

A CRM APPLICATION ON E-COMMERCE ACTIVITIES

NAAN MUDHALVAN PROJECT REPORT

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BONAFIDE CERTIFICATE

Certified that this project report titled "**CRM APPLICATION OF E-COMMERCE ACTIVITIES**" is the Bonafide work of "**NAVEENA R (620120104069), PAVITHRA K (620120104073), SIVAPRIYA B (620120104092), TAMILVANI S (620120104104)**" who carried out the project work under my supervision.

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TABLE OF CONTENTS

Chapter No	Title	Page No
	LIST OF FIGURES	3
	LIST OF ABBREVIATION	4
1.	PROJECT SPECIFICATION	
	1.1 Project Goal	5
	1.2 Project Scope.	6
	1.3 Problem Statements Definition	7
	1.4 Empathy Map Canvas	8
	1.5 Ideation & Brainstorming	9
	1.6 Proposal Solution	12
	1.7 Functional & Technical Requirements.	13
	1.8 Project Road Map	16
2.	PREPARATION DATA MODELING	
	2.1 Salesforce Developer Org.	17
	2.2 Custom Object Creation & Tabs	19
	2.3 Lightning App	22
	2.4 Relationship between Objects	27
	2.5 Customize User Interface	29
	2.6 Business Logic	30
3.	USERS & SECURITY	
	3.1 User Creation & Setup Approvals	31
4.	APEX & THEIR SCHEDULERS	
	4.1 Apex Creation	32
	4.2 Apex Schedulers	37
5.	REPORTS & DASHBOARDS	
	5.1 Reports	43
	5.2 Dashboards	47
6.	CONCLUSION	51
7.	PROJECT DEMONSTRATION	
	Github & Project Video Demo Link	52

LIST OF FIGURES

Figure No	Name Of Figure	Page No
1.8.1	Data Flow Diagram	14
1.8.2	Technical Architecture.	15

LIST OF ABBREVIATION

CRM	Customer Relationship Management
UI	User Interface
UX	User Experience
OWD	Org – Wide Default
CSV	Comma – Separated Values
API	Application Programming Interface

CHAPTER – 1 PROJECT SPECIFICATION

1.1 Project Goal

The goal of developing a CRM application for E-commerce activities is to create a comprehensive system that helps businesses effectively manage their customer relationships, sales, and marketing efforts within the context of E-commerce. Centralize customer data, including contact information, purchase history, and communication preferences. Segment customers based on various criteria for targeted marketing and personalized interactions. Provide a 360-degree view of each customer to improve engagement and customer service.

Integrate with E-commerce platforms to manage orders, inventory, and product catalogs. Streamline order processing and fulfilment. Ensure accurate product availability information. Integrate with various data sources, including E-commerce platforms, payment gateways, and third-party applications. Ensure real-time data synchronization to keep information up to date. Enable mobile access to the CRM for users on the go.

The ultimate goal of a CRM application for E-commerce activities is to improve customer relationships, drive sales growth, and enhance the overall E-commerce experience for both customers and the business itself. The CRM project should contribute to cost savings, increased sales, and improved customer satisfaction, resulting in a positive return on investment.

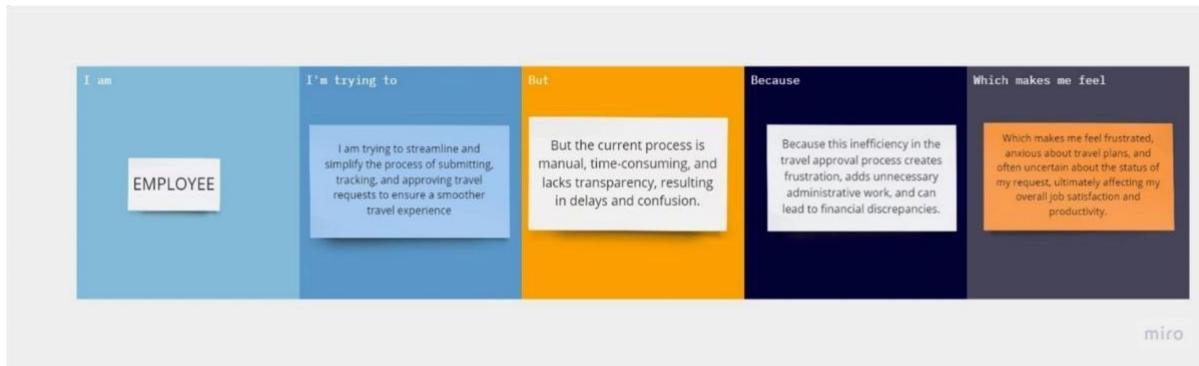
1.2 Project Scope

The scope of a CRM application for E-commerce activities can be quite extensive, as it involves managing various aspects of customer interactions, sales, marketing, and service within the context of an E-commerce business. Design and execute marketing campaigns, including email marketing, social media marketing, and content marketing. Integrate with E-commerce platforms to manage orders, inventory levels, and product catalogs. Monitor order status and shipping information. Provide real-time product availability information to customers. Integrate with E-commerce platforms, payment gateways, accounting systems, and third-party applications.

Design the system to scale as the business grows. Accommodate an increasing number of customers, products, and transactions. Provide training and documentation for users to effectively use the CRM. Encourage user adoption through user-friendly interfaces. Collect feedback from users to identify areas for improvement. Regularly update and enhance the CRM based on user input and evolving business needs.

The scope of a CRM application for E-commerce activities should be well-defined, but it can evolve as the business grows and adapts to changing customer needs and market dynamics. A well-planned and executed CRM project can lead to improved customer relationships, increased sales, and enhanced customer satisfaction in the E-commerce sector.

