Project Title: A CRM Application To Manage The Mall

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Project Overview

The Management App is a robust solution developed on the Salesforce platform, specifically designed to streamline the management of commercial malls. This innovative app offers a comprehensive suite of tools that enhance lease tracking, improve tenant relationships, and provide valuable insights for decision-making. By automating processes and centralizing data, the app empowers mall management teams to efficiently oversee daily operations, optimize revenue, and ensure a seamless experience for both tenants and customers. With its user-friendly interface and powerful analytics, the app serves as a game-changer for modernizing mall management practices.

Objectives

The specific, measurable goals the project intends to achieve. It helps to a mall manage customer data and interactions to improve business relationships, retain customers, and increase sales.

- **Centralized data**

  CRM software stores customer data in the cloud, making it accessible from anywhere. This can help ensure that everyone at the company has access to the same information, which can improve the level of service provided to customers.

- **Customer profiles**

  CRM software can create a single customer profile that includes purchase history, order status, and customer service issues. This can help businesses understand their customers' needs and provide better service.

- **Targeted marketing**

  CRM software can help businesses create and send targeted marketing based on customer data, such as demographics and interests.

Salesforce key features and Concepts utilized

The main functionalities and concept applied within the Salesforce project.

1. Salesforce CRM Core Features: Accounts and Contacts: Manage information about tenants (as Accounts) and key tenant representatives (as Contacts).
2. Salesforce Custom Object: Custom objects can be created to track specific lease details such as start and end dates, terms, and payment schedules.
3. Automation Tools: Automate processes such as sending notifications for lease expirations, scheduling maintenance tasks, or generating lease renewal reminders.
4. Dashboards and Reports: Generate detailed reports on tenant occupancy, lease revenue, maintenance requests, and vacancy rates.
5. Salesforce AppExchange: Use AppExchange solutions for additional functionalities such as payment processing, visitor management, or marketing automation.
6. Mobile Accessibility: Create custom mobile pages to streamline field data entry and lease inspections.

Detailed Steps to Solution Design

Activity 1: Creating Developer Account

1. Go to https://developer.salesforce.com/signup

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

1) First name & Last name

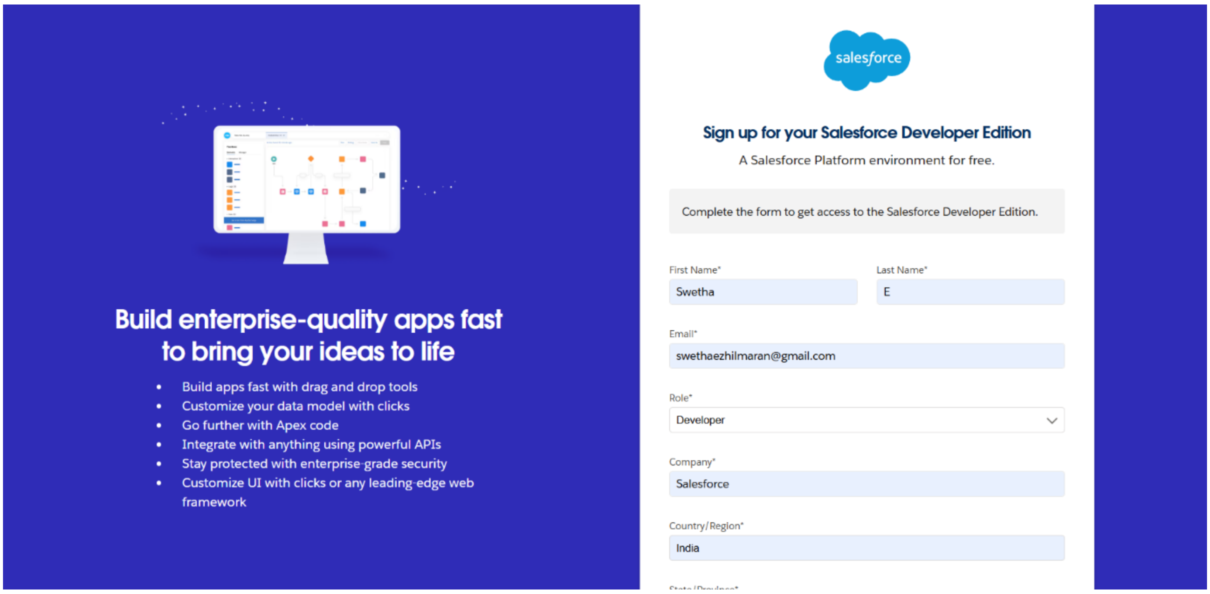
2) Email

3) Role: Developer

4) Company: College Name

5) County: India

6) Postal Code: pin code



Activity 2: Account Activation

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

Create Custom Objects

To store the data as per business requirement.

