

CRM APPLICATION FOR MALL MANAGEMENT

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1. Project Overview:

This project focuses on developing a CRM application tailored for mall management. It is designed to streamline operations, enhance tenant and customer relationships, and optimize revenue management. By leveraging the Salesforce platform, the project aims to provide centralized control and real-time insights for mall administrators.

2.Objectives:

Business Goals: -

- Improve tenant relationship management.
- Enhance customer engagement and satisfaction.
- Optimize operational efficiency and revenue tracking.

Specific Outcomes: -

- A unified tenant management system.
- Custom dashboards for real-time insights.
- Automated workflows for common tasks such as lease renewals and maintenance scheduling.

3. Salesforce key Features and Concepts Utilized:

Salesforce Service Cloud:

- For tenant and customer support management.

Salesforce Sales Cloud:

- For leasing and revenue tracking.

Custom Workflows:

- Automated task management for operational efficiency.

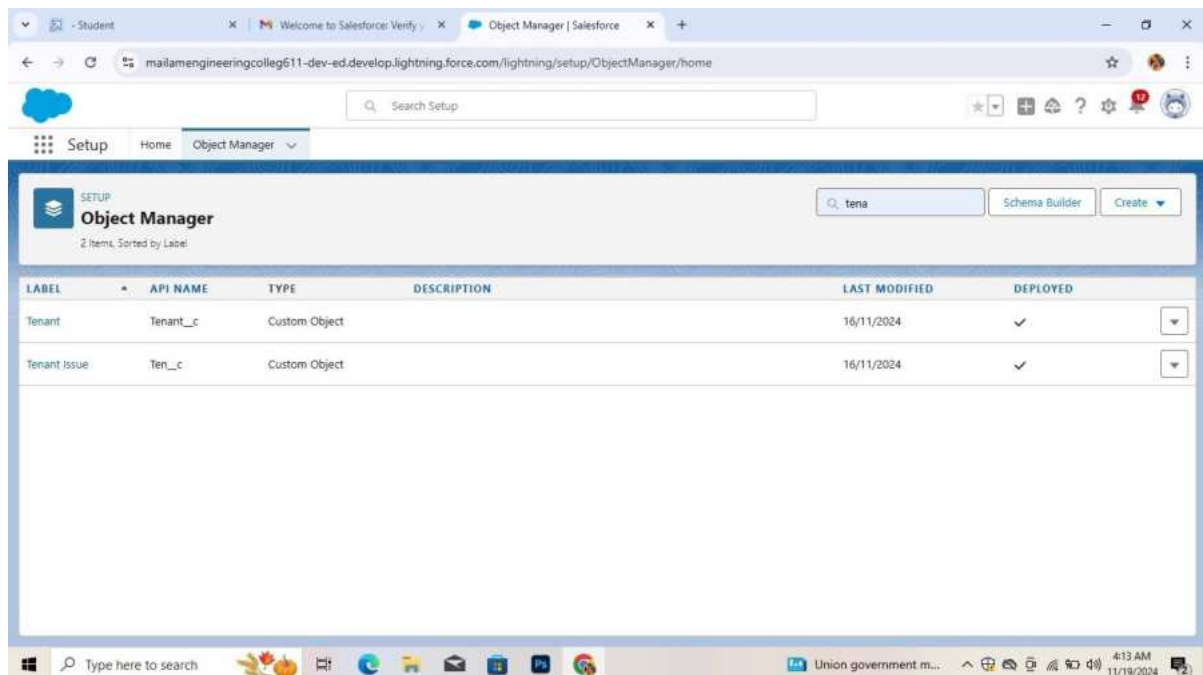
Reports and Dashboards:

- Real-time data visualization for mall management.

4. Detailed Steps to Solution Design:

✓ Create Custom Objects:

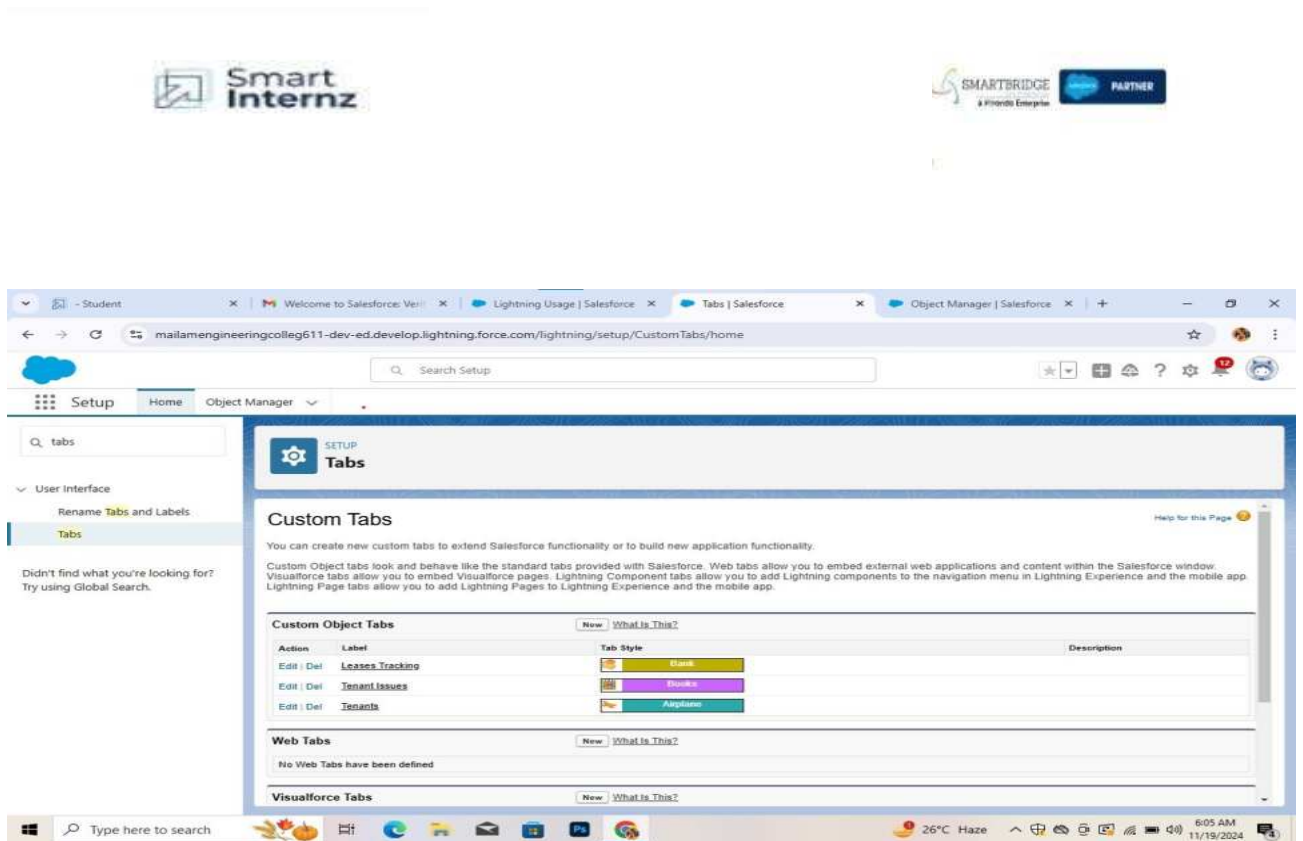
We should create a custom objects in salesforce, follow these details:



