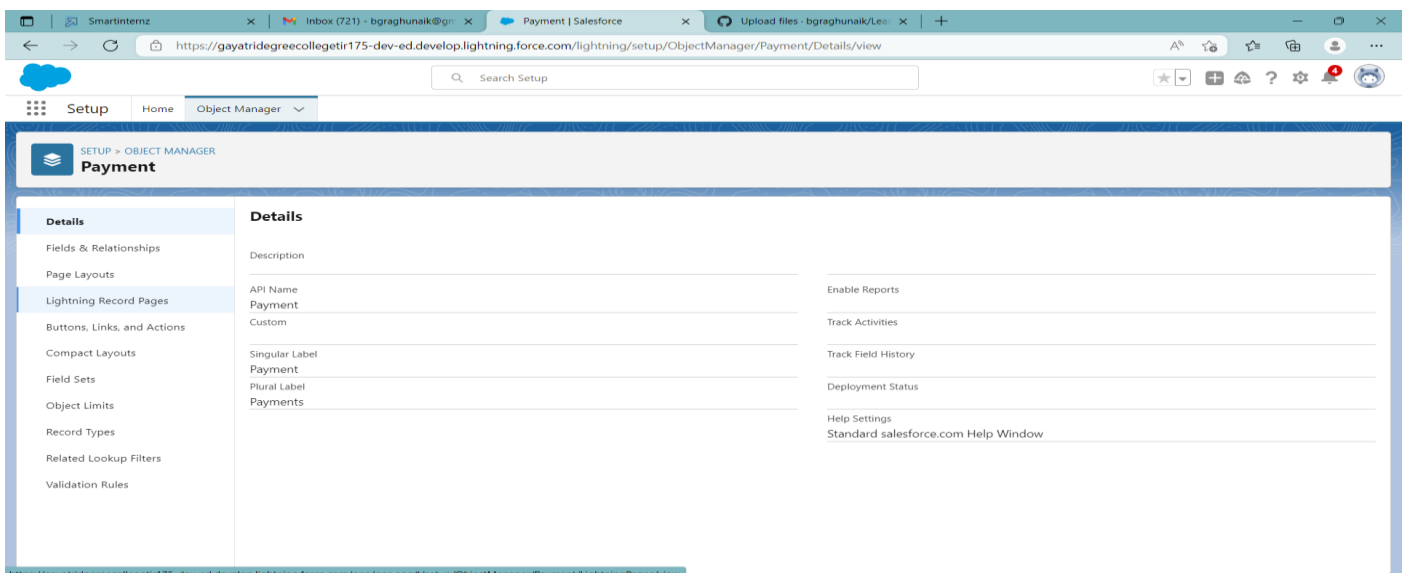
## Object – Tenant

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 .

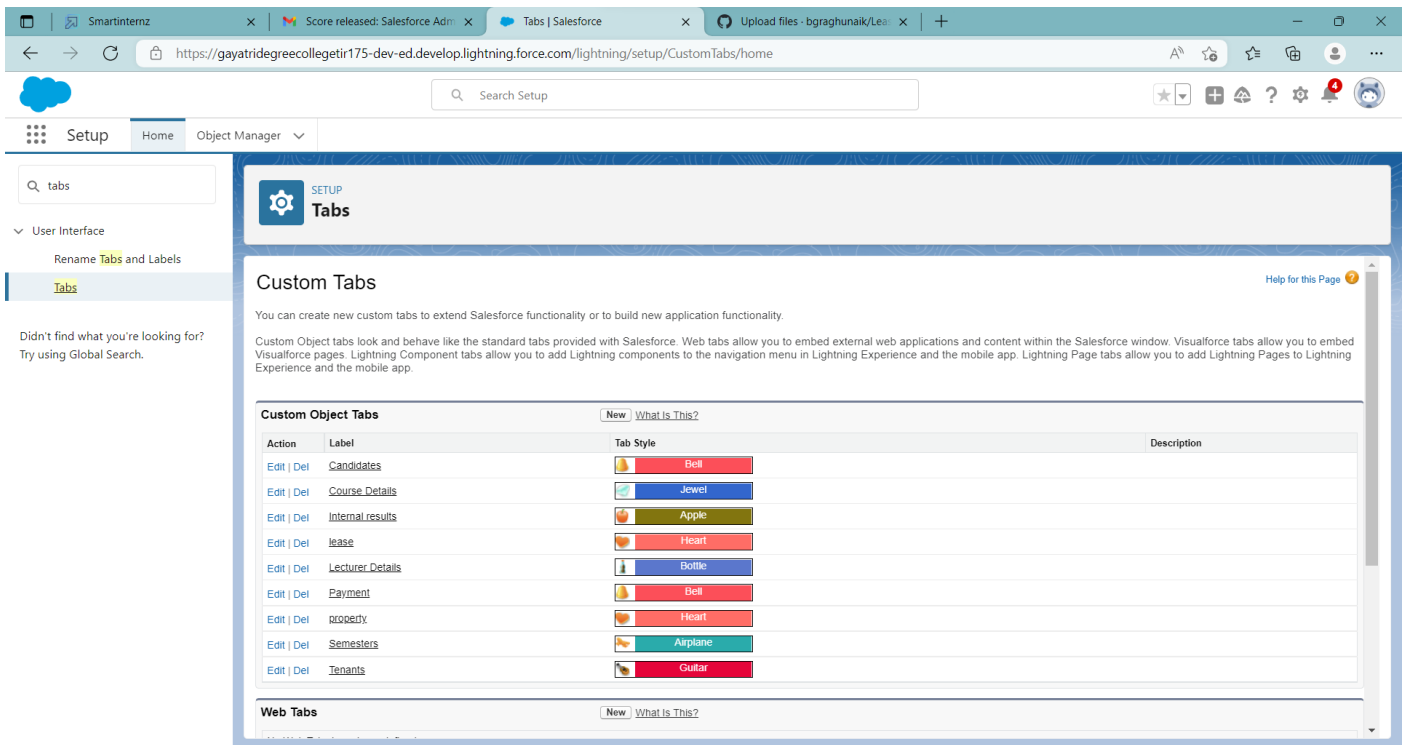
Make sure that the Append tab to users' existing personal customizations is checked.