Activity: Create Tenant Object

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

    1.Enter the label name: Tenant

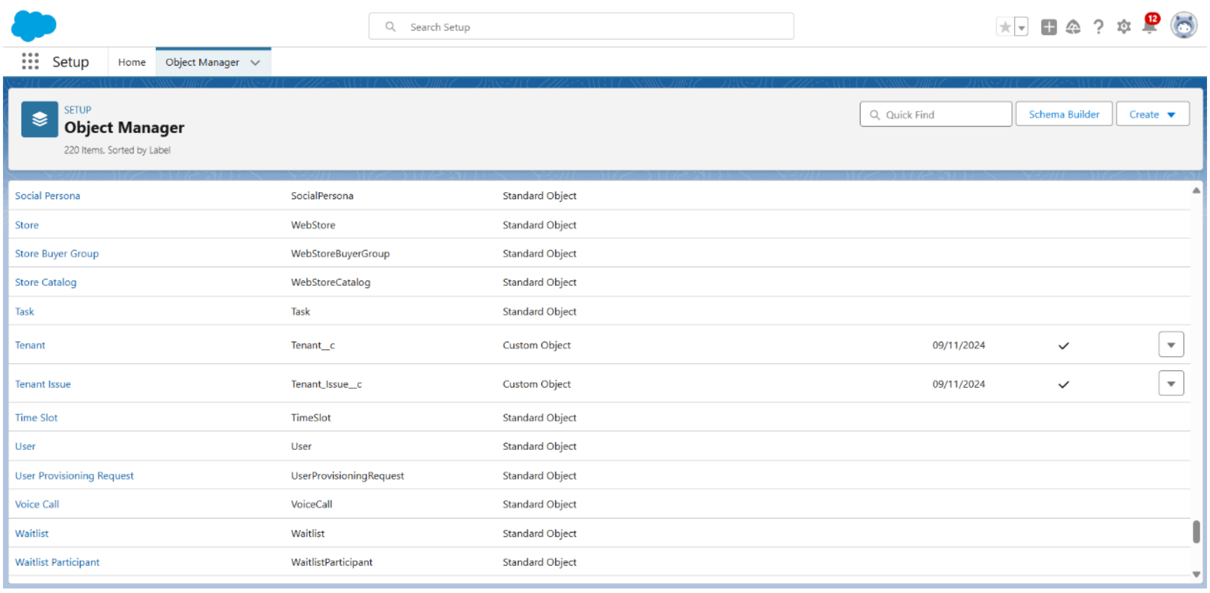
    2.Plural label name: Tenants

    3.Enter Record Name Label and Format

    - Record Name: Tenant Name
    - Data Type: Text

    4.Click on Allow reports

    5.Allow search and Save



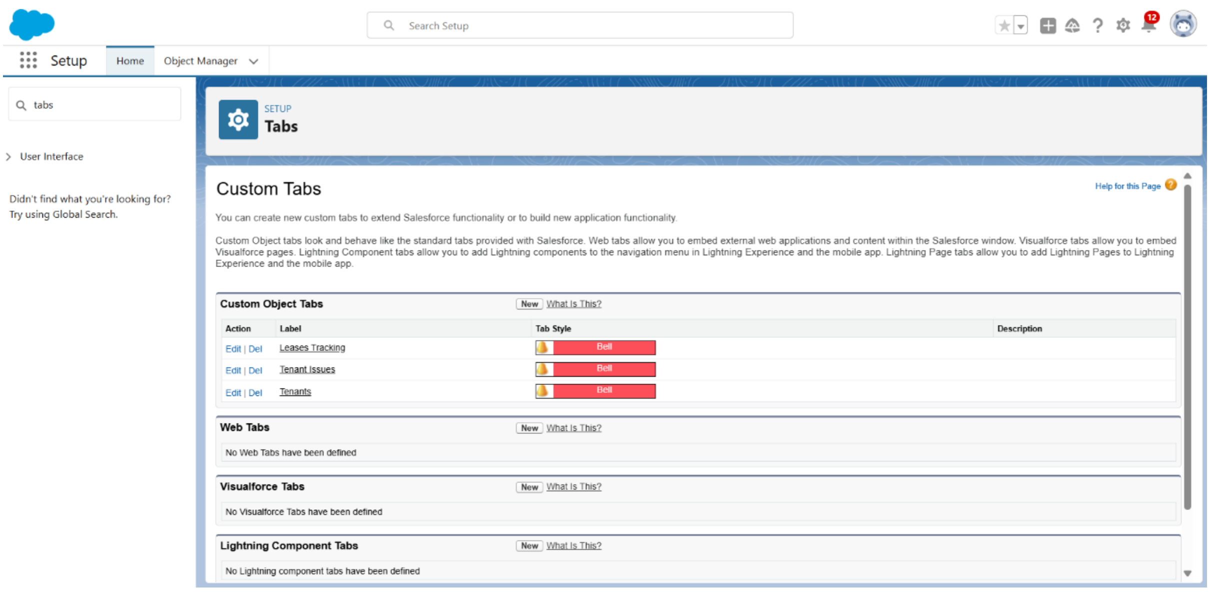
Note: Similarly, create objects for Lease Tracking and Tenant issues.