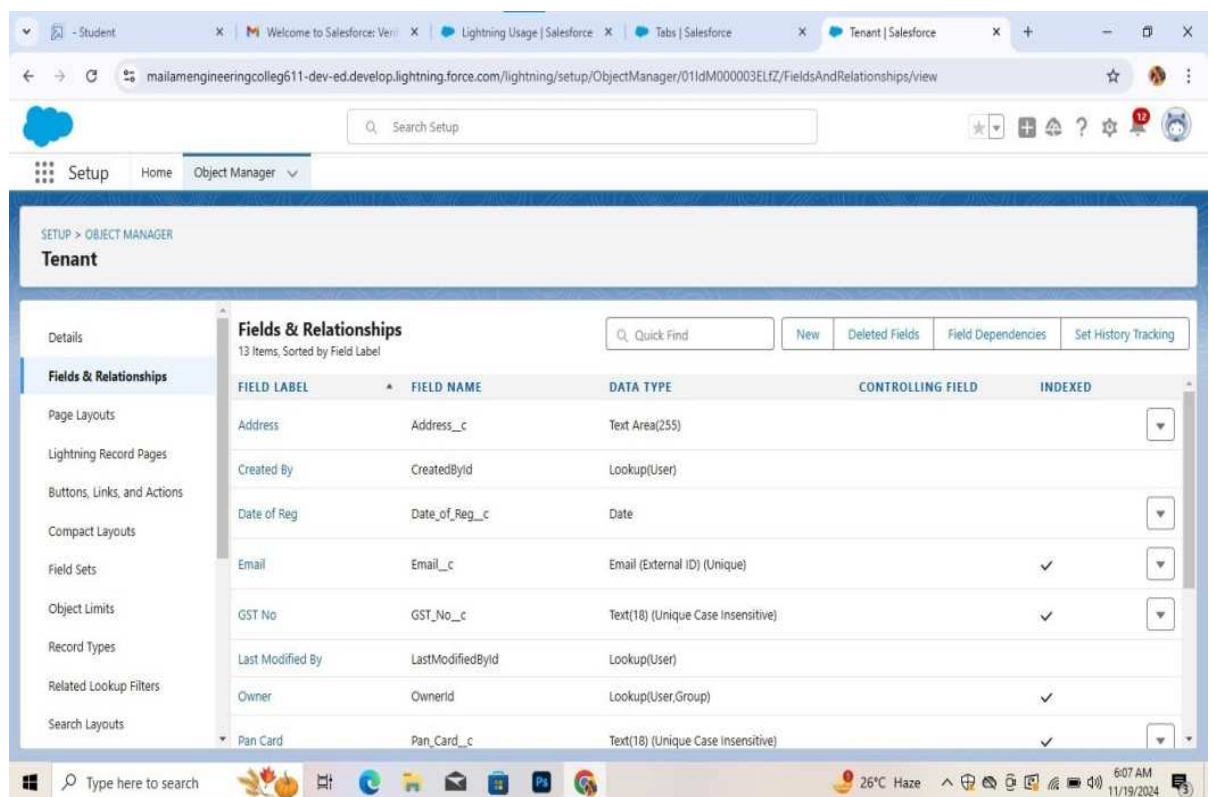
✓ Create a Tabs:

Tabs in a CRM (Customer Relationship Management) application for a mall typically serve as organized sections to manage various aspects of customer and business interactions. Here are common tab ideas.

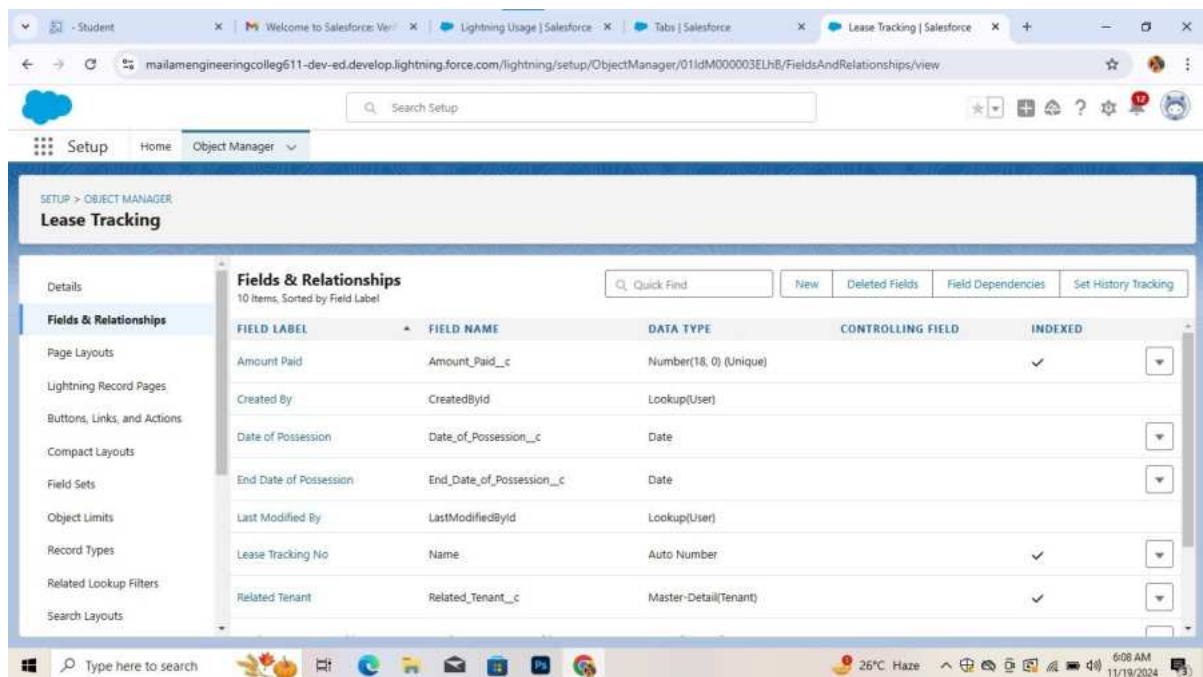
Overview of key metrics, such as footfall, sales data, and tenant performance.



✓ Create fields on tenant object:



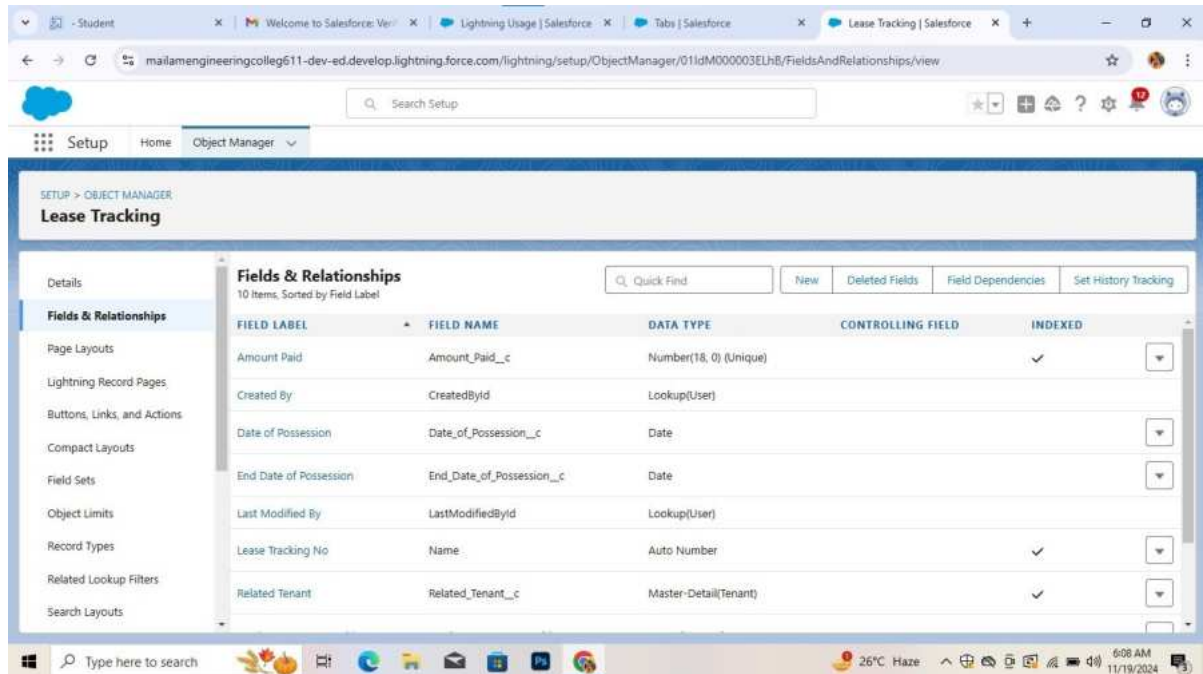
✓ Create fields on Lease tracking object:



The screenshot shows the Salesforce Setup interface for the 'Lease Tracking' object. The 'Fields & Relationships' section is active, displaying a list of 10 fields. The fields are sorted by Field Label. The table below summarizes the fields shown:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount Paid	Amount_Paid__c	Number(18, 0) (Unique)		✓
Created By	CreatedById	Lookup(User)		
Date of Possession	Date_of_Possession__c	Date		
End Date of Possession	End_Date_of_Possession__c	Date		
Last Modified By	LastModifiedById	Lookup(User)		
Lease Tracking No	Name	Auto Number		✓
Related Tenant	Related_Tenant__c	Master-Detail(Tenant)		✓

✓ Create fields on tenant issues:



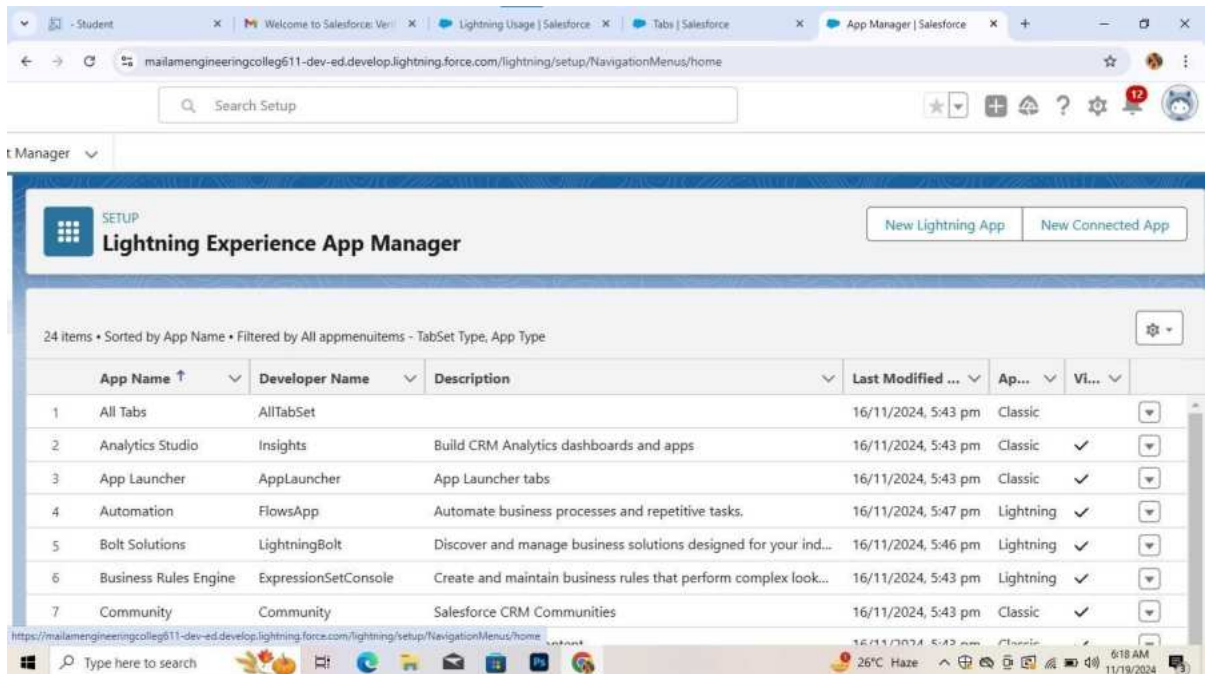
This screenshot is identical to the one above, showing the Salesforce Setup interface for the 'Lease Tracking' object. The 'Fields & Relationships' section is active, displaying a list of 10 fields. The fields are sorted by Field Label. The table below summarizes the fields shown:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount Paid	Amount_Paid__c	Number(18, 0) (Unique)		✓
Created By	CreatedById	Lookup(User)		
Date of Possession	Date_of_Possession__c	Date		
End Date of Possession	End_Date_of_Possession__c	Date		
Last Modified By	LastModifiedById	Lookup(User)		
Lease Tracking No	Name	Auto Number		✓
Related Tenant	Related_Tenant__c	Master-Detail(Tenant)		✓

✓ Create a lightning app:

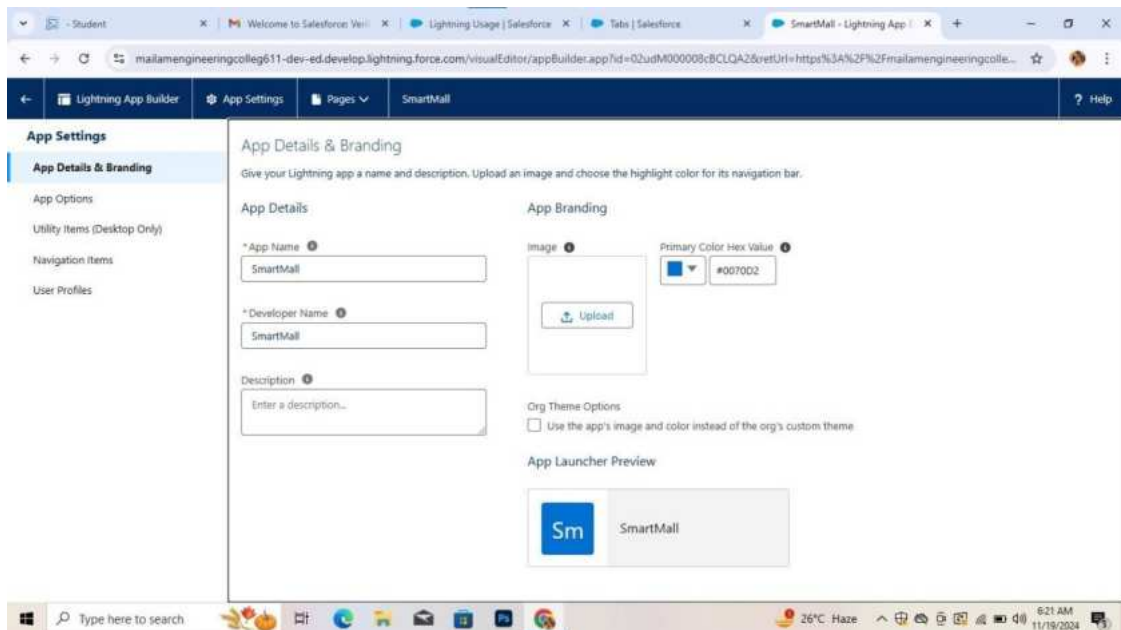
Create a Custom Lightning App that integrates the following components:

- o Opportunity Records
 - o Automobile Information records
 - o Invoices related to Opportunities
- The app should include:
- o Navigation to all relevant objects (Opportunities, Automobiles, Invoices).
 - o A dashboard to visualize Total Sales, Invoices due, opportunity stage.