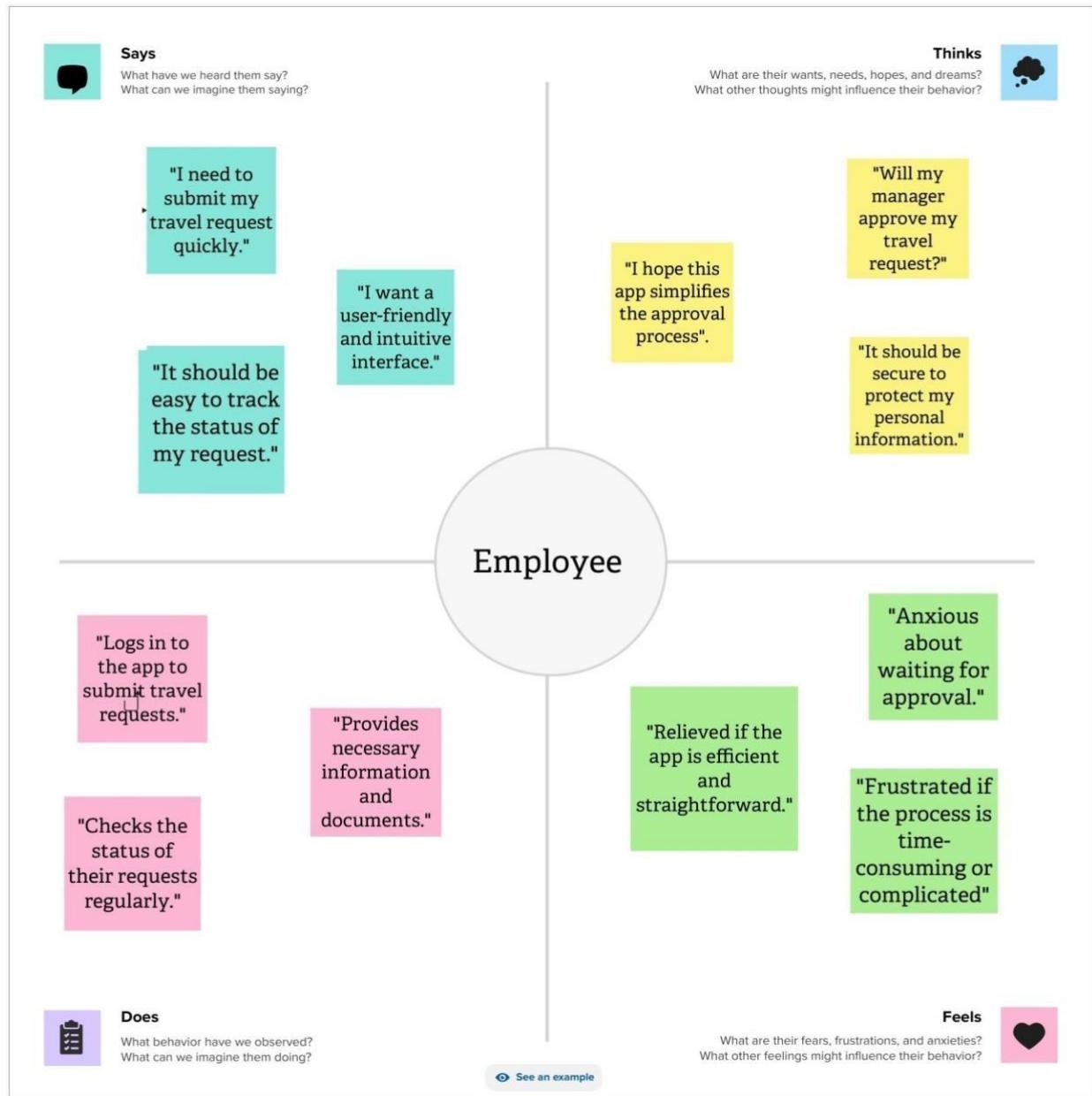
1.3 Problem Statement Definition



Problem Statement (PS)	I am	I'm trying to	But	Because	Which make me feel
PS	Employee	I am trying to streamline and simplify the process of submitting, and providing e-commerce requests to ensure a smoother activities experience	But the current process is manual, timeconsuming, and lacks transpar ency , resulting in delays and confusio n.	Because this inefficiency in the product delivery process creates frustration, adds unnecessary administrative work, and can lead to financial discrepancies	Which makes me feel frustrated, anxious about e-commerce plans, and often uncertain about the status of my request, ultimately affecting my overall job satisfaction and productivity

1.4 Empathy Map Canvas

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behavior and attitudes.



1.5 Ideation & Brainstorming

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Step-1: Team Gathering, Collaboration and Select the Problem Statement:

The image shows a digital template for a Brainstorm & Idea Prioritization session. The template is organized into three main sections:

- Define your problem statement:** This section includes a brief description of the project aim, a timer icon indicating 5 minutes, and a link to learn how to use facilitation tools.
- Before you collaborate:** This section includes a brief description of preparation needs, a timer icon indicating 10 minutes, and a link to learn how to use facilitation tools.
- Brainstorm & idea prioritization:** This section includes a brief description of the session purpose, a timer icon indicating 10 minutes to prepare, 1 hour to collaborate, and 3-8 people recommended. It also features a 'Key rules of brainstorming' box with six rules: Stay in topic, Encourage wild ideas, Offer judgment, Listen to others, Go for volume, and If possible, be visual.

A vertical sidebar on the right is titled 'Template' and contains a preview of the template document.

Step-2: Brainstorm, Idea Listing and Grouping:

2

Brainstorm
Write down any ideas that come to mind that address your problem statement.

⌚ 10 minutes

Person 1

- User-Friendly Dashboard:** Create an intuitive dashboard for employees to submit travel requests and track their status.
- Manager Approval Workflow:**
 - Implement a workflow that allows managers to review and approve travel requests easily.

Person 2

- Travel Policy Integration:**
 - Include the company's travel policy within the app, ensuring employees are aware of guidelines and restrictions.
- Expense Management:**
 - Allow employees to submit expense reports related to their trips and attach receipts.

Person 3

- Notification System:**
 - Implement a notification system to keep employees informed about the status of their travel requests.
- Notification System:**
 - Implement a notification system to keep employees informed about the status of their travel requests.

Person 4

- Real-Time Currency Conversion:**
 - Provide a currency conversion feature to help employees manage expenses in different currencies.
- Analytics and Reporting:**
 - Generate reports for corporate administrators to analyze travel patterns and expenses.

TIP: You can select a sticky note and hit the pencil icon to switch/copy/paste drawing!

TIP: Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

⌚ 20 minutes

3

Group ideas
Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

TIP: Add customized tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mind.

Manager Approval Workflow: Implement a streamlined workflow that allows employees to submit travel requests, and managers to easily review and approve them within the application. This ensures a quick and efficient approval process.

Expense Management and Reporting:

- Build a comprehensive expense management system that allows employees to submit and track expenses related to their trips. Include features for attaching receipts and generating expense reports, simplifying financial aspects of corporate travel.

Step 4 of 7

Step-3: Idea Prioritization:

4

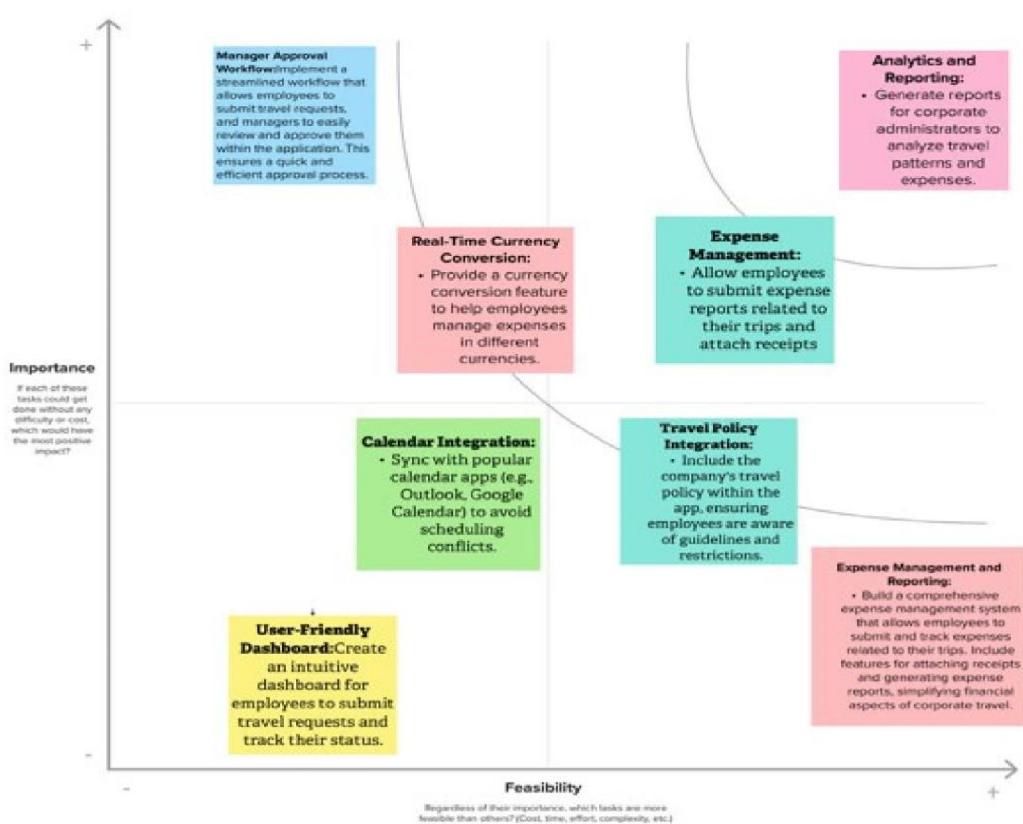
Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

⌚ 20 minutes

TIP

Participants can use their cursor to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H** key on the keyboard.



1.6 Proposed Solution

S. No	Parameter	Description
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1.	Problem Statement (Problem to be solved)	In the highly competitive E-commerce industry, businesses face the challenge of effectively managing customer relationships, sales, marketing, and service operations. As Ecommerce activities continue to grow and customer expectations rise, there is a pressing need for a comprehensive CRM (Customer Relationship Management) application tailored to the unique demands of this sector.
2.	Idea / Solution description	This CRM application will address the unique challenges faced by E-commerce companies in managing customer relationships, sales, marketing, and service operations. Data-Driven Decision-Making Detailed reporting and analytics provide valuable insights into customer behavior and marketing campaign performance. Businesses can better understand and engage with their customers, leading to improved customer loyalty and retention.
3.	Novelty / Uniqueness	What sets our solution apart is the innovative use of Salesforce, a highly customizable and powerful platform, to streamline corporate travel management. The automation of approval workflows and integration with external systems will significantly reduce manual work and errors. The mobile app component will provide users with the flexibility and convenience of on-the-go access. Furthermore, the incorporation of robust reporting and analytics tools will enable datadriven decision-making and offer insights into travel expenses, setting our solution apart from conventional methods.