Tabs

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

Activity: Create a custom tab for tenant object

1. Go to setup page ==> type Tabs in Quick Find bar ==> click on tabs ==> New (under custom object tab)
    1. Select Object (Tenant) ==> Select the tab style ==> Next (Add to profiles page) keep it as default ==> Next (Add to Custom App) uncheck the include tab ==> Save.
    2. Make sure to append tab to users' existing personal customizations is checked.



Note: Similarly, create tabs for Lease Tracking and Tenant issues.

Create Fields and Relationships

To sort of information the objects store which we have created.

Activity: Create Fields on Tenant object

1. While still on your salesforce account, navigate to the gear icon present in the top right corner. You will notice Setup and click on setup.
2. You will now be navigated to the setup page, and click on object manager and search for object "Tenant".
3. Click on "Fields & Relationships" in the left panel.
4. Click on New and choose the data type Phone and first name: Phone Number. Click next and fill the following details in the mentioned.
5. Click Next, Next and click on "Save and New".

S No	Field Label	Data Type
1	Address	Text Area (255)
2	PAN Card	Text
3	Date of Reg	Date
4	Email	Email
5	GST No	Text

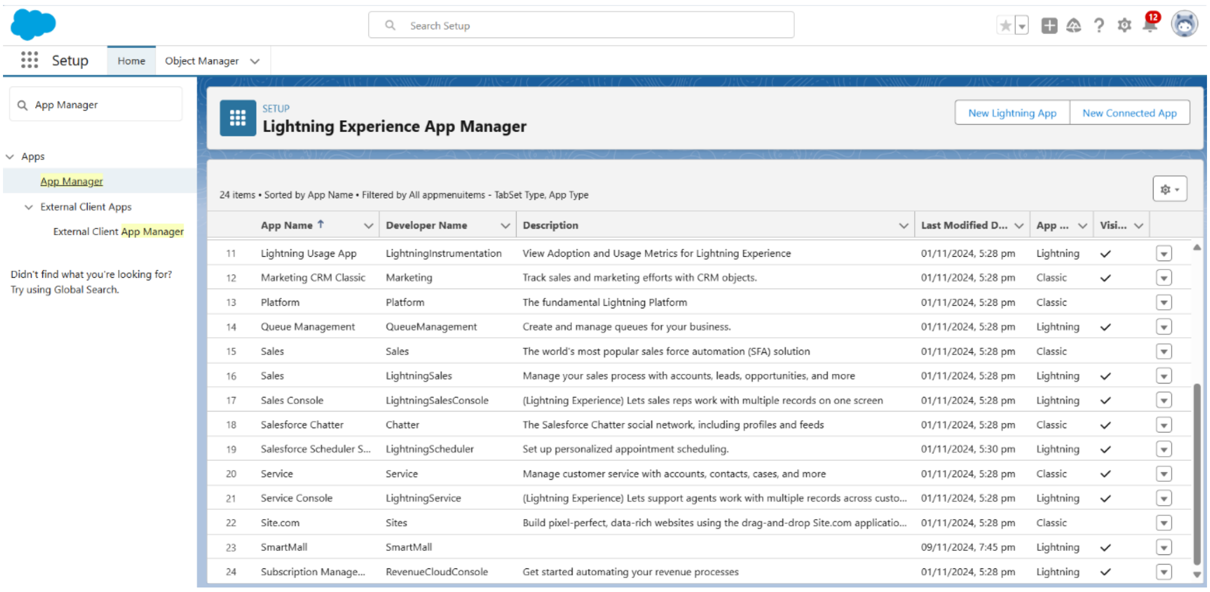
Note: Similarly, Create Fields tabs for Lease Tracking and Tenant issues.