24 items • Sorted by App Name • Filtered by All appmenuitems - TabSet Type, App Type

	App Name ↑	Developer Name	Description	Last Modified ...	Ap...	Vi...	
1	All Tabs	AllTabSet		16/11/2024, 5:43 pm	Classic		
2	Analytics Studio	Insights	Build CRM Analytics dashboards and apps	16/11/2024, 5:43 pm	Classic	✓	
3	App Launcher	AppLauncher	App Launcher tabs	16/11/2024, 5:43 pm	Classic	✓	
4	Automation	FlowsApp	Automate business processes and repetitive tasks.	16/11/2024, 5:47 pm	Lightning	✓	
5	Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your ind...	16/11/2024, 5:46 pm	Lightning	✓	
6	Business Rules Engine	ExpressionSetConsole	Create and maintain business rules that perform complex look...	16/11/2024, 5:43 pm	Lightning	✓	
7	Community	Community	Salesforce CRM Communities	16/11/2024, 5:43 pm	Classic	✓	



The screenshot shows the 'App Details & Branding' configuration page in the Salesforce Lightning App Builder. The left sidebar lists 'App Settings' with sub-items: 'App Details & Branding' (selected), 'App Options', 'Utility Items (Desktop Only)', 'Navigation Items', and 'User Profiles'. The main content area is divided into two sections: 'App Details' and 'App Branding'.

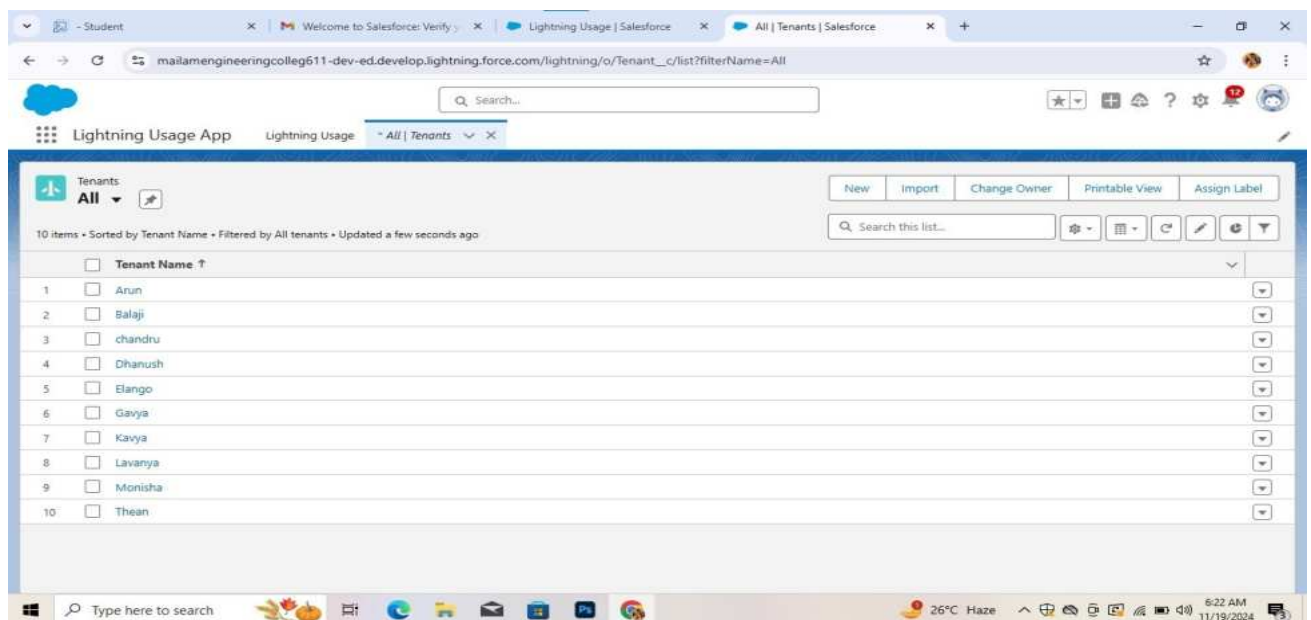
App Details:

- * App Name:** SmartMail
- * Developer Name:** SmartMail
- Description:** Enter a description...

App Branding:

- Image:** A placeholder box with an 'Upload' button.
- Primary Color Hex Value:** #0070D2
- Org Theme Options:** A checkbox labeled 'Use the app's image and color instead of the org's custom theme' is currently unchecked.
- App Launcher Preview:** A preview showing a blue square icon with 'Sm' and the text 'SmartMail'.

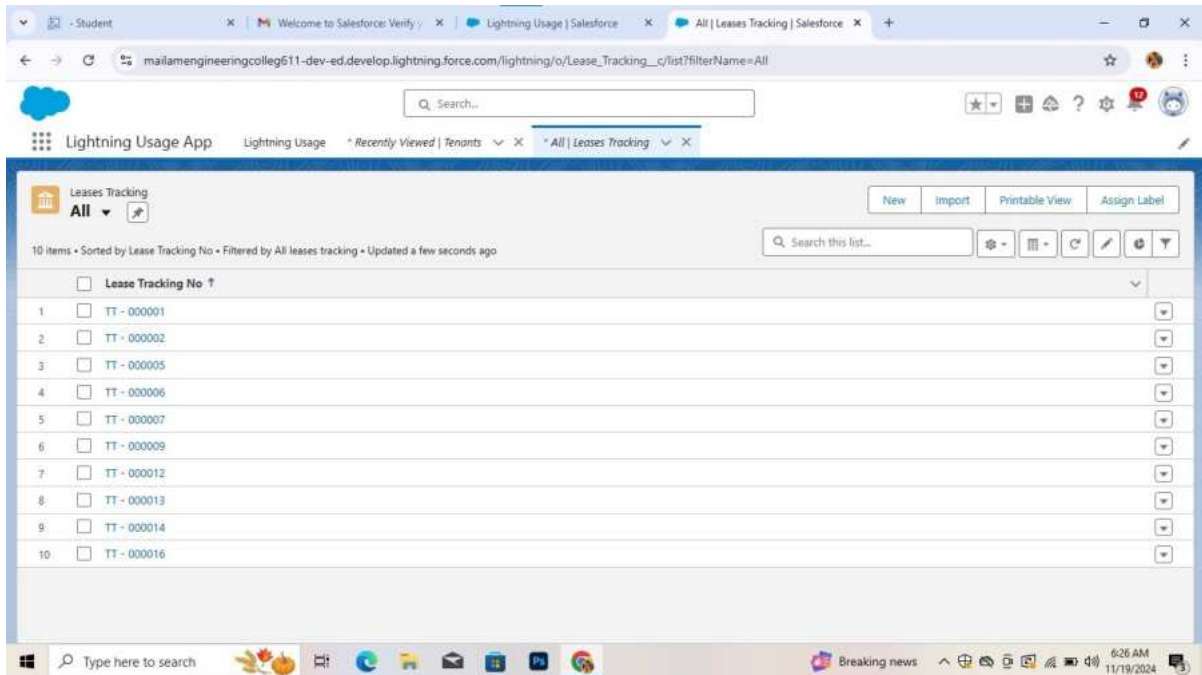
✓ Inserting records in tenant object:



The screenshot shows the 'All Tenants' list in the Lightning Usage App. The interface includes a search bar, a table of tenants, and a toolbar with actions like 'New', 'Import', 'Change Owner', 'Printable View', and 'Assign Label'.