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 .

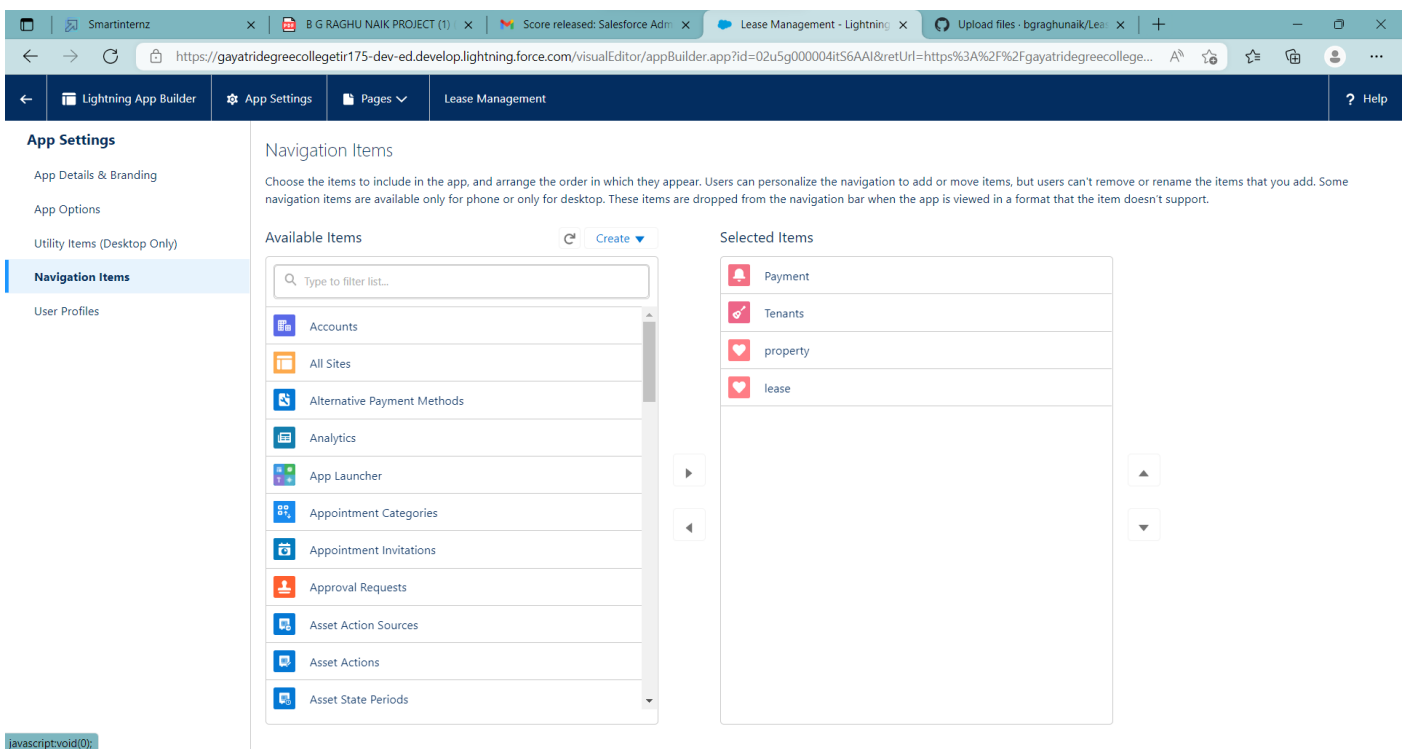
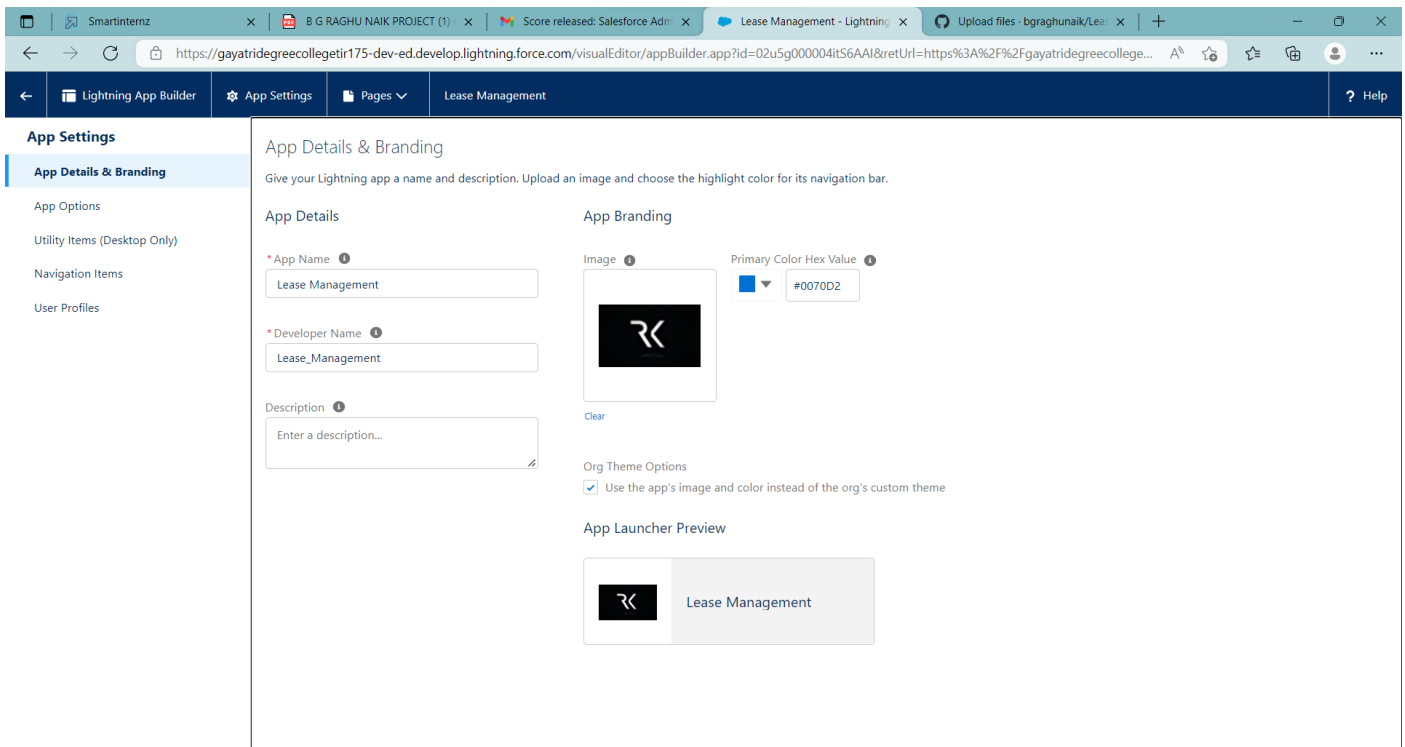