4.	Social Impact / Customer Satisfaction	Ensuring compliance with data protection regulations, such as GDPR, demonstrates a commitment to protecting customer data. This safeguards customer privacy and sets a positive example for data handling practices in the industry. well-managed CRM system can help optimize supply chains and reduce unnecessary waste in E-commerce operations. This contributes to sustainability and reduced environmental impact.
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1.7 Functional & Technical Requirements

1.7.1 Functional Requirements

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR 1	Customer Management	<p>Customer Profiles: Create and maintain detailed customer profiles with information such as contact details, purchase history, and communication preferences.</p> <p>Lead Management: Capture and manage leads from multiple sources, including website inquiries, email, and social media.</p> <p>Contact and Account Management: Track individual contacts and accounts associated with customers, including roles and affiliations.</p>

FR 2	Sales Management	<p>Opportunity Tracking: Manage sales opportunities, including stages, close dates, and sales team assignments.</p> <p>Sales Pipeline: Visualize and report on the sales pipeline, allowing for revenue forecasting and monitoring sales performance.</p> <p>Quote and Proposal Generation: Generate quotes, proposals, and sales documents within the CRM application.</p>
FR 3	Market Automation	<p>Customer Segmentation: Segment the customer base based on demographics, purchase history, and behavior for targeted marketing.</p> <p>Lead Nurturing: Automate lead nurturing processes, such as email sequences, to move leads through the sales funnel.</p> <p>Email Marketing: Manage email marketing campaigns, including email templates, scheduling, and tracking</p>
FR 4	Order and Inventory Integration	<p>E-commerce Platform Integration: Integrate with E-commerce platforms to sync order data, inventory levels, and product catalogs in real-time.</p> <p>Order Tracking: Provide real-time order tracking for customers to monitor the status of their orders.</p> <p>Inventory Management: Ensure accurate product availability information, prevent overselling, and track stock levels.</p>

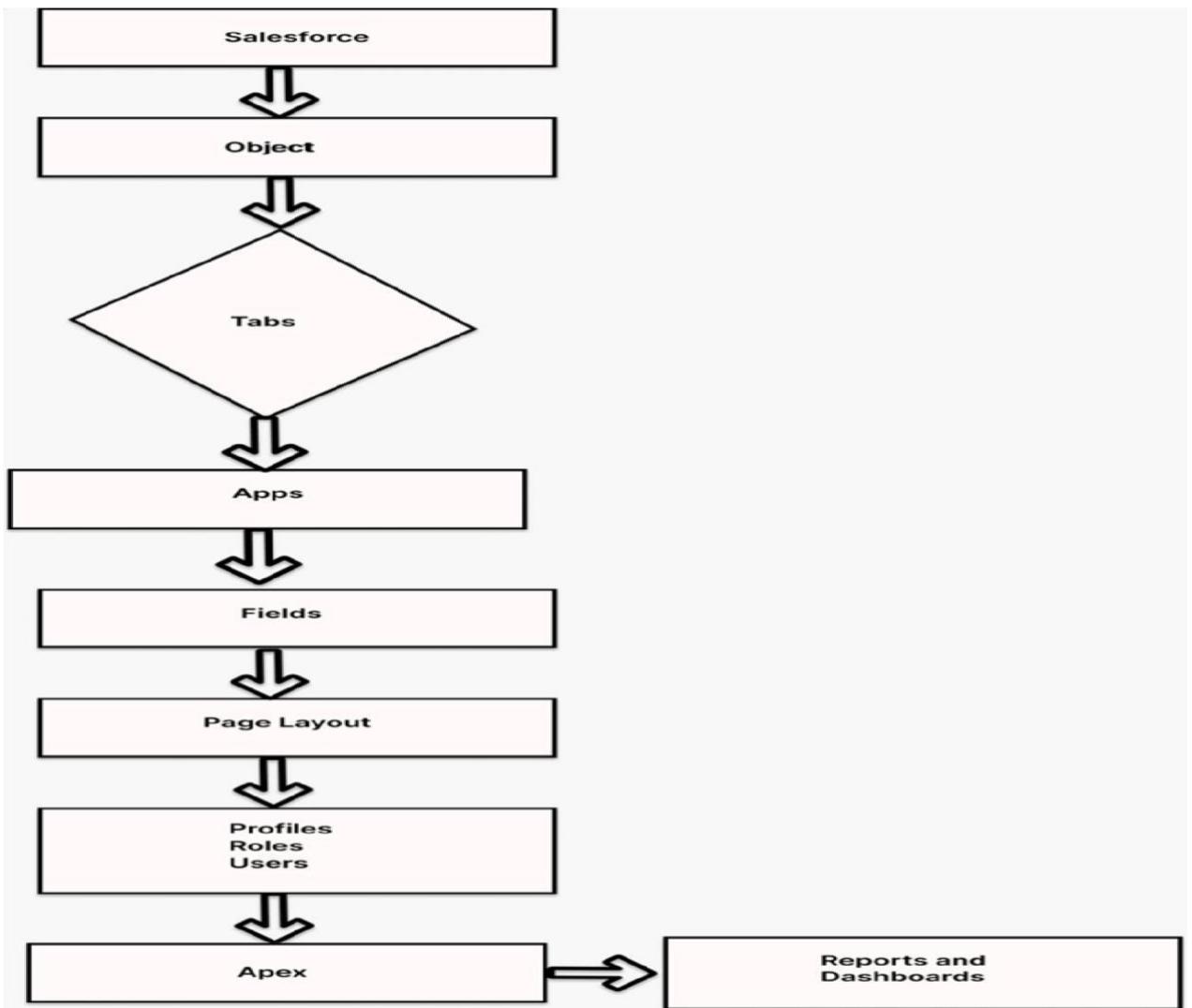
FR 5	Reporting and Analytics	Report Generation: Create custom reports and dashboards to track sales performance, customer behavior, and marketing campaign effectiveness. Key Performance Indicators (KPIs): Define and monitor KPIs to make data-driven decisions and assess the health of the business. Analytics: Implement analytics features for advanced insights into customer behavior and trends.
FR 6	User Access and Permissions	User Roles and Profiles: Define user roles and profiles with specific permissions to control data access and system functionality.

1.7.2 Technical Requirements

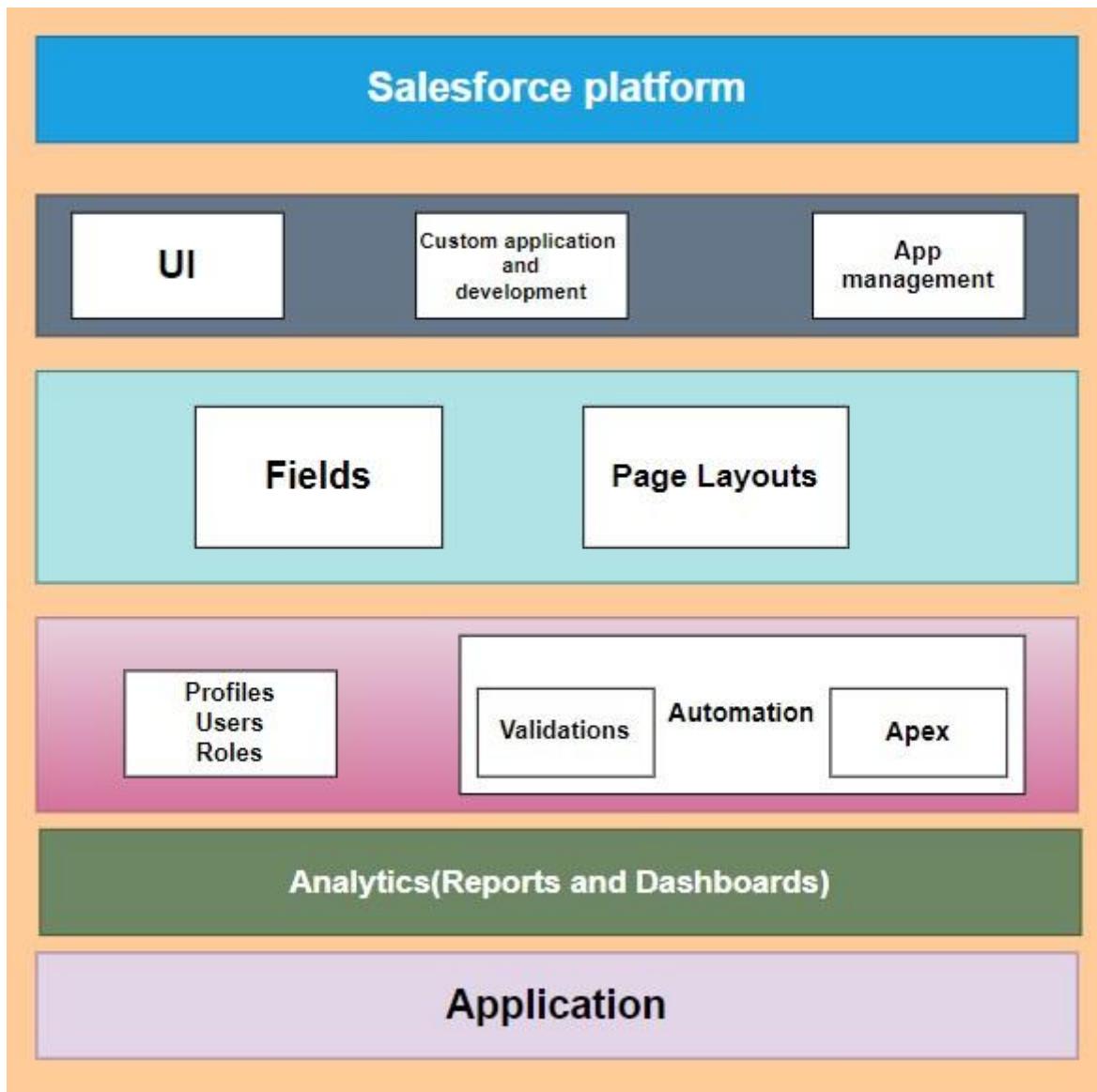
TR No.	Technical Requirement	Description
TR-1	Salesforce Environment	Utilize Salesforce's Enterprise or Unlimited edition to ensure scalability and access to advanced features.
TR-2	Development language	Develop using Salesforce's proprietary programming language, Apex, for server side logic.
TR-3	Security	<ul style="list-style-type: none"> • Implement role-based access control (RBAC) to control who can access and modify data. • Encrypt sensitive data both in transit and at rest. • Utilize Salesforce Shield for enhanced security, including event monitoring and field-level encryption.