	Tenant Name ↑	
1	<input type="checkbox"/> Arun	
2	<input type="checkbox"/> Balaji	
3	<input type="checkbox"/> Chandru	
4	<input type="checkbox"/> Dhanush	
5	<input type="checkbox"/> Elango	
6	<input type="checkbox"/> Gavya	
7	<input type="checkbox"/> Kavya	
8	<input type="checkbox"/> Lavanya	
9	<input type="checkbox"/> Monisha	
10	<input type="checkbox"/> Thean	

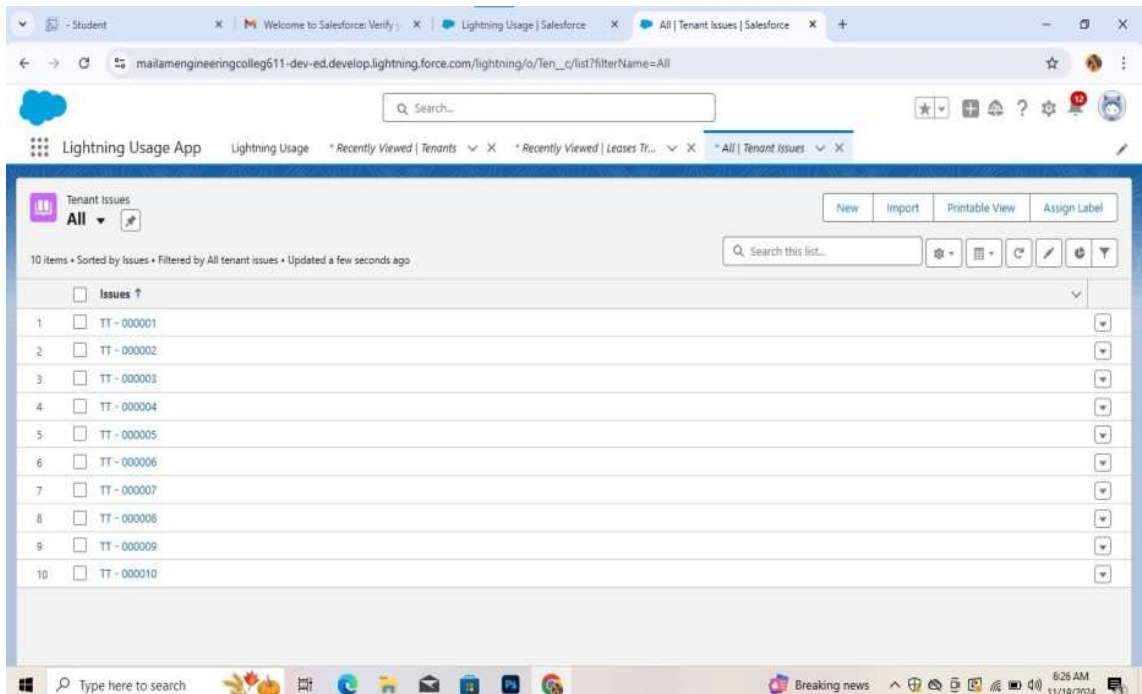
✓ Inserting records in lease tracking object:



The screenshot shows the Salesforce Lightning Usage App interface. The browser tabs include "Student", "Welcome to Salesforce: Verify", "Lightning Usage | Salesforce", and "All | Leases Tracking | Salesforce". The address bar shows the URL: `mailamengineeringcolleg611-dev-ed.develop.lightning.force.com/lightning/o/Lease_Tracking__c/list?filterName=All`. The app header displays "Lightning Usage App" and "Lightning Usage". The main content area is titled "Leases Tracking" and shows a list of 10 items. The list is sorted by "Lease Tracking No" and filtered by "All leases tracking". The list items are as follows:

Lease Tracking No
1 TT - 000001
2 TT - 000002
3 TT - 000005
4 TT - 000006
5 TT - 000007
6 TT - 000009
7 TT - 000012
8 TT - 000013
9 TT - 000014
10 TT - 000016

✓ Inserting records in tenant issues object:

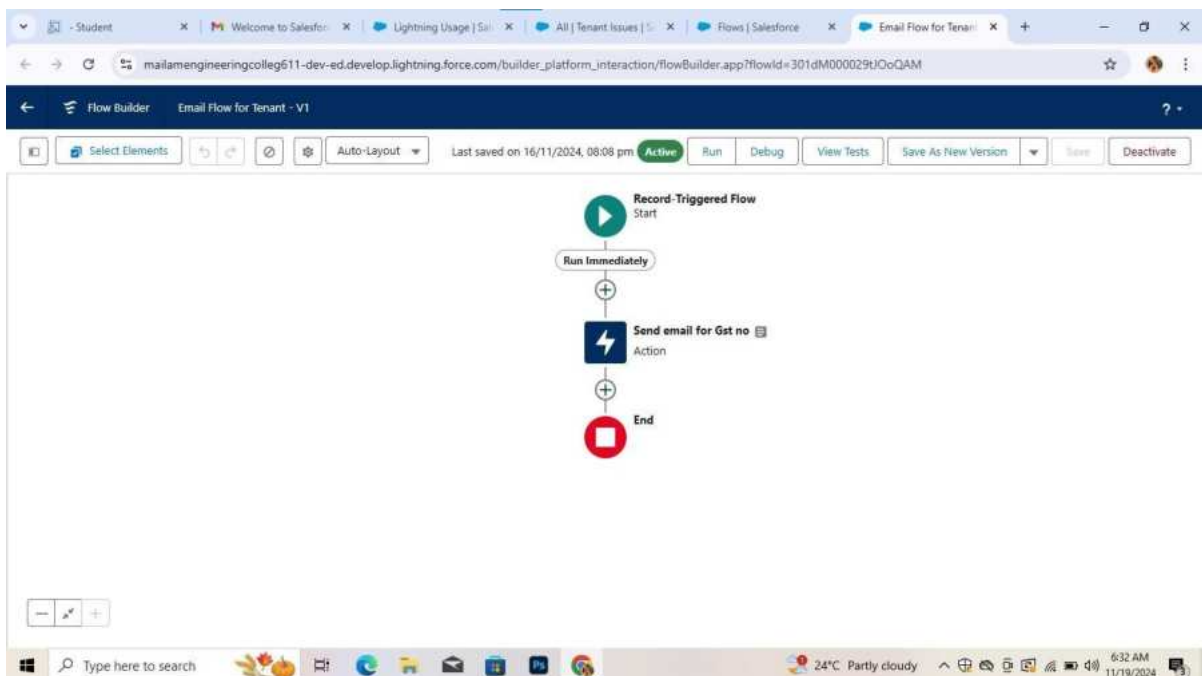


The screenshot shows the Salesforce Lightning Usage App interface. The browser tabs include "Student", "Welcome to Salesforce: Verify", "Lightning Usage | Salesforce", and "All | Tenant Issues | Salesforce". The address bar shows the URL: `mailamengineeringcolleg611-dev-ed.develop.lightning.force.com/lightning/o/Ten__c/list?filterName=All`. The app header displays "Lightning Usage App" and "Lightning Usage". The main content area is titled "Tenant Issues" and shows a list of 10 items. The list is sorted by "Issues" and filtered by "All tenant issues". The list items are as follows:

Issues
1 TT - 000001
2 TT - 000002
3 TT - 000003
4 TT - 000004
5 TT - 000005
6 TT - 000006
7 TT - 000007
8 TT - 000008
9 TT - 000009
10 TT - 000010

✓ Create Flows:

Designing a CRM (Customer Relationship Management) application for a mall involves creating a set of comprehensive, user-centric workflows to optimize operations, enhance customer experience, and provide valuable insights to stakeholders. Below are detailed flows tailored to the key user groups: Mall Administrators, Store Managers, and Customers.