Create the Lightning App

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 colour and logo.

Activity: Steps to Create Custom App in Salesforce

1. Go to setup, by clicking the gear icon present in the top right corner.
2. Navigate to the Home bar and in the quick find box, search for App.
3. Click on APP MANAGER.
4. Enter the App name as ‘Smart Mall’.

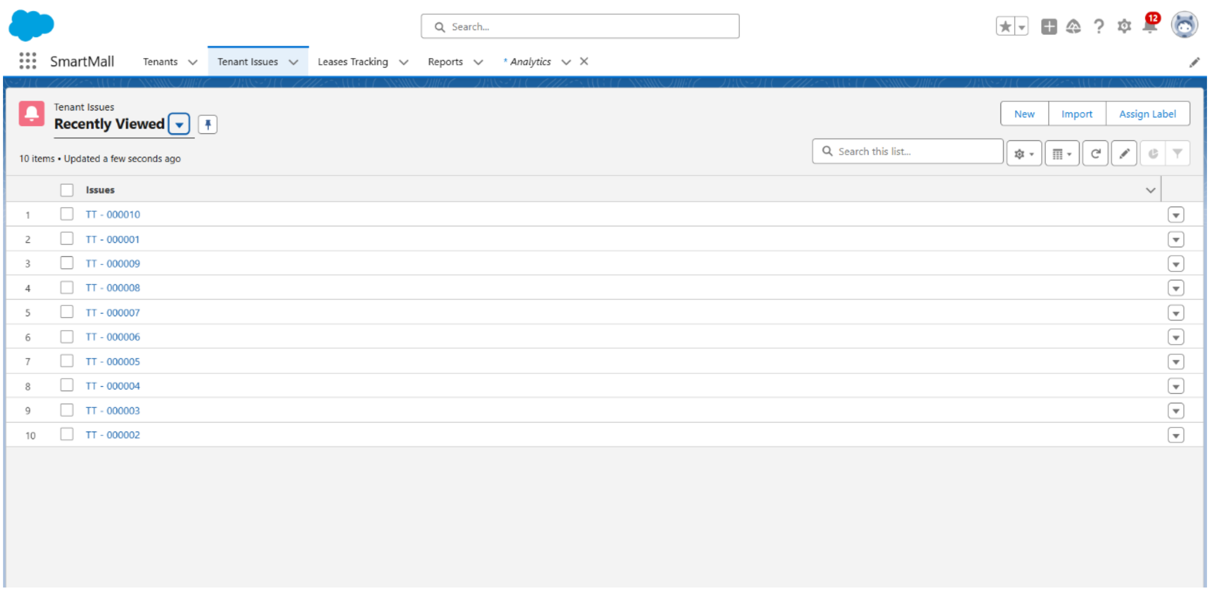


Record Insertion

Creating records in Salesforce is a fundamental and essential activity that serves multiple purposes, contributing to the effective management of data, streamlined processes, and overall success of an organization.

Activity: Inserting Records in Tenant Object

1. Click on the App Launcher and search Tenant Object then click New in the right corner to create a record.
2. Fill every field with valid data, especially the fields on which you have created a validation rule.
3. If you Enter Phone Number more or less than 10 digits it will show an error.
4. Similarly, if you enter DateofReg a Past date it will show an error.



Note: Similarly, Inserting Records for Lease Tracking and Tenant issues.

Smart Internz

SMARTBRIDGE

salesforce PARTNER

Create Flows

To automate complex business processes by orchestrating and automating sequences of tasks, data manipulations, and user interactions.

Activity: Create a Record Triggered flow on tenant Object

Whenever tenant record is created and the GST No field in tenant Object is empty a mail should be sent to the tenant requesting the GST No.