## Milestone – 04: Lightning App

### 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' followed by the 'property' object. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main content area displays a table of fields for the 'property' object, sorted by Field Label. The table has columns for 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 'Type' field is highlighted in blue, indicating it is the selected field.

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		

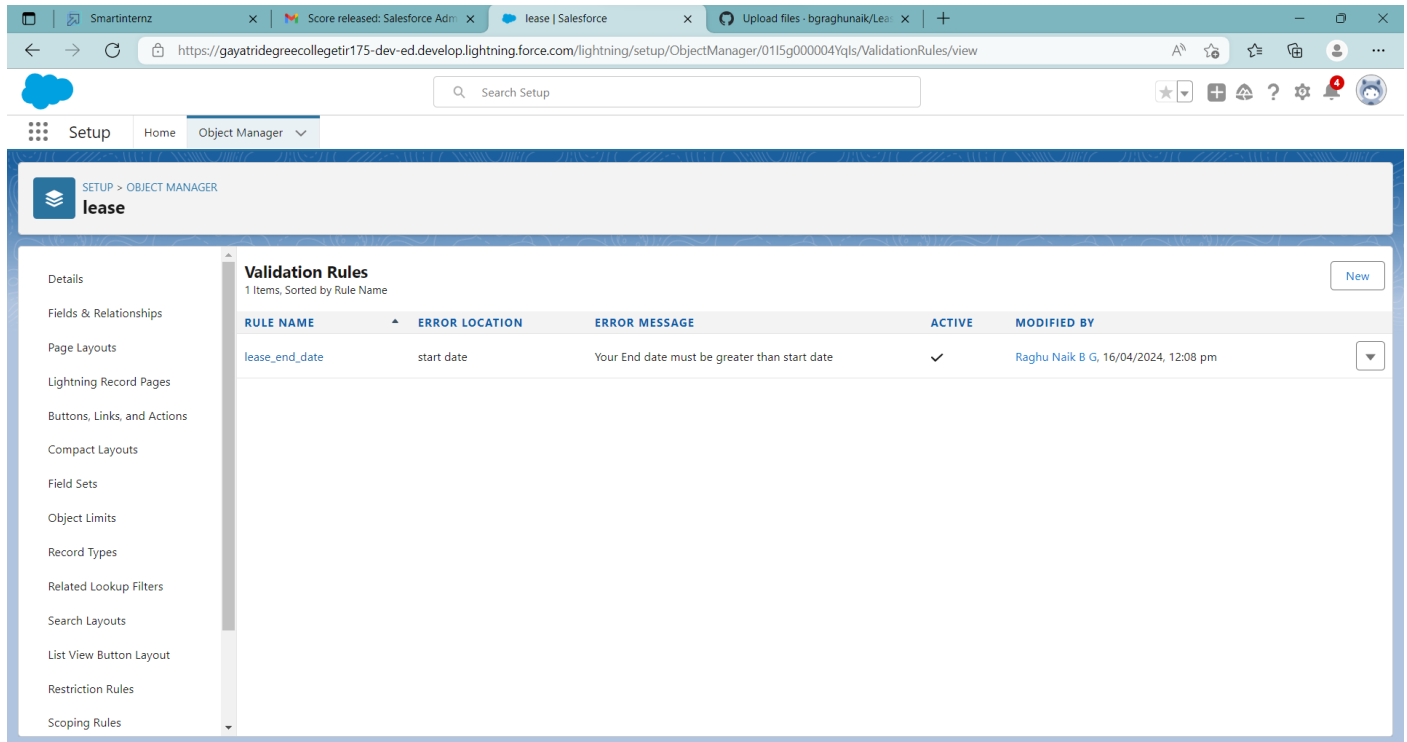
## Creation Of Lookup Fields

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 one rule named 'lease\_end\_date'. The table has columns for Rule Name, Error Location, Error Message, Active status, and Modified By. The rule is active and was modified by Raghu Naik B G on 16/04/2024 at 12:08 pm.

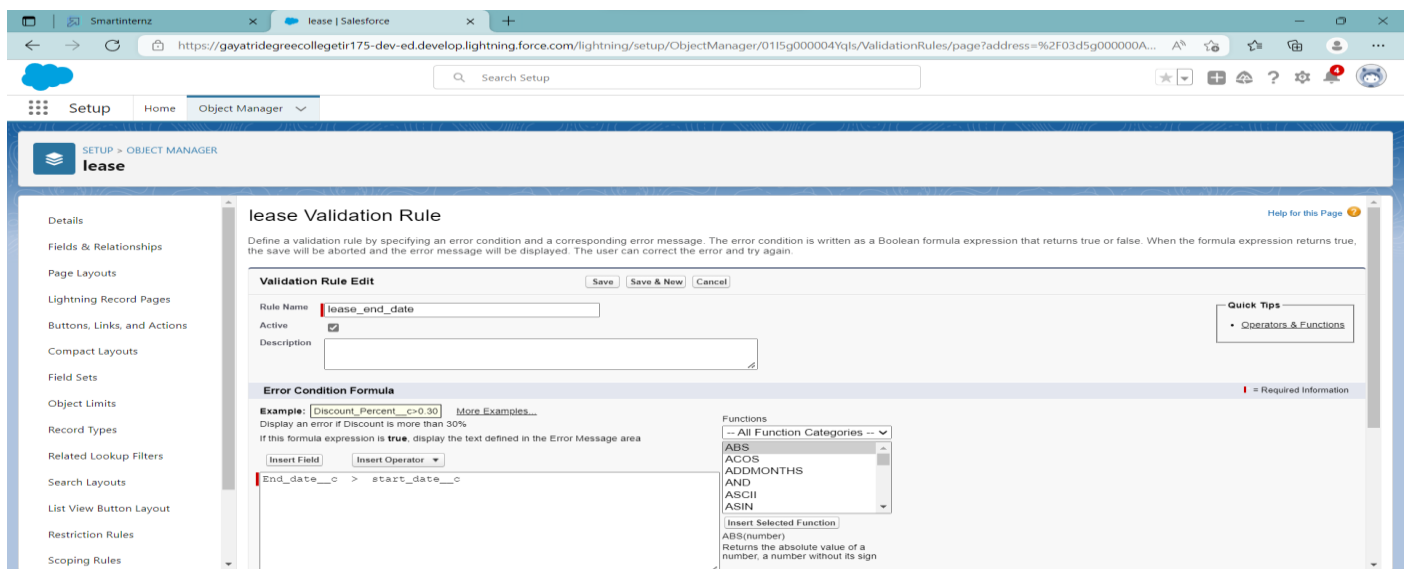
RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
lease_end_date	start date	Your End date must be greater than start date	✓	Raghu Naik B G, 16/04/2024, 12:08 pm

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 for the 'lease' object. The page has a header 'lease Validation Rule' and a sub-header '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 'Validation Rule Edit' section includes fields for Rule Name (lease\_end\_date), Active (checked), and Description. Below this is the 'Error Condition Formula' section, which contains an example formula and a field for the error message. The formula is 'End\_date\_\_c > start\_date\_\_c'. The error message is 'Your End date must be greater than start date'. The 'Functions' section on the right lists various functions like ABS, ACOS, ADDMONTHS, AND, ASCII, and ASIN.