TR-4	Integration	<ul style="list-style-type: none"> • Use REST and SOAP APIs for integration with external systems, such as finance and expense management tools. • Implement Single Sign-On (SSO) solutions for seamless and secure access.
TR-5	Customization	Allow administrators to customize and configure the application, including approval workflows, fields, and user profiles.
TR-6	Mobile Accessibility	<ul style="list-style-type: none"> • Ensure that the application is accessible via the Salesforce mobile app for on-the go request submission and tracking. • Develop a custom mobile app using Salesforce Mobile SDK for more tailored mobile functionality.

1.8 Project Road Map



1.8.2 Technical Archicecture

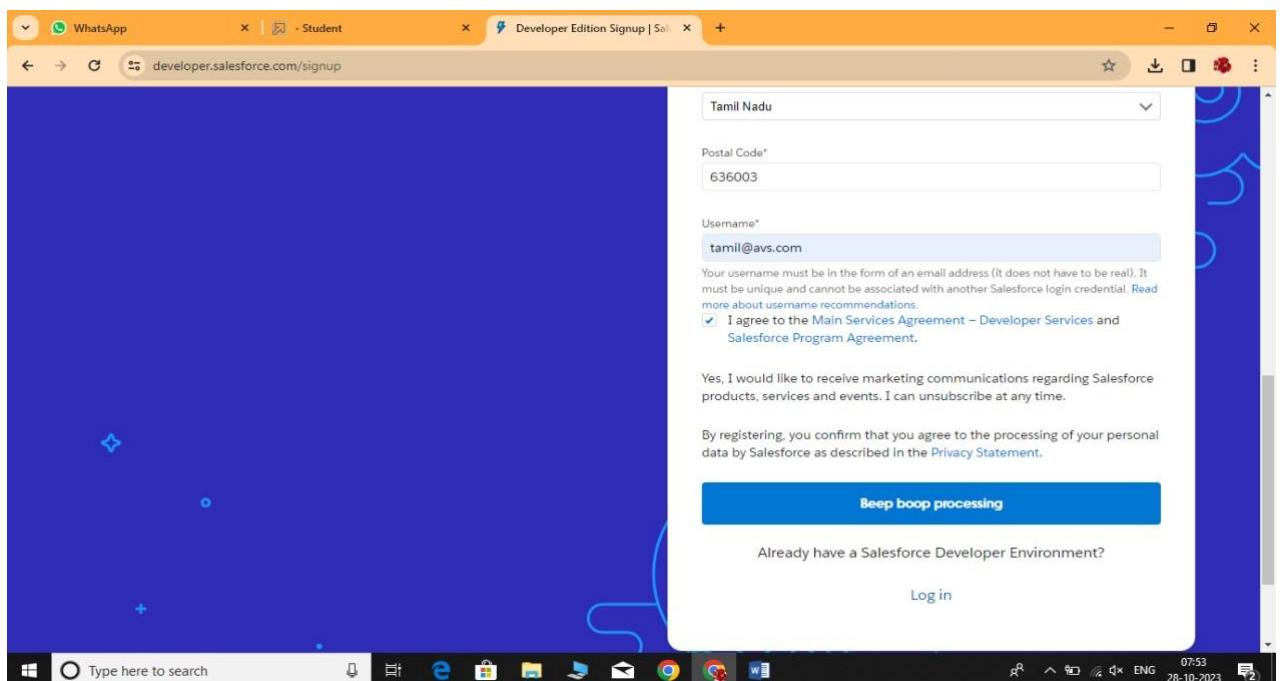
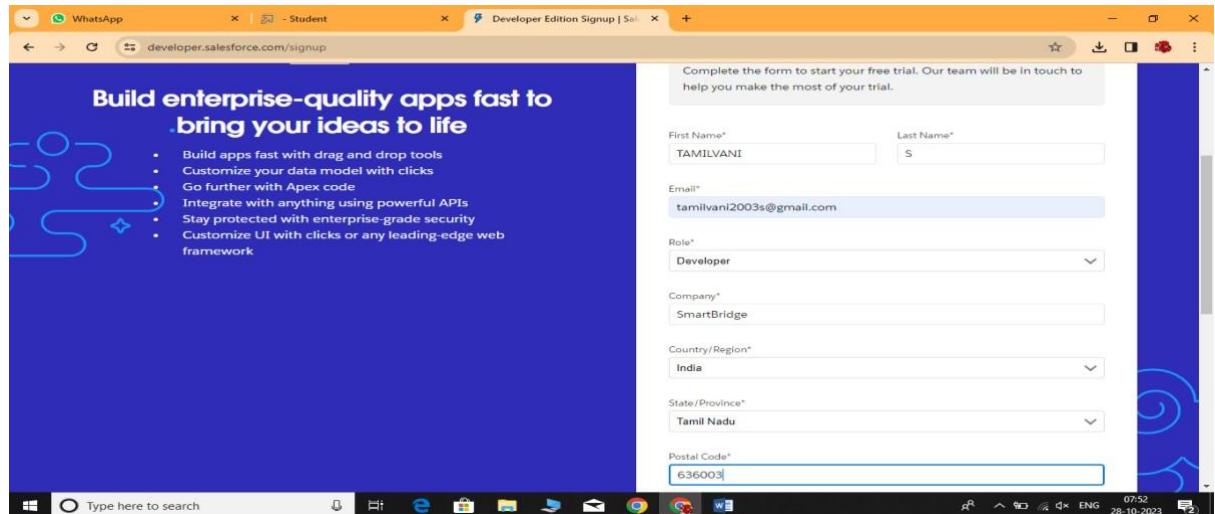