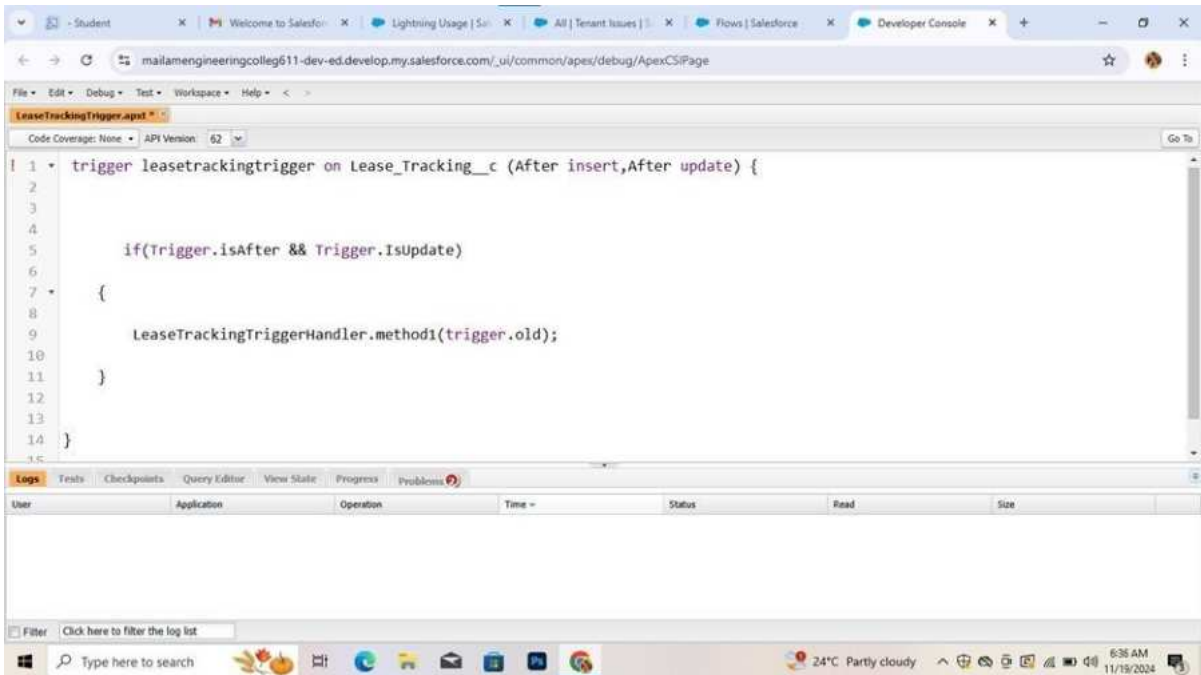
✓ **Create a schedule flow on lease management object:**

The screenshot displays the Salesforce Flow Builder interface. At the top, there are logos for 'Smart Internz' and 'SMARTBRIDGE a Hiverts Enterprise PARTNER'. The browser address bar shows the URL: mailamengineeringcolleg511-dev-ed.develop.lightning.force.com/builder_platform_interaction/flowBuilder.app?flowId=301dM00002A4FqqQAF. The flow is titled 'schedule flow on lease tracking - V1'. The flow diagram consists of three steps: 1. 'Start' (Schedule-Triggered Flow) with settings: 'Flow Starts: Mon, 06-Nov-2023, 11:...' and 'Frequency: Weekly'. 2. 'Create task' (Create Records). 3. 'End'. The flow is currently 'Active' and was last saved on 18/11/2024, 02:17 am. The bottom of the screen shows a Windows taskbar with the date 11/19/2024 and time 6:34 AM.

✓ Apex Triggers:

An Apex trigger is a set of instructions that execute when certain events occur on a Salesforce object (like when a record is created, updated, deleted, or restored).

✓ Lease tracking trigger:

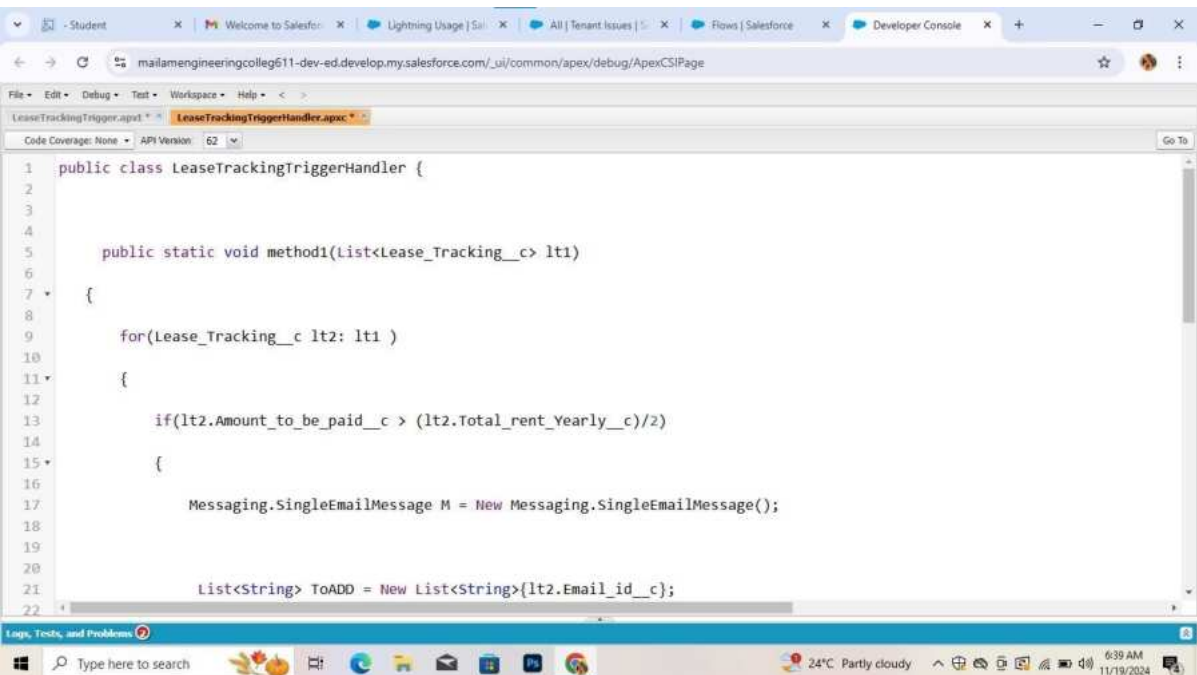


```

1  trigger leasetrackingtrigger on Lease_Tracking__c (After insert,After update) {
2
3
4
5      if(trigger.isAfter && Trigger.IsUpdate)
6
7      {
8
9          LeaseTrackingTriggerHandler.method1(trigger.old);
10
11      }
12
13
14 }