1) To create a flow, click on setup==> Flow ==> Click on New Flow==>

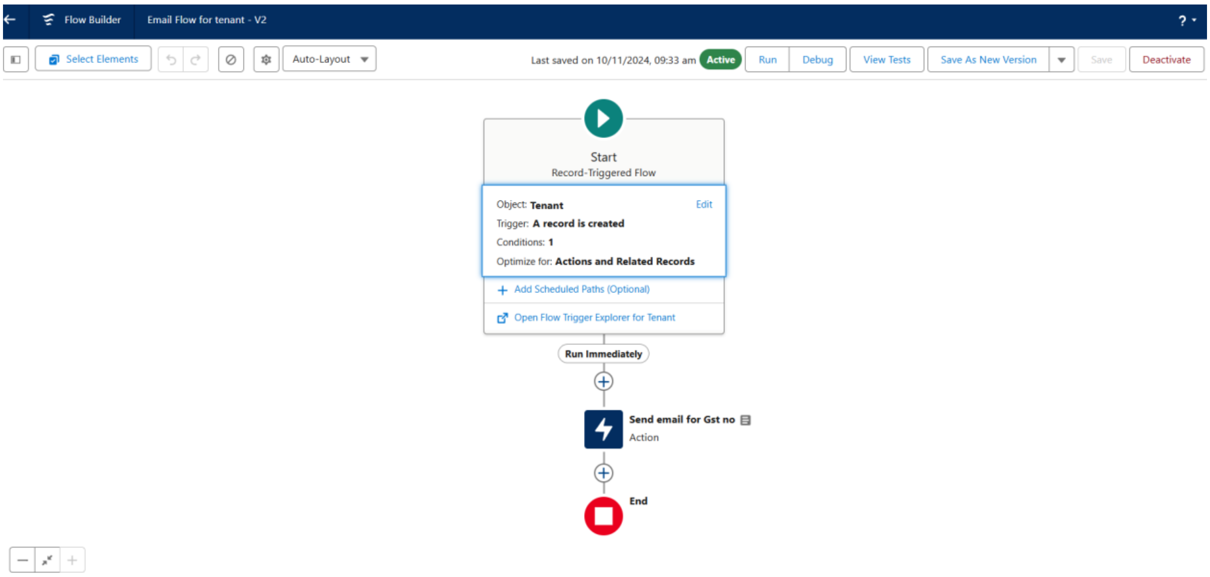
Select Record Triggered Flow

2) In Trigger the flow when Select A record is created

3) Select Condition required All Conditions are met (AND)

4) Select Field - GST_No__c, Operator - Is Null, Value - True.

5) Optimize the Flow for: Actions and Related Records.



Note: Similarly, Creating flow for schedule flow on lease tracking.

Apex Triggers

A trigger is a set of Apex code that runs before or after DML(Data Manipulation Language) events.

Activity: Apex Trigger to send an email if the tenant has not paid 50 Percent of Total Rent

1) Click on the gear icon and click on the developer console.

2) Click on file select New Apex Trigger

3) Name- leasetrackingtrigger, Object —> Lease_Tracking__c

4) Use Event - After insert and After Update and Use Trigger Context Variables as IsAfter and IsUpdate.

CODE SNIPPET:

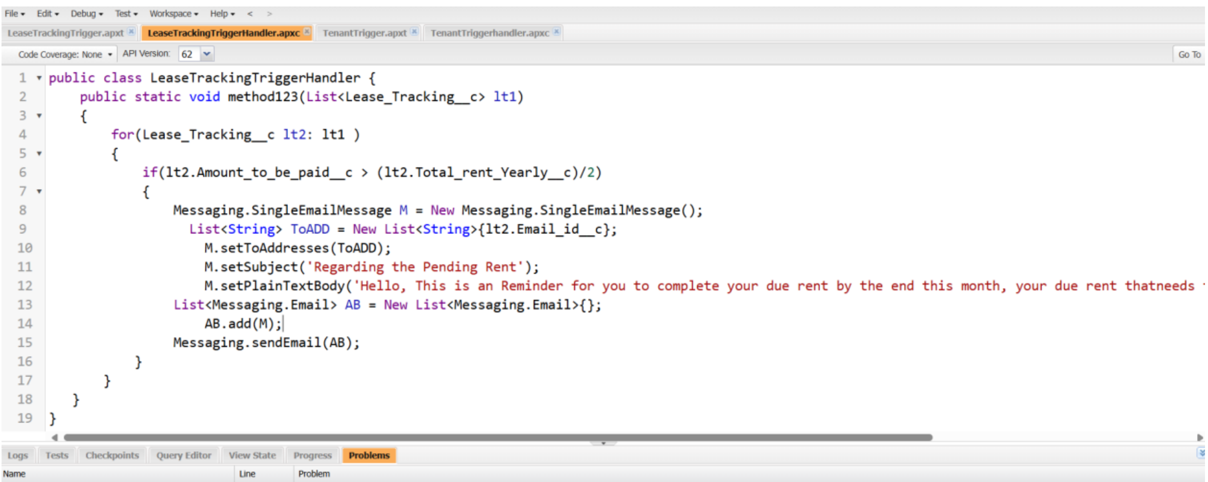
```
trigger leasetrackingtrigger on Lease_Tracking__c (After insert,After update) {
      if(Trigger.isAfter && Trigger.IsUpdate)
   {
       LeaseTrackingTriggerHandler.method1(trigger.old);
   }
}
```