CHAPTER-2

PREPARATION DATA MODELING

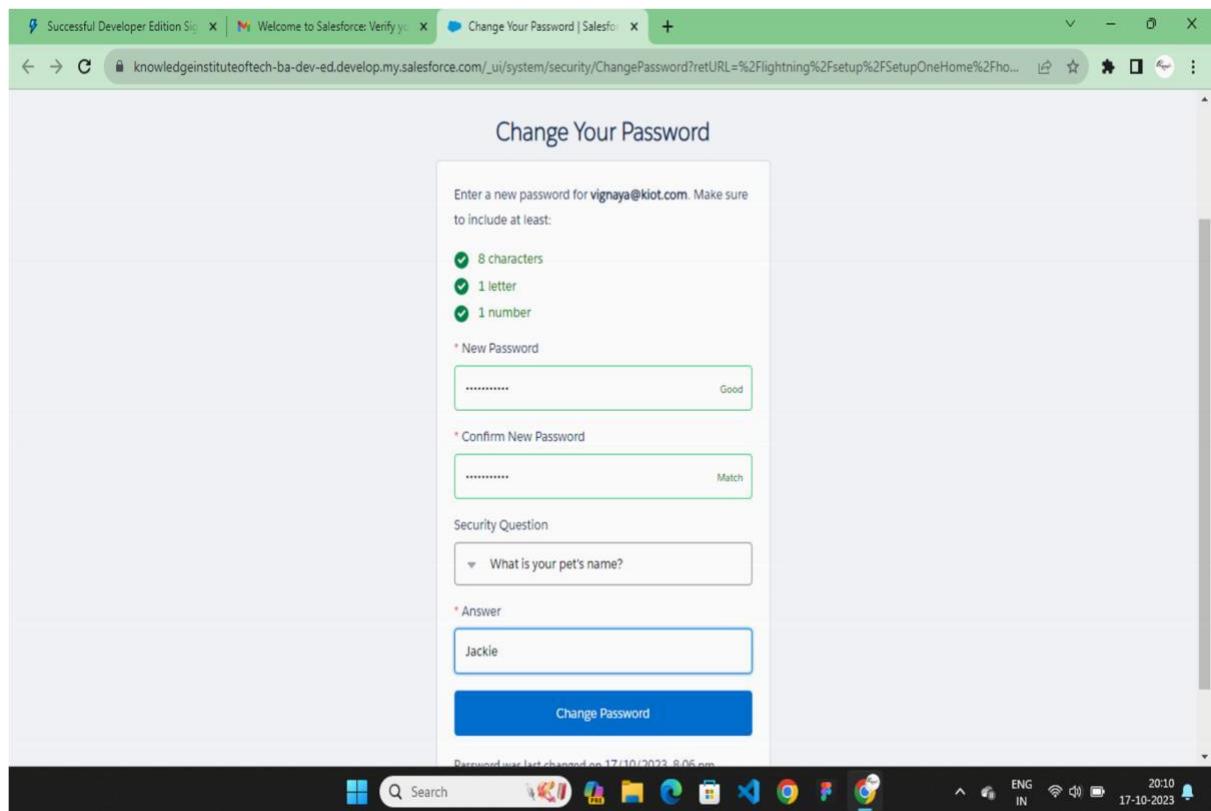
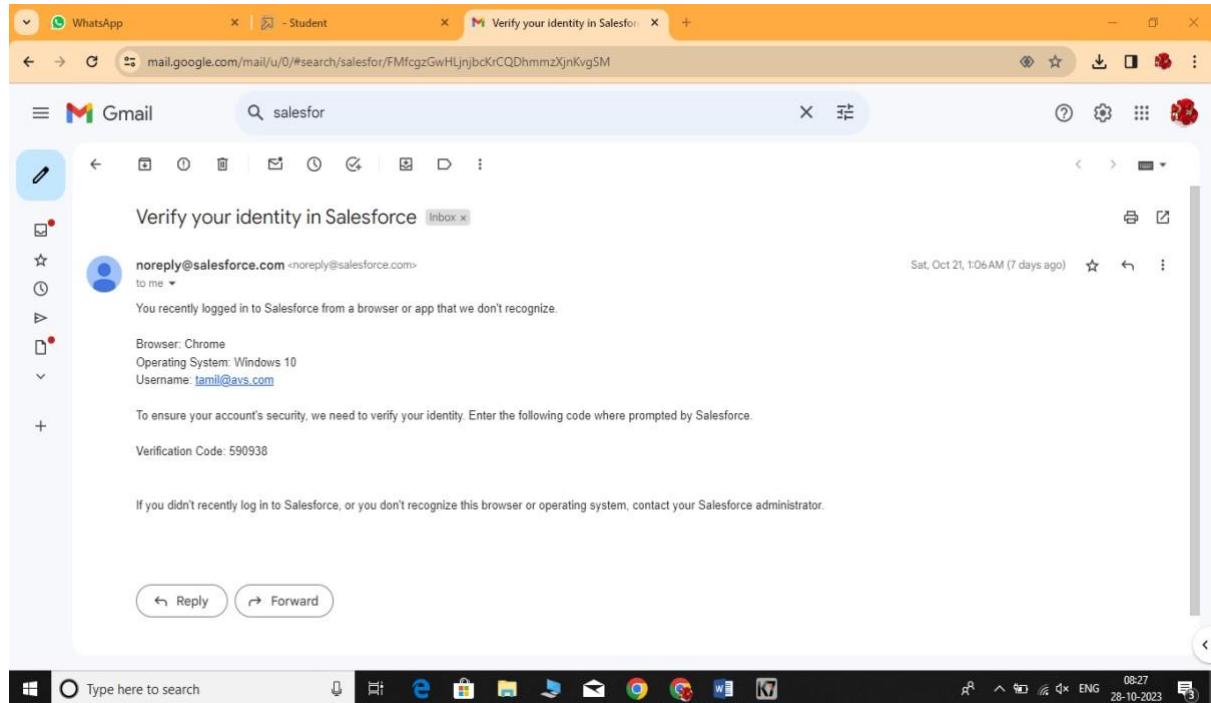
2.1 Salesforce Developer Org

In Salesforce, a Developer Sign Up or Developer Edition is a special type of Salesforce environment that is primarily used for development, testing, and learning purposes.



Account Activation

Activation tracks information about devices from which users have verified their identity.



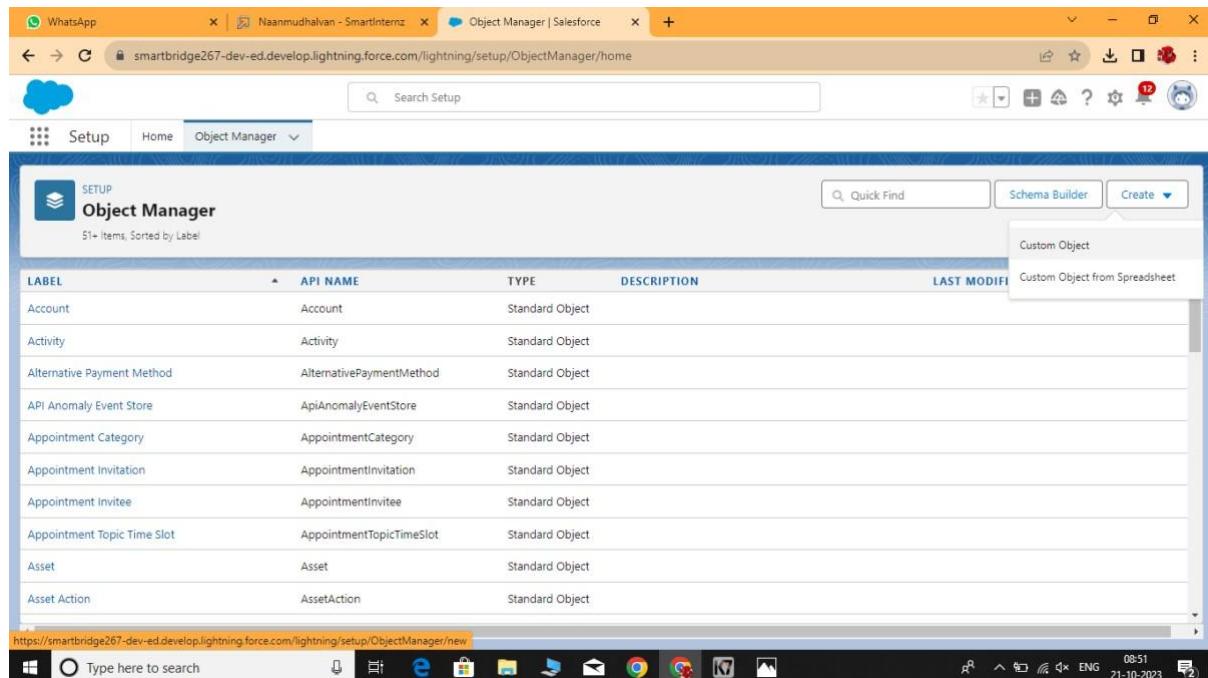
2.2 Custom Object Creation & Tabs

Custom Object Creation

Objects are containers for your information, but they also give you special functionality.

Custom objects are created to store information that's specific to your company or industry.

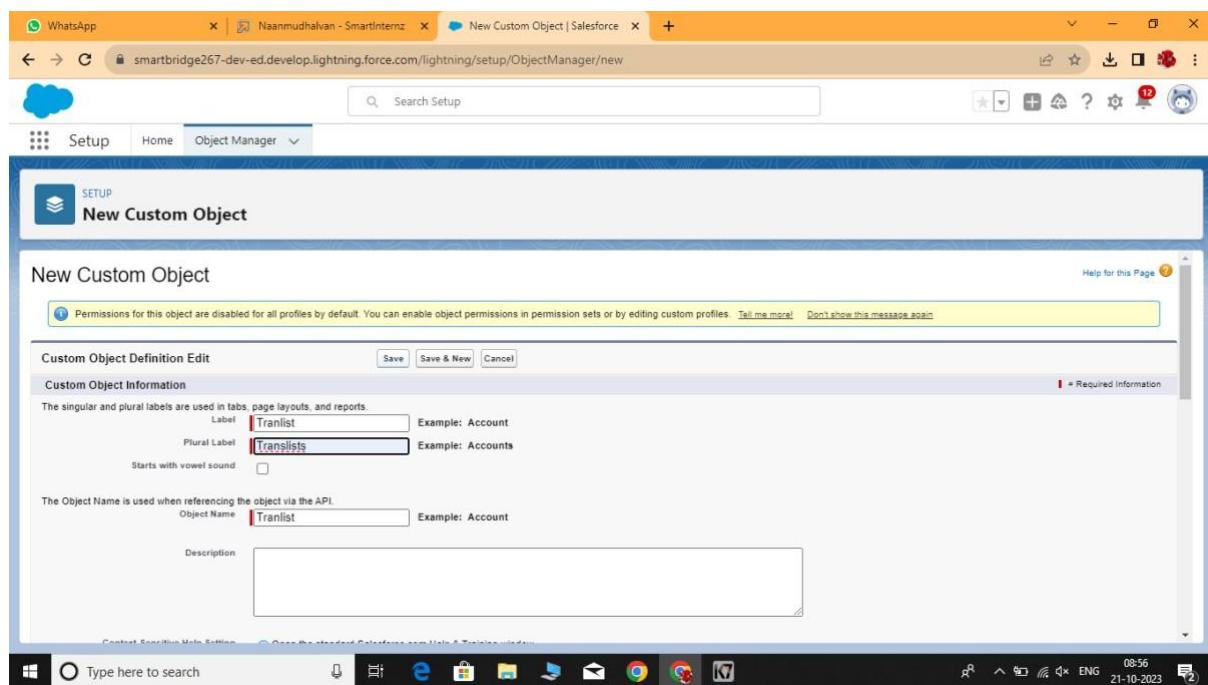
Custom Objects in CRM App :