## 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. On the left, a sidebar lists various setup options under the 'Email' category, with 'Classic Email Templates' selected. The main content area shows the configuration for a template named 'tenant leaving'. 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), and 'Created By' (Raghu Naik B.G.). The 'Available For Use' checkbox is checked. Below this, the 'Email Template' section shows the 'Subject' (request for approve the leave) and the 'Plain Text Preview' (Dear {!Tenant\_\_c.CreatedBy}, Please approve my leave). The 'Send Test and Verify Merge Fields' button is visible at the bottom of the preview section.

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 page. The left sidebar shows the navigation menu with 'Email' selected. The main content area shows the 'Leave approved' template details. The 'Email Template Detail' section includes fields for 'Email Template Name' (Leave approved), 'Template Unique Name' (Leave\_approved), 'Encoding' (Unicode (UTF-8)), 'Author' (Raghu Naik B.G.), and 'Description'. The 'Available For Use' checkbox is checked. The 'Email Template' section shows the 'Subject' (Leave approved) and a 'Plain Text Preview' of the email body. The preview 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'.

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”

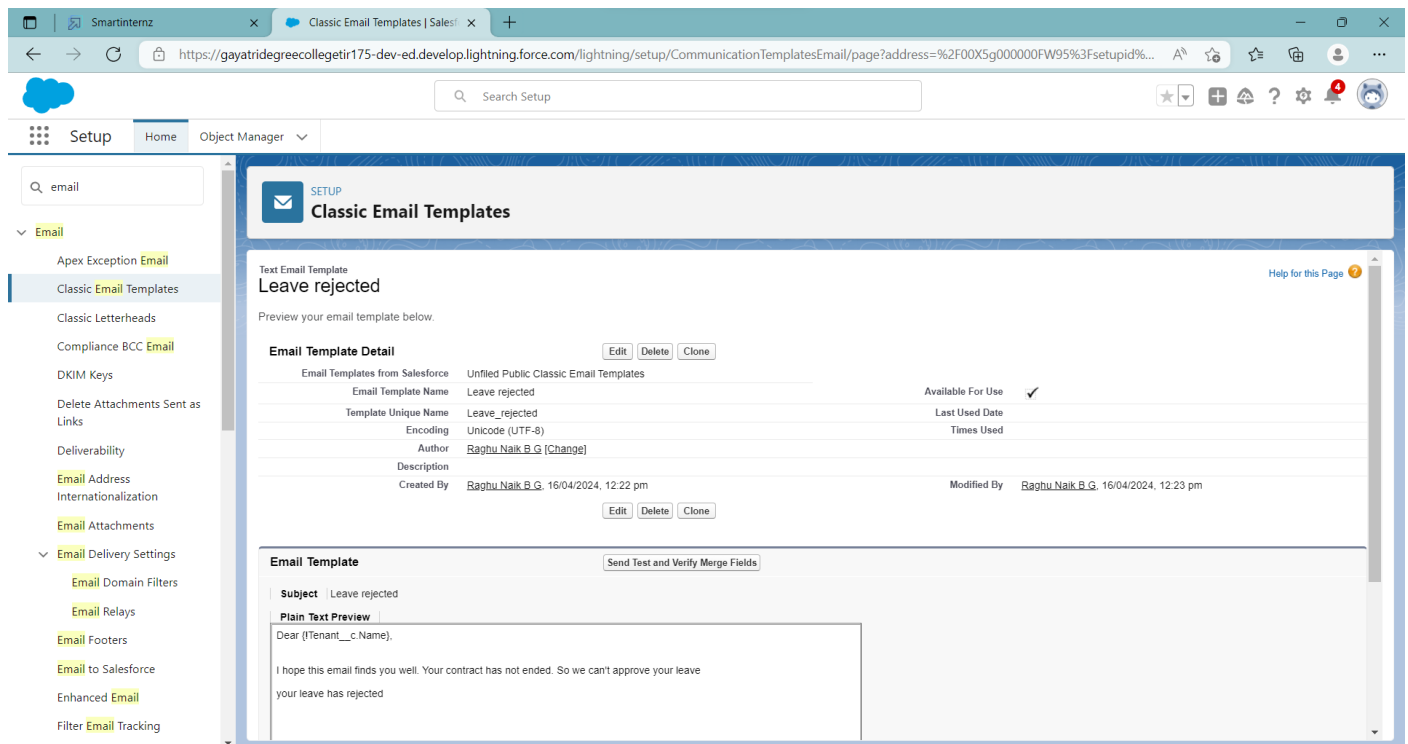
6. Email body :