```

✓ Lease tracking trigger handler:



```

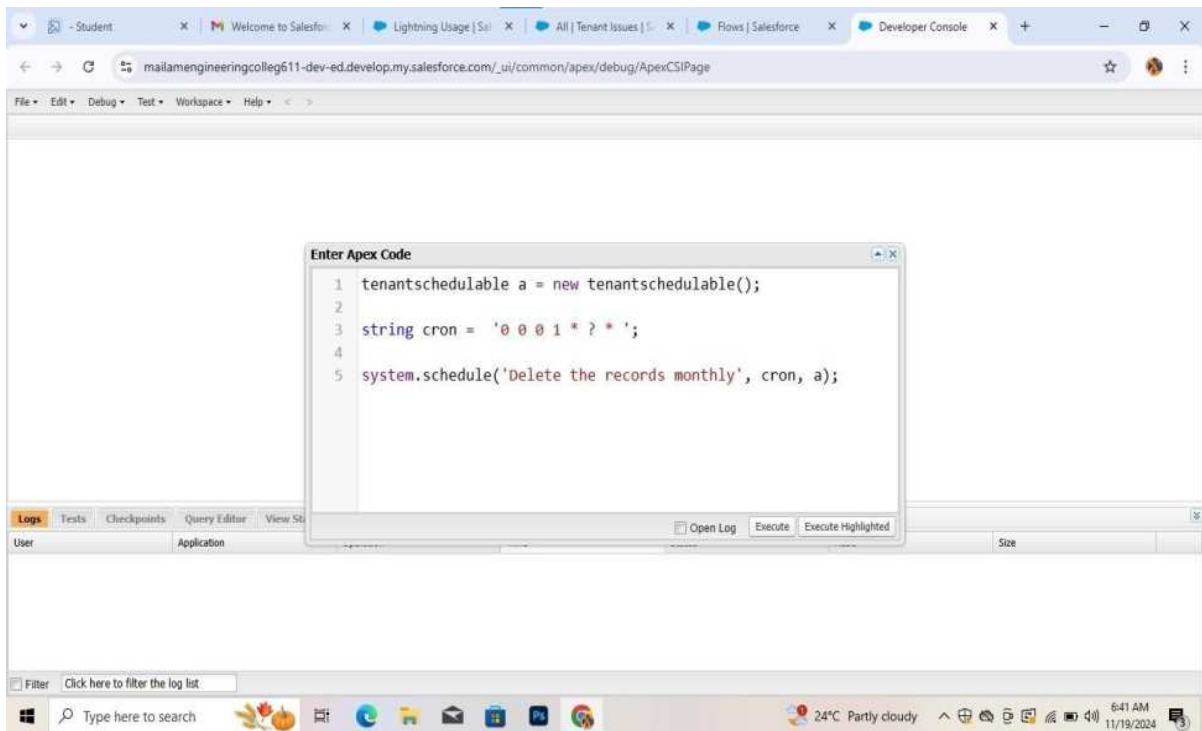
1  public class LeaseTrackingTriggerHandler {
2
3
4
5      public static void method1(List<Lease_Tracking__c> lt1)
6
7      {
8
9          for(Lease_Tracking__c lt2: lt1 )
10
11          {
12
13              if(lt2.Amount_to_be_paid__c > (lt2.Total_rent_Yearly__c)/2)
14
15              {
16
17                  Messaging.SingleEmailMessage M = New Messaging.SingleEmailMessage();
18
19
20
21                  List<String> ToADD = New List<String>{lt2.Email_id__c};
22

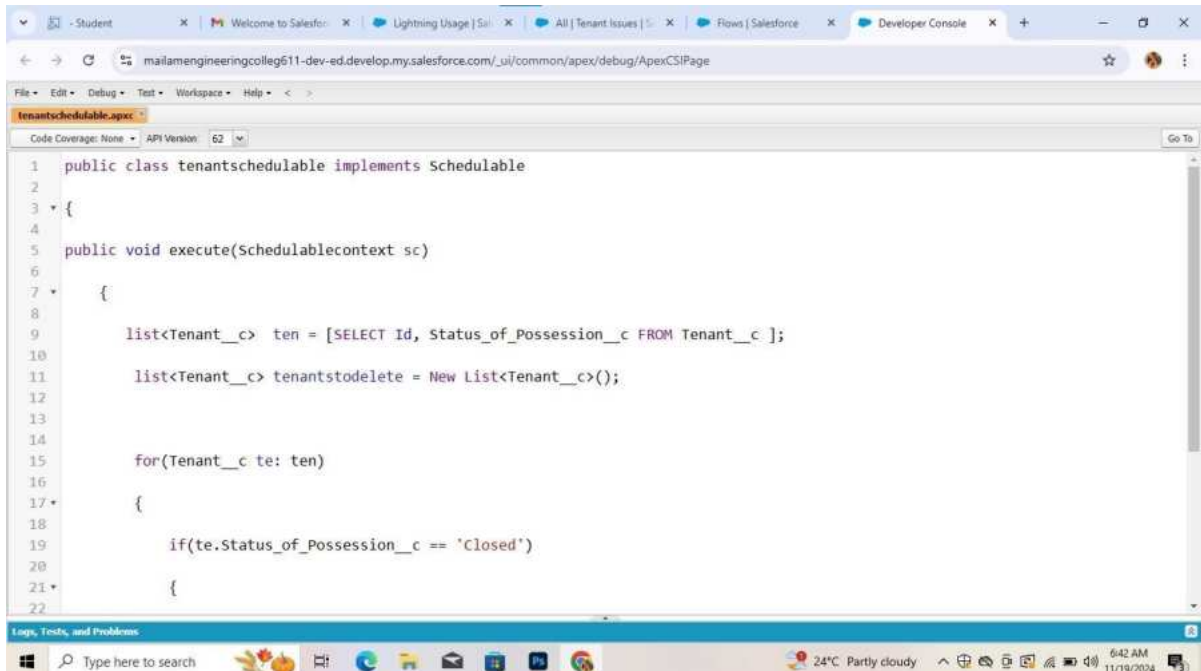
```

✓ Asynchronous apex:

Asynchronous Apex can be applied to CRM systems for a mall to handle operations that are long-running, resourceintensive, or time-dependent, such as sending

notifications, processing tenant records, or updating analytics dashboards. Below are examples of Asynchronous Apex implementations, including Scheduled Apex for specific scenarios in a mail CRM application.





```

1 public class tenantschedulable implements Schedulable
2 {
3     {
4     public void execute(Schedulablecontext sc)
5     {
6     {
7         list<Tenant__c> ten = [SELECT Id, Status_of_Possession__c FROM Tenant__c ];
8         list<Tenant__c> tenantstodelete = New List<Tenant__c>();
9
10        for(Tenant__c te: ten)
11        {
12            if(te.Status_of_Possession__c == 'closed')
13            {
14            }
15        }
16    }
17    }
18    }
19    }
20    }
21    }
22    }

```

✓ Reports:

Reports give you access to your Salesforce data. You can examine your Salesforce data in almost infinite combinations, display it in easy-to-understand formats, and share the resulting insights with others. Before building, reading, and sharing reports, review these reporting basics.

- **Create A Report of lease Management Records:**

Lease management records play a critical role in the administration of real estate properties, especially for commercial spaces like malls, office buildings, or residential complexes. A well-organized lease management system helps property managers track lease agreements, rental payments, terms, renewals, and compliance with lease conditions

Report: Tenants with Leases Tracking
lease report

Total Records: 10
Total Amount Paid: 3,62,000

Date of Reg	Tenant: Tenant Name	Lease Tracking: Lease Tracking No	Amount Paid	Date of Possession
16/11/2024 (2)	Thean	TT - 000012	43,000	29/11/2026
	Thean	TT - 000016	54,000	29/11/2026
Subtotal			97,000	
19/11/2024 (1)	Elango	TT - 000013	48,000	14/11/2025
Subtotal			48,000	
20/11/2024 (1)	Arun	TT - 000007	5,000	13/11/2026
Subtotal			5,000	
21/11/2024 (2)	Kavya	TT - 000014	57,000	05/11/2025
	Kavya	TT - 000002	40,000	17/07/2025
Subtotal			97,000	
23/11/2024 (2)	Lavanya	TT - 000009	36,000	27/11/2026
	Lavanya	TT - 000001	30,000	12/02/2026
Grand Total			3,62,000	

Row Counts: ☒ Detail Rows: ☒ Subtotals: ☒ Grand Total: ☒

- **Create a report of Tenant issue:**

This report will outline the key components of lease management records, including the structure, data, and key performance indicators (KPIs) relevant to tracking lease agreements.