The screenshot shows the Salesforce Object Manager interface. The page title is "Object Manager | Salesforce". The main content area displays a table of standard objects:

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED
Account	Account	Standard Object		
Activity	Activity	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		
Asset Action	AssetAction	Standard Object		

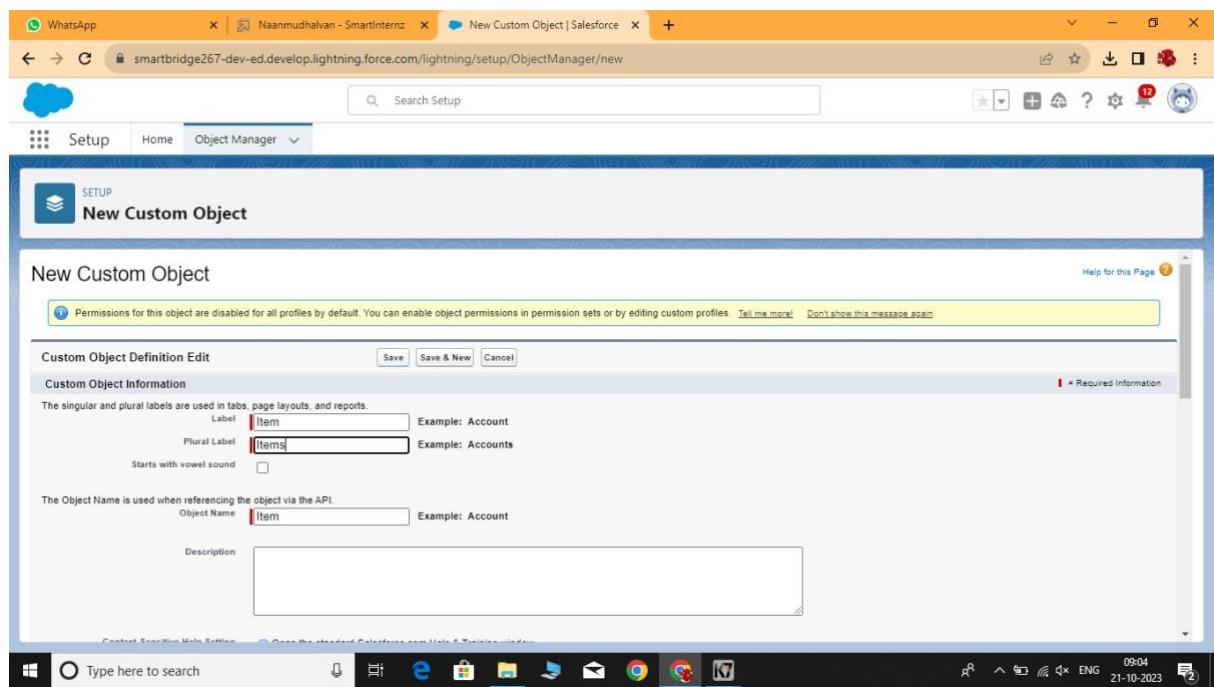
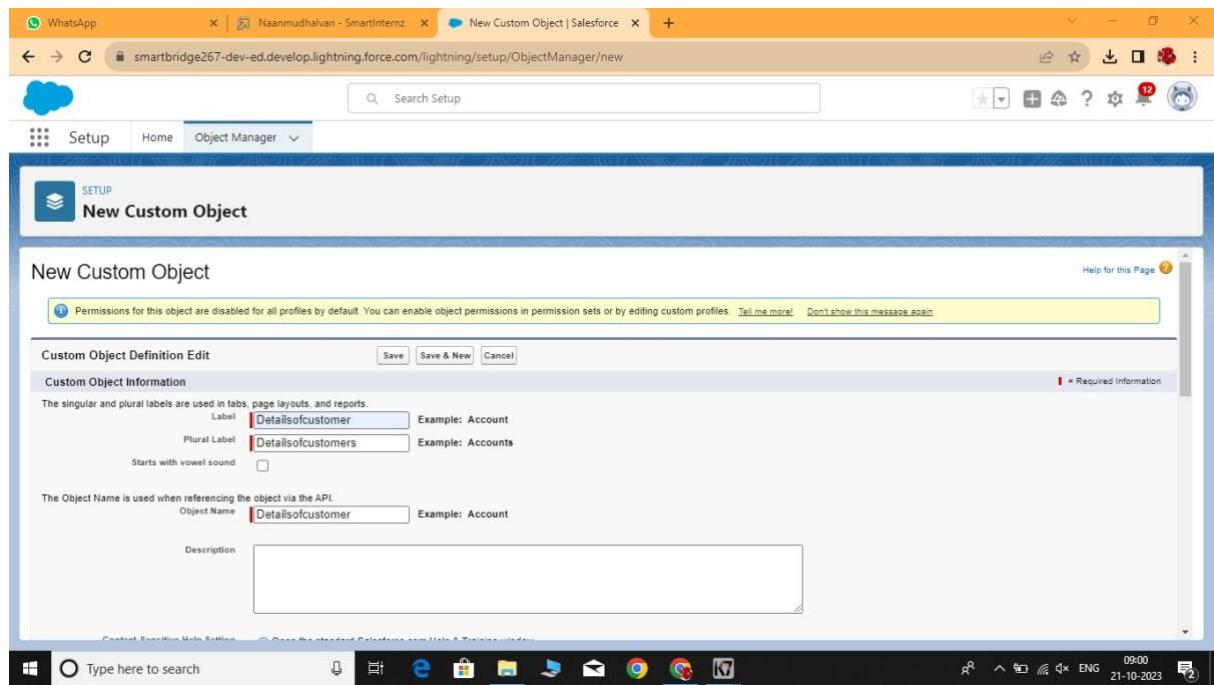
A tooltip "Custom Object" is visible over the "Create" button in the top right corner of the table header.



The screenshot shows the "New Custom Object" page in the Salesforce setup. The page title is "New Custom Object | Salesforce". The main content area is titled "Custom Object Definition Edit" and contains fields for "Custom Object Information":

- Label: Tranlist
- Plural Label: Translists
- Starts with vowel sound:
- Object Name: Tranlist
- Description: (empty text area)

At the top of the page, there is a message: "Permissions for this object are disabled for all profiles by default. You can enable object permissions in permission sets or by editing custom profiles." with links "Tell me more!" and "Don't show this message again".



Tabs for Created Objects:

Salesforce Tabs are like the menu options in a software application. They allow you to access specific functions, objects, or data.