1) Create an apex class and Name it LeaseTrackingTriggerHandler

CODE SNIPPET:

```
public class LeaseTrackingTriggerHandler {
     public static void method1(List<Lease_Tracking__c> lt1)
   {
      for(Lease_Tracking__c lt2: lt1 )
```

```
    {
        if(lt2.Amount_to_be_paid__c > (lt2.Total_rent_Yearly__c)/2)
        {
            Messaging.SingleEmailMessage M = New Messaging.SingleEmailMessage();
             List<String> ToADD = New List<String>{lt2.Email_id__c};
                M.setToAddresses(ToADD);
                M.setSubject('Regarding the Pending Rent');
                M.setPlainTextBody('Hello, This is an Reminder for you to complete your due rent by the end this month, your due rent thatneeds to be paid is' +lt2.Amount_to_be_paid__c;
               List<Messaging.Email> AB = New List<Messaging.Email>{};
               AB.add(M);
               Messaging.sendEmail(AB);
        }
    }
}
```



Asynchronous Apex

This approach is designed to handle long-running processes, heavy computations, or tasks that should not block user interactions.

Activity: Schedule Apex

Delete the Tenant Records Monthly whose Status Of Possession is closed.

1) Create a class with name tenantschedulable

2) Give extension Schedulable to the class.

3) Open the Anonymous Window.

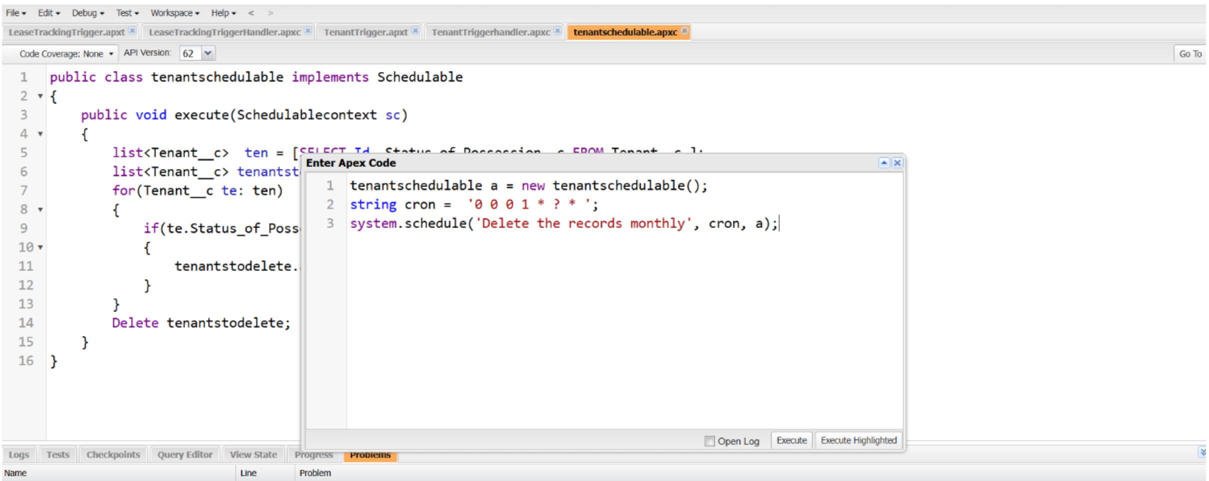
4) Schedule the class

```
tenantschedulable a = new tenantschedulable();
string cron =  '0 0 0 1 * ? * ';
system.schedule('Delete the records monthly', cron, a);
```

CODE SNIPPET

```
public class tenantschedulable implements Schedulable
{
public void execute(Schedulablecontext sc)
{
      list<Tenant__c>  ten = [SELECT Id, Status_of_Possession__c
FROM Tenant__c ];
       list<Tenant__c> tenantstodelete = New List<Tenant__c>()
       for(Tenant__c te: ten)
       {
          if(te.Status_of_Possession__c == 'Closed'){
```

```
                tenantstodelete.add(te);
            }
        }
        Delete tenantstodelete;
    }
}
```



Create Reports and Dashboards

Salesforce Reports and Dashboards are powerful tools that empower users to visualize and analyze data within the Salesforce platform. They play a crucial role in providing insights, monitoring performance, and making informed business decisions.