Report: Tenants with Tenant Issues
Issue Report

Total Records: 10

	Tenant: Tenant Name	Tenant Issue: Issues	Origin	Priority	Status
1	Kavya	TT - 000002	1.Phone	2.Medium	4.Working
2	Lavanya	TT - 000001	1.Phone	1.Low	1.Not contacted
3	Balaji	TT - 000010	1.Phone	1.Low	1.Not contacted
4	chandru	TT - 000009	1.Phone	1.Low	1.Not contacted
5	Monisha	TT - 000003	1.Phone	1.Low	1.Not contacted
6	Dhanush	TT - 000004	1.Phone	2.Medium	1.Not contacted
7	Arun	TT - 000005	1.Phone	2.Medium	4.Working
8	Elango	TT - 000006	1.Phone	2.Medium	3.In progress
9	Gavya	TT - 000007	1.Phone	2.Medium	4.Working
10	Thean	TT - 000008	1.Phone	1.Low	1.Not contacted

- **Create A Report on Tenant Records:**

Report: Tenants
Tenant Details.

Total Records: 10

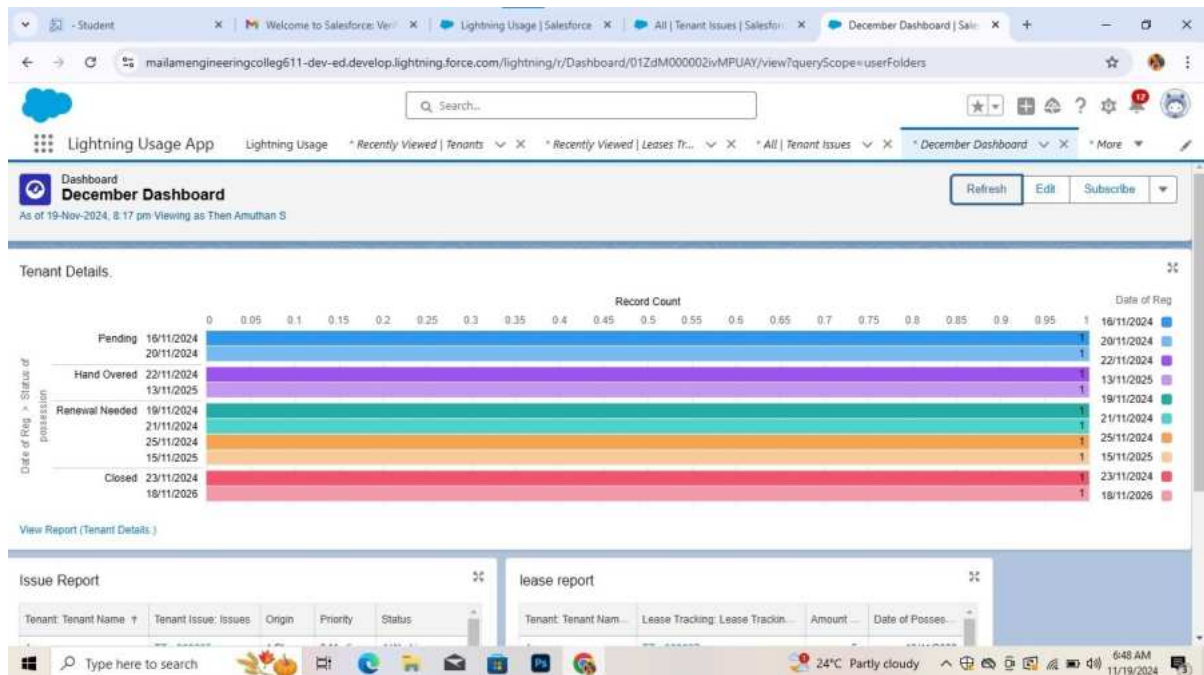
Status of possession	Date of Reg	Tenant: Tenant Name	Pan Card	GST No
Pending (2)	16/11/2024 (1)	Thean	5151Sawd	FFBsys
	Subtotal			
	20/11/2024 (1)	Arun	5151Sawwww	ssdmj
	Subtotal			
Subtotal				
Hand Overed (2)	22/11/2024 (1)	Gavya	5151Sawdaj	FFBysaj
	Subtotal			
	13/11/2025 (1)	Dhanush	5151Sahhh	FFBysyy
	Subtotal			
Subtotal				
Renewal Needed (4)	19/11/2024 (1)	Elango	5151Sawdtg	FFBysqwf
	Subtotal			

Row Counts: Detail Rows: Subtotals: Grand Total:

✓ Dashboard:

Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities.

A set of steps designed to review, validate, and authorize tasks or transactions related to workforce management. This process ensures that actions like employee onboarding, promotions, leave requests, and payroll changes comply with organizational policies and are properly documented.



✓ Data Model Design:

- Incorporating tenants, leases, shops, and customer data.

✓ User Interface Design:

- Tenant portals for lease and communication management.
- Customer portals for event updates and feedback.

✓ Business Logic:

- Custom triggers for automated alerts and renewals.

5. Testing and Validation:

✓ Unit Testing:

- Apex classes and triggers tested for functionality.

✓ User Interface Testing:

- Ensuring intuitive and responsive UI for all users.

6. Key Scenarios Addressed by Salesforce in the Implementation Project:

✓ Customer Data Management:

Scenario: Centralizing all customer data in one place to create a 360degree view of each customer.

Implementation: Salesforce integrates various customer touchpoints (e.g., website, email, call centers) to aggregate customer data, ensuring that all interactions and transactions are captured and easily accessible to sales, marketing, and service teams.

✓ **Lead and Opportunity Management:**

Scenario: Managing and nurturing leads through the sales funnel to convert them into opportunities and eventually customers.

Implementation: Salesforce provides tools like Lead and Opportunity Management to track the lifecycle of potential customers, from initial interest to final sale. It allows for automatic lead assignment, status tracking, and personalized follow-up tasks.

✓ **Sales Forecasting and Reporting:**

Scenario: Generating accurate sales forecasts and performance reports for management and sales teams.

Implementation: Salesforce offers customizable dashboards, realtime analytics, and reporting tools to track sales performance, revenue, and forecasting. Users can visualize data in real time and generate reports to understand trends, close rates, and pipeline health.

✓ **Marketing Automation and Campaign Management:**

Scenario: Automating marketing tasks and creating personalized campaigns to engage customers and prospects.

Implementation: Salesforce Marketing Cloud enables the creation, automation, and tracking of marketing campaigns across multiple channels, including email, social media, and SMS. It allows businesses to send targeted messages based on customer behavior and preferences.

- ✓ Automating tenant onboarding and lease renewal processes.
- ✓ Providing customers with tailored promotional offers based on their shopping patterns.
- ✓ Facilitating real-time maintenance and support request tracking

7.Conclusion:

In conclusion, implementing a CRM application for a mall provides a strategic advantage by centralizing customer data, streamlining operations, and enhancing customer engagement. The CRM system allows for efficient management of customer relationships through personalized marketing, targeted promotions, loyalty programs, and responsive customer service. It empowers mall management with valuable insights into customer behavior, sales performance, and campaign effectiveness, enabling data-driven decision-making. Moreover, by integrating with other systems such as POS, tenant management, and inventory systems, the CRM application creates a seamless experience for both customers and mall operators. Ultimately, the CRM application not only boosts customer satisfaction and loyalty but also contributes to the mall's overall growth and operational efficiency, making it an indispensable tool for modern retail management.

Summary of Achievements:

The CRM application enhances mall management by automating key processes, fostering better relationships with tenants and customers, and providing actionable insights for decision-making.