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



## 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.

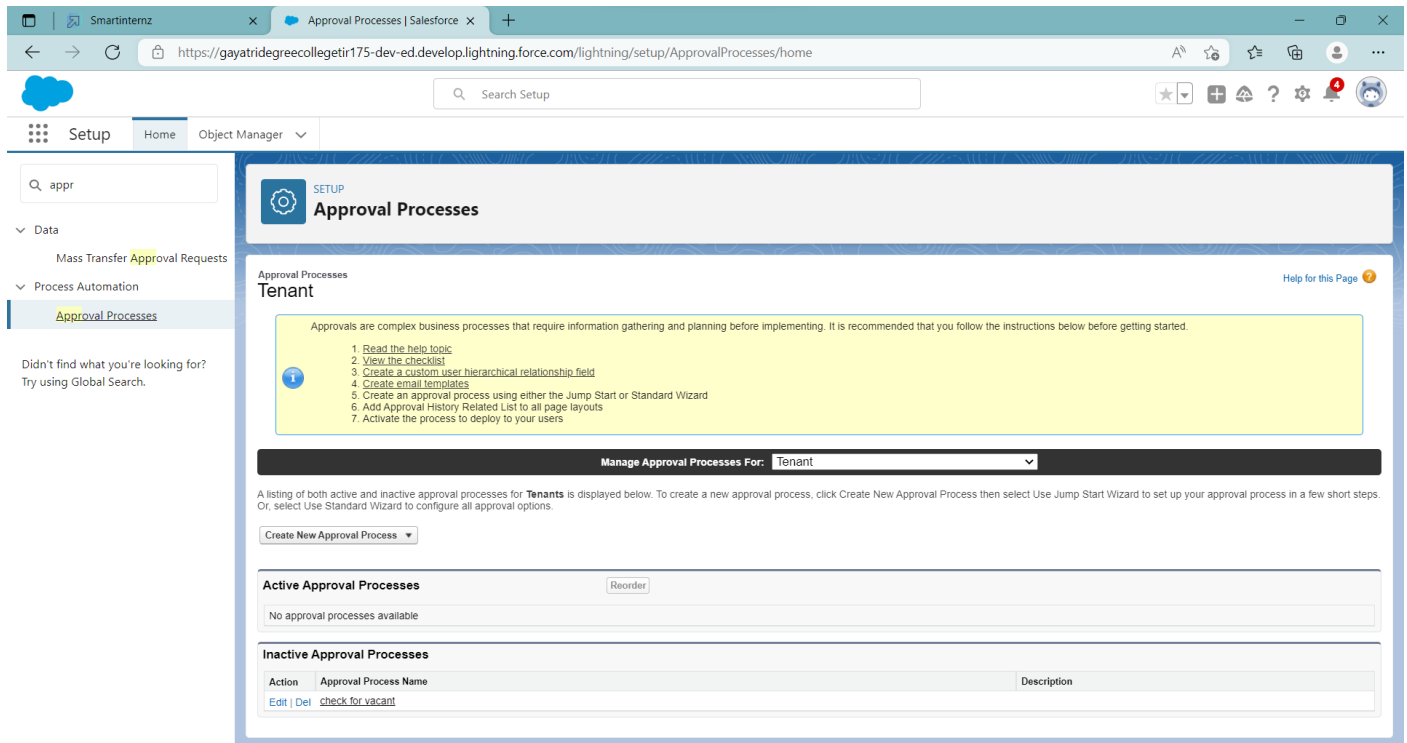
An approval process consists of finalizing the basic properties of the approval process (as shown in the below image), approval steps, and actions to be executed.

### 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.

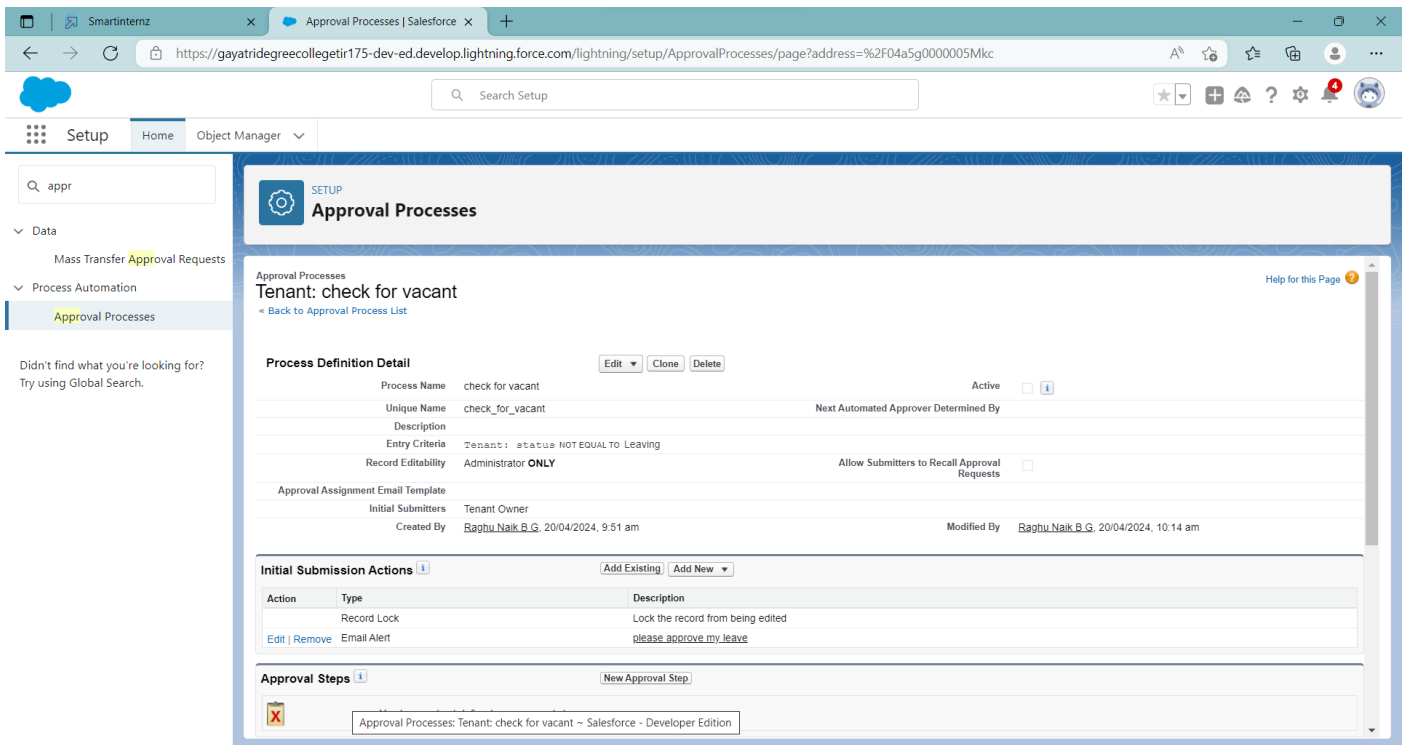
Make sure Display approver history is checked.