Action	Label	Tab Style	Description
Edit Del	Banks		Building
Edit Del	colleges		Jewel
Edit Del	Customers		Handsaw
Edit Del	departments		Lightning
Edit Del	Detailsofcustomers		Building Block
Edit Del	Informations		Bell
Edit Del	Items		Helicopter
Edit Del	Management		Compass
Edit Del	Translists		Books

Fields in Translist Object:

Field Label	Type	Description
GrandTotal	Formula (Number)	GrandTotal_c
Last Modified By	Lookup(User)	LastModifiedById
listname	Text(25)	listname_c
Mailid	Email	Mailid_c
Owner	Lookup(User,Group)	Ownerid
SubTot	Number(18, 0)	SubTot_c
Transid	Number(18, 0)	Transid_c
Translist Name	Text(80)	Name

Fields in DetailsOfCustomer Object:

The screenshot shows the Salesforce Object Manager interface for the 'Detailsofcustomer' object. The left sidebar has 'Fields & Relationships' selected. The main area displays the 'Fields & Relationships' table with the following data:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
ContNo	ContNo_c	Phone		
Created By	CreatedById	Lookup(User)		
Detailsofcustomer Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
mailid	mailid_c	Email		
Owner	OwnerId	Lookup(User,Group)		✓

Fields of Item Object:

The screenshot shows the Salesforce Object Manager interface for the 'Item' object. The left sidebar has 'Fields & Relationships' selected. The main area displays the 'Fields & Relationships' table with the following data:

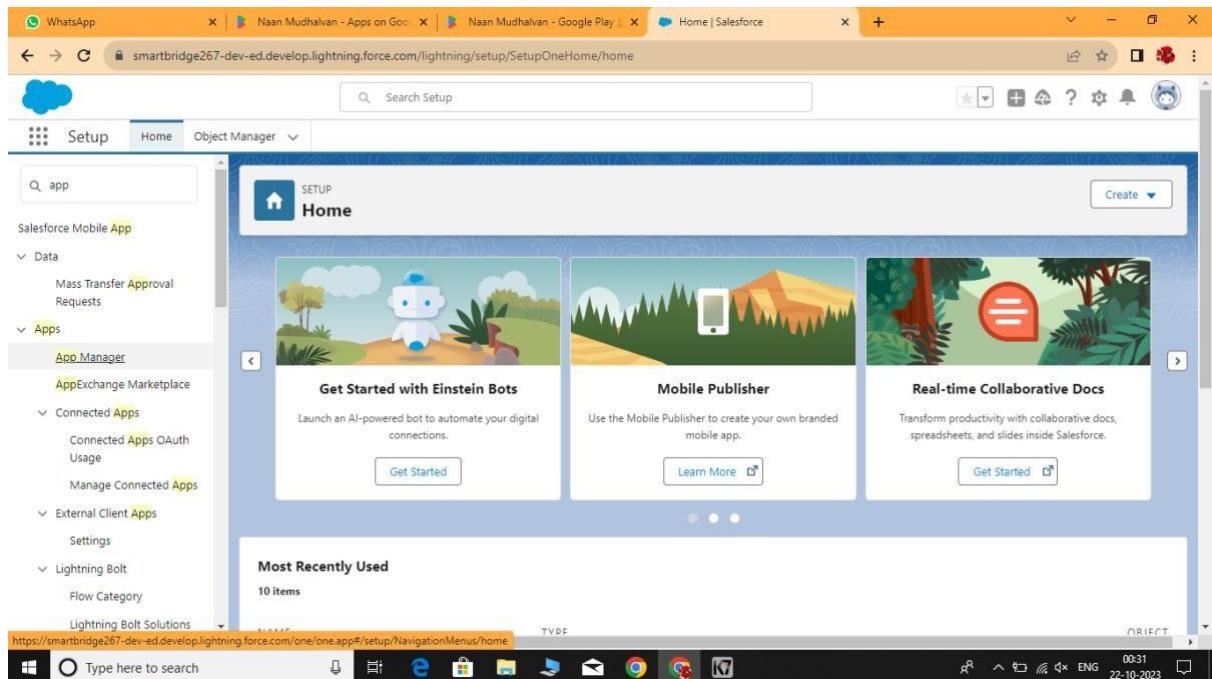
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Item Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
manfdate	manfdate_c	Date		
Owner	OwnerId	Lookup(User,Group)		✓
price	price_c	Number(18, 0)		
prodname	prodname_c	Text(25)		

2.3 Lightning App

The Lightning App Builder is a point-and-click tool that makes it easy to create custom pages for the Salesforce mobile app and Lightning Experience, giving your users what they need all in one place.

Create a CRM Lightning App

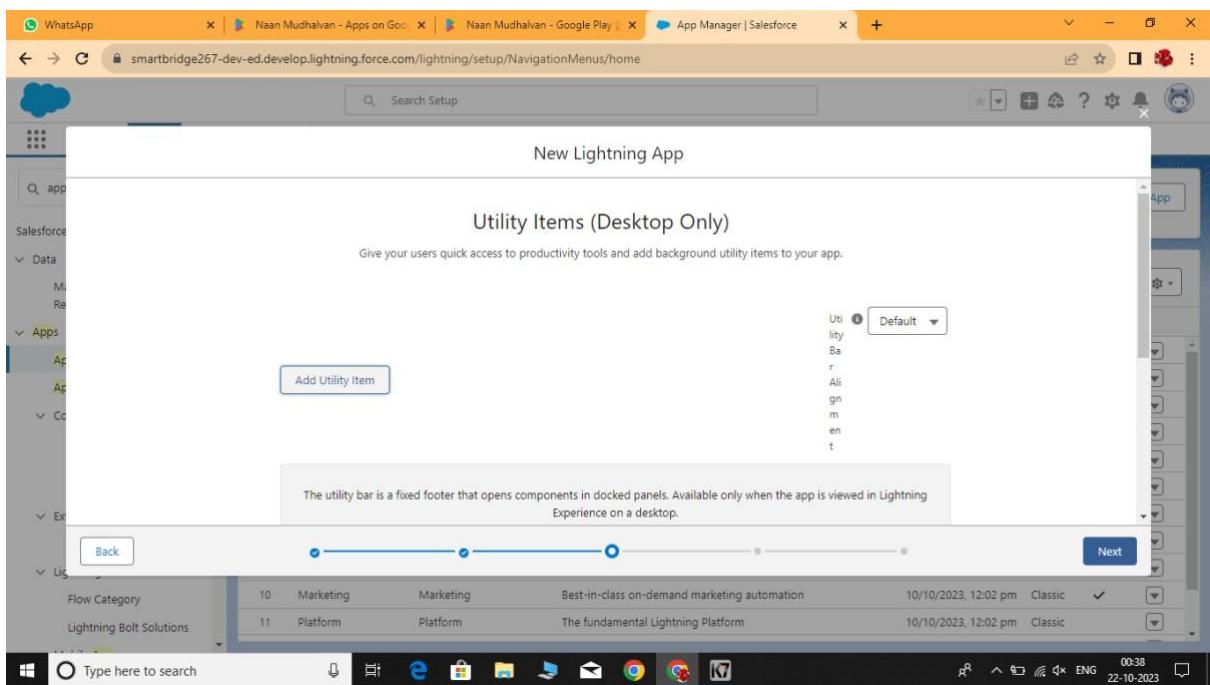
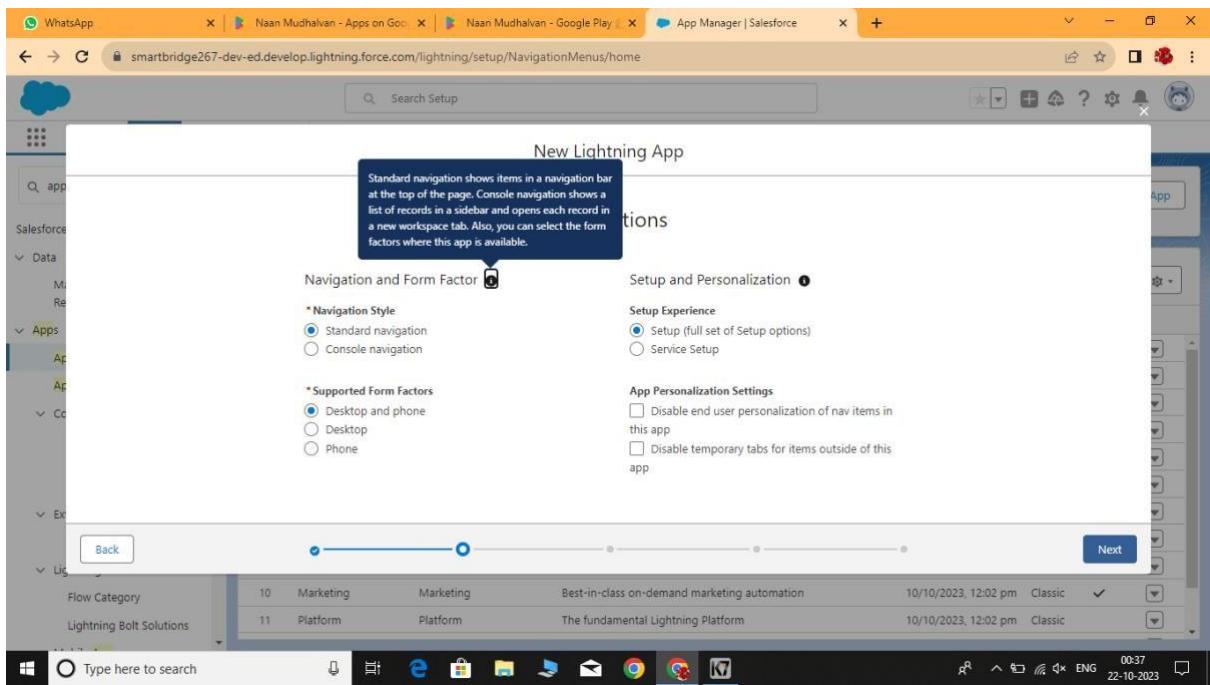
- Build a Lightning app, add tabs, and customize page layouts.
- Create custom objects and fields for the app.
- Define relationships between objects.
- Import data and test the app.