Activity: Create a Report of lease Management Records

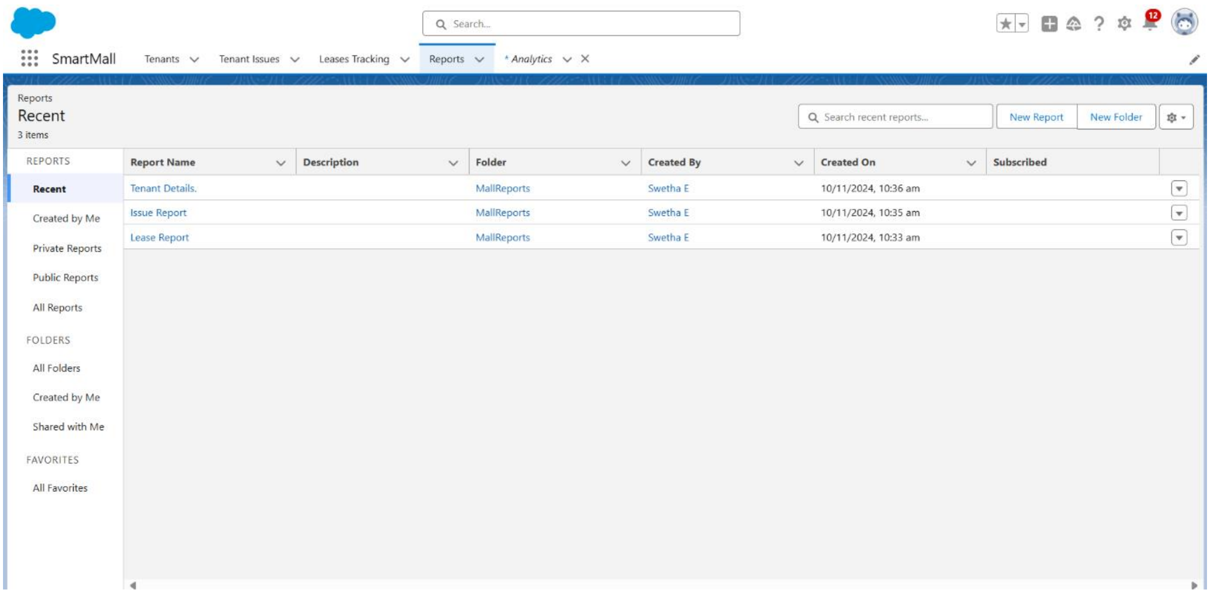
The Manager needs a report which shows the tenant and their joining date and their Remaining payment details and also group this by date of Registration, and make a bucket list of remaining amount as greater than 1000000 as red, less than 1000 and greater than 500000 as blue and less than equal to 500000 as yellow.

1) Create a new Folder and name it as MallReports

2) Click On new report ==> Select object Activities with LeaseTracking ==> Click on start report.

3) Click on the Amount to be paid column and click on bucket this list and name it as Remaining amount.

4) Save the report named as lease report and Save it in MallReports.



Note: Similarly, Create a Report on Issue Record and Tenant Records

Create a Dashboard

Create a Dashboard and follow the instruction below

1) To Create a Dashboard first create a folder to store the dashboard and save it as Mall Dashboard

2) Now click on New Dashboard

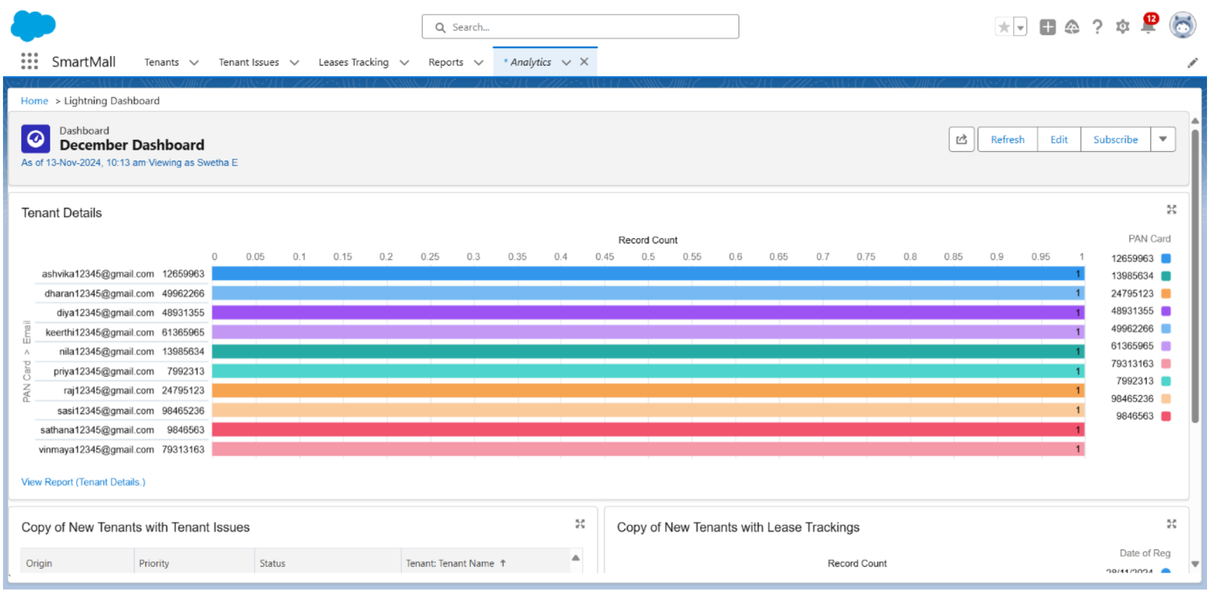
3) Enter Name - December Dashboard, select the Mall Dashboard folder and click on create.