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

New Tenant

\* = Required Information

Information

\* Tenant Name Raghusita

Owner Raghu Naik B G

property Padmavathi Gardens

\* Email raghu@gmail.com

Phone 9874561230

status Stay

Cancel Save & New Save

Tenant Raghusita

New Contact Edit New Opportunity

Related Details

Tenant Name Raghusita

property Padmavathi Gardens

Email raghu@gmail.com

Phone 9874561230

status Stay

Owner Raghu Naik B G

Created By Raghu Naik B G, 20/04/2024, 11:32 pm

Last Modified By Raghu Naik B G, 20/04/2024, 11:32 pm

Activity

Filters: All time • All activities • All types

Refresh • Expand All • View All

Upcoming & Overdue

No activities to show.

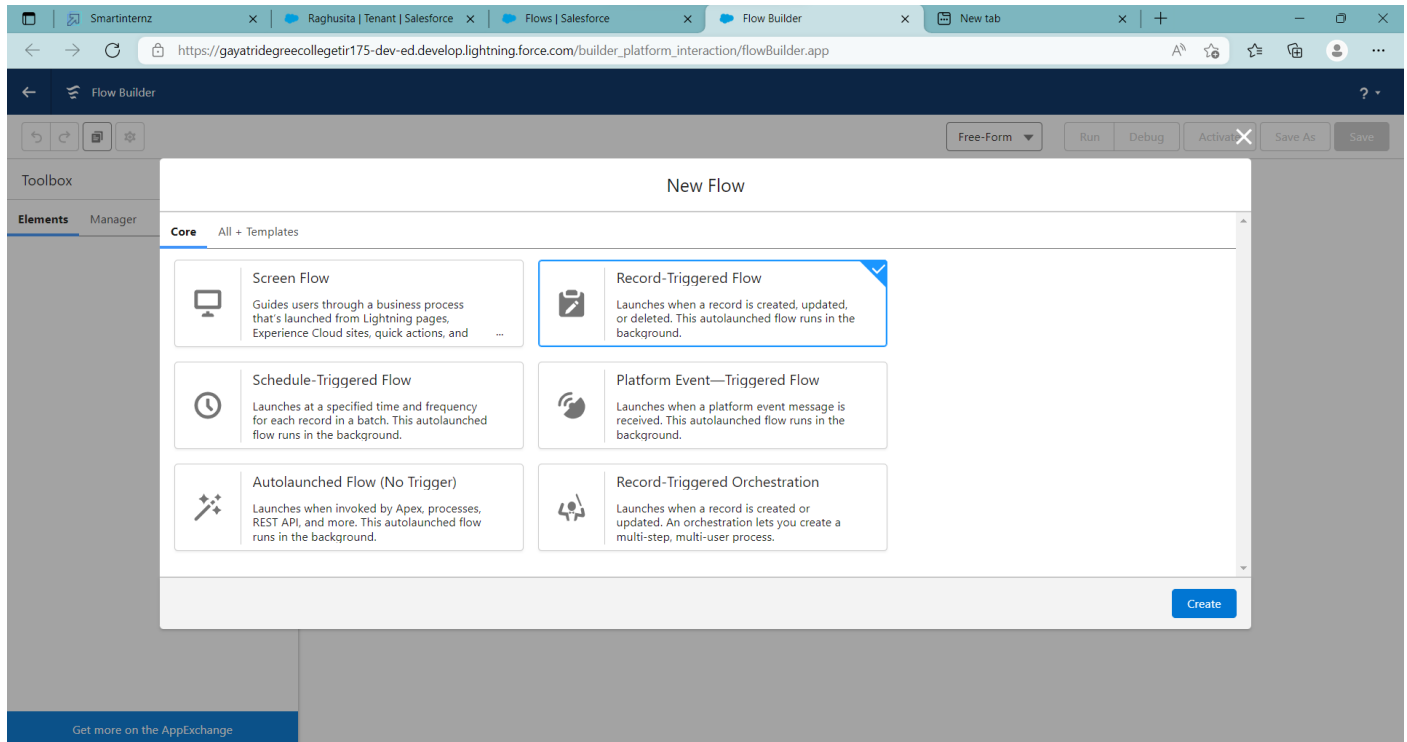
Get started by sending an email, scheduling a task, and more.