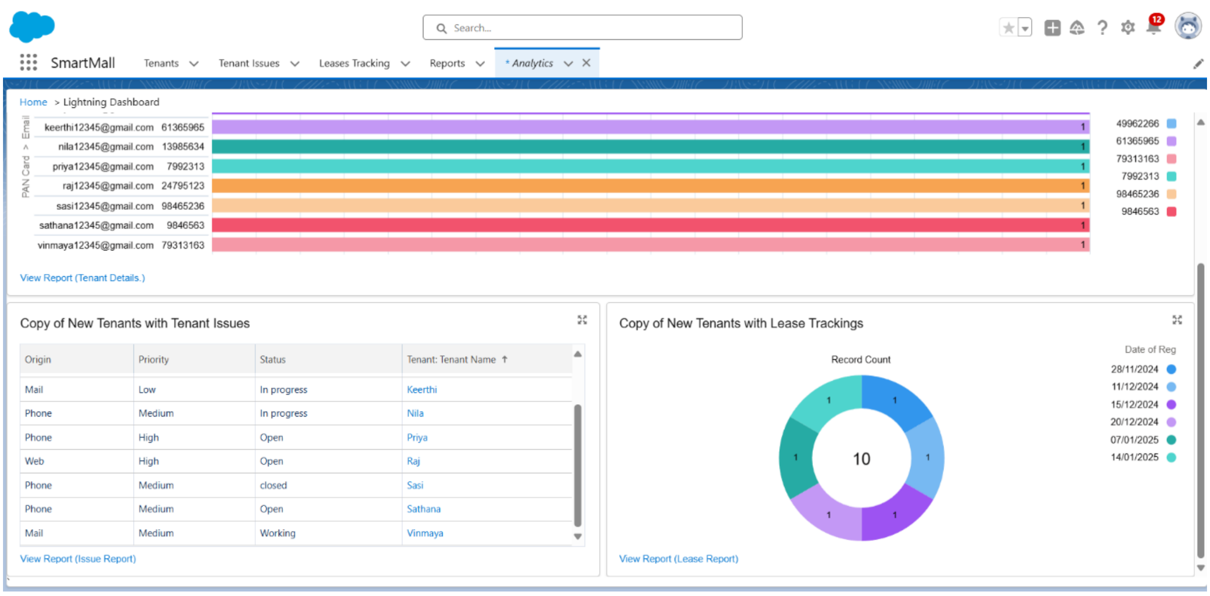
4) Click on + Component and Select Tenant Details, Display as Horizontal Bar Chart, Dimensions - Height * width = 10*12.

5) Click on + Component and Select Issue Report, Display as Lightning Table, Dimensions - Height * width = 8*6.

6) Click on + Component and Select lease report, Display as Lightning Table,Dimensions - Height * width = 8*6

7) Click on save and Done.





Conclusion:

This CRM application project for mall management has successfully demonstrated the essential role of a centralized system in enhancing operational efficiency and customer relationship management. By integrating features such as tenant management, customer data analytics, event scheduling, and promotional activities, the application provides a comprehensive solution tailored to the needs of mall administration. Through streamlined processes, it aids in delivering personalized experiences to shoppers and efficient support to tenants, ultimately driving higher customer satisfaction and engagement. This project has set a foundation for implementing scalable and adaptable CRM solutions in the retail and commercial space, with potential for further advancements, including AI-driven insights and automated customer service options, to keep pace with the evolving demands of the retail industry.