No past activity. Past meetings and tasks marked as done show up here.

## 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

Flow Builder interface showing the configuration for a Record-Triggered Flow. The flow starts with a 'Start' node (Record-Triggered Flow) for the object 'Payment for tenant'. The trigger is 'A record is created'. The flow ends with an 'End' node. The right sidebar shows the 'Select Object' panel with 'Payment for tenant' selected, the 'Configure Trigger' panel with 'A record is created' selected, and the 'Set Entry Conditions' panel with 'None' selected.

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.

Flow Builder interface showing the configuration for a 'Send Email' action. The flow starts with a 'Start' node (Record-Triggered Flow) for the object 'Payment for tenant'. The trigger is 'A record is created'. The flow ends with an 'End' node. The right sidebar shows the 'Edit Send Email' panel with the 'Body' field set to '{!emailbody}' and the 'Recipient Address List' field set to '{!\$Record.null\_\_NotFound.Email\_\_c}'.

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.

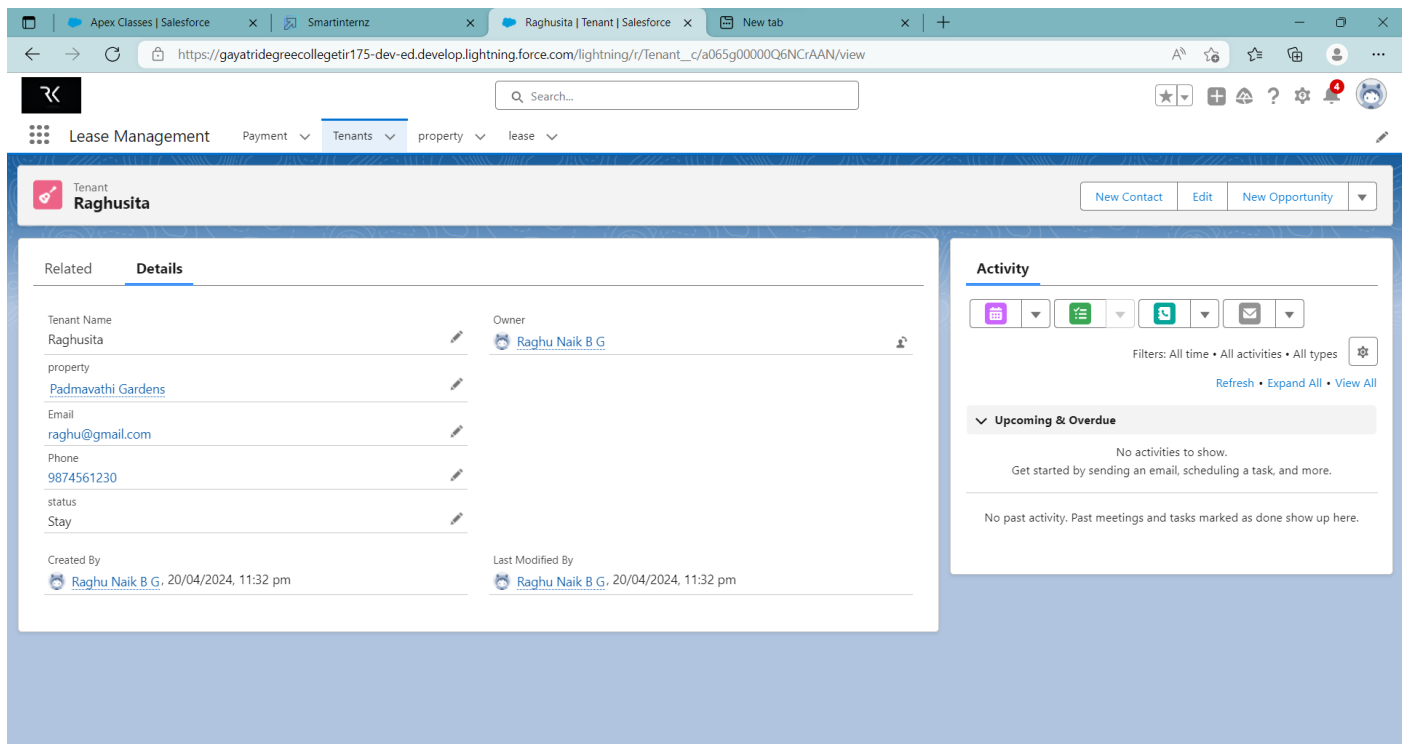
The screenshot displays the Salesforce 'Schedule Apex' configuration interface. The 'Job Name' field is populated with 'MonthlyEmailScheduler'. The 'Frequency' is set to 'Weekly', and the dropdown menu is open, showing the days of the week with 'Saturday' selected. The 'Start' date is '20/04/2024', the 'End' date is '20/05/2024', and the 'Preferred Start Time' is '--None--'. The left sidebar shows the navigation menu with 'Apex Classes' selected. The top of the page shows the browser tabs and the Salesforce URL.

## Schedule Apex Class

Enter Apex class in quick find box

Select schedule Apex

## Milestone- TEST PROJECT REVIEW :



# THE END