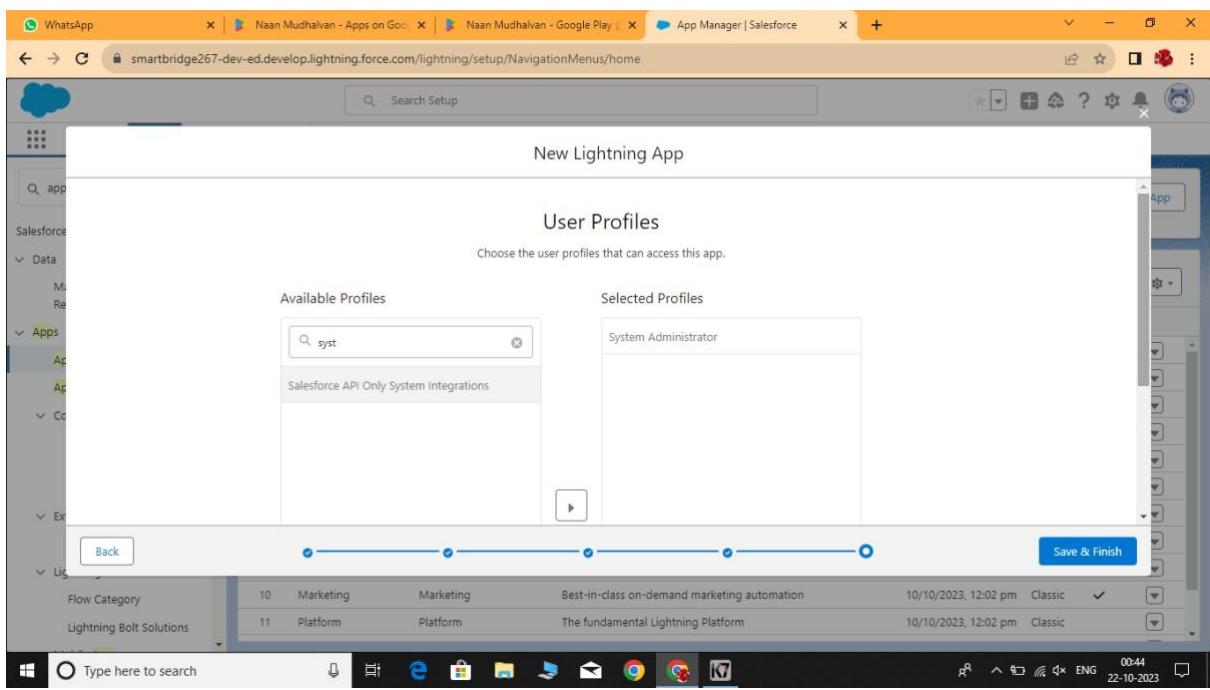
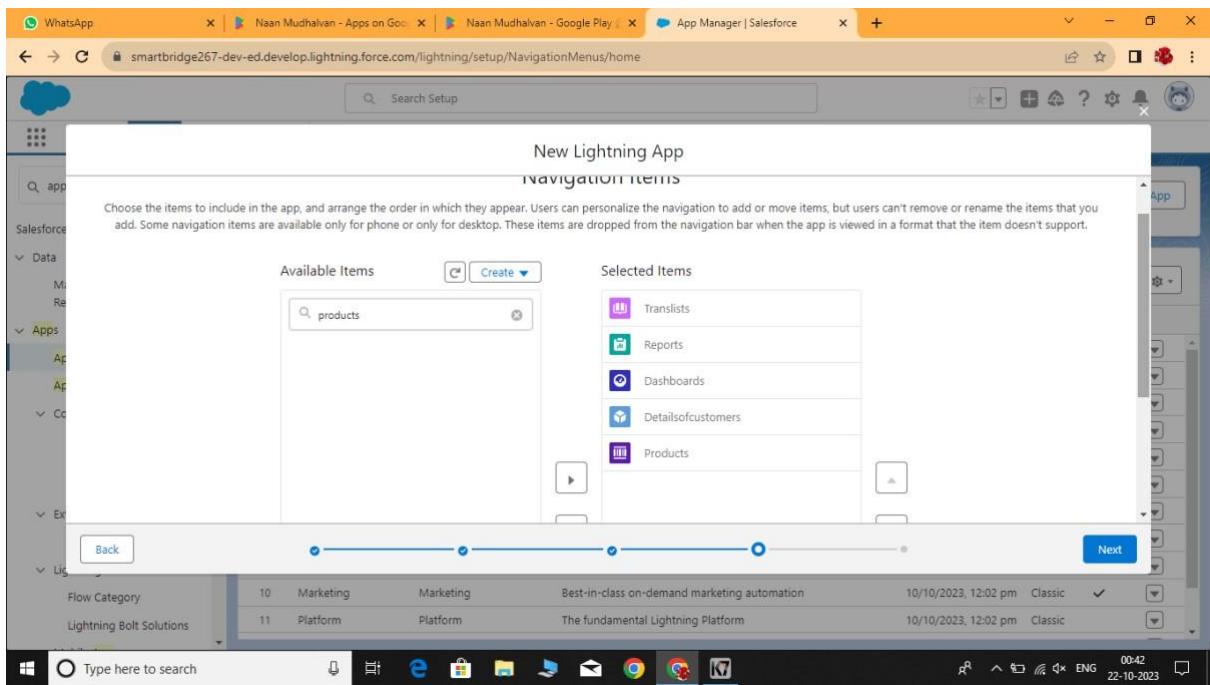


The screenshot shows the 'Lightning Experience App Manager' page. The left sidebar has a search bar and navigation links for Setup, Home, Object Manager, and a search bar. The main area displays a table titled 'Lightning Experience App Manager' with 23 items. The columns are: App Name, Developer Name, Description, Last Modified, Type, and Visibility. The table includes rows for various Salesforce apps like All Tabs, Analytics Studio, App Launcher, Bolt Solutions, etc.

App Name	Developer Name	Description	Last Modified	Type	Visibility
All Tabs	AltTabSet		10/10/2023, 12:02 pm	Classic	✓
Analytics Studio	Insights	Build CRM Analytics dashboards and apps	10/10/2023, 12:02 pm	Classic	✓
App Launcher	AppLauncher	App Launcher tabs	10/10/2023, 12:02 pm	Classic	✓
Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your ind...	10/10/2023, 12:04 pm	Lightning	✓
Community	Community	Salesforce CRM Communities	10/10/2023, 12:02 pm	Classic	✓
Content	Content	Salesforce CRM Content	10/10/2023, 12:02 pm	Classic	✓
Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage r...	10/10/2023, 12:02 pm	Lightning	✓
Digital Experiences	SalesforceCMS	Manage content and media for all of your sites.	10/10/2023, 12:02 pm	Lightning	✓
Lightning Usage App	LightningInstrumentation	View Adoption and Usage Metrics for Lightning Experience	10/10/2023, 12:02 pm	Lightning	✓
Marketing	Marketing	Best-in-class on-demand marketing automation	10/10/2023, 12:02 pm	Classic	✓
Platform	Platform	The fundamental Lightning Platform	10/10/2023, 12:02 pm	Classic	✓

The screenshot shows the 'New Lightning App' configuration page. It has two main sections: 'App Details' and 'App Branding'. In 'App Details', fields include 'App Name' (CRM), 'Developer Name' (Squad), and 'Description' (Enter a description...). In 'App Branding', there is an 'Image' section with an 'Upload' button and a color picker set to #000000. A progress bar at the bottom indicates the process is at 100%. A 'Next' button is visible on the right.





The screenshot shows a Salesforce Lightning interface. At the top, there's a navigation bar with links for CRM, Translists, Reports, Dashboards, Detailsofcustomers, and Products. Below the navigation is a search bar and a toolbar with various icons. The main content area displays a list titled 'Recently Viewed' under the 'Translists' category. The list contains four items, each with a checkbox and a name: 1. Ananya, 2. Amirtha, 3. Arun, and 4. Anjali. At the top right of the list, there are buttons for 'New', 'Import', and 'Change Owner'. Below the list is a large empty space. The bottom of the screen shows a Windows taskbar with icons for File Explorer, Edge, and other applications.

2.4 Relationship between Objects

Look up Relationship

Lookup Relationship in Salesforce relates two objects together but does not affect deletion (cascade delete functionality) or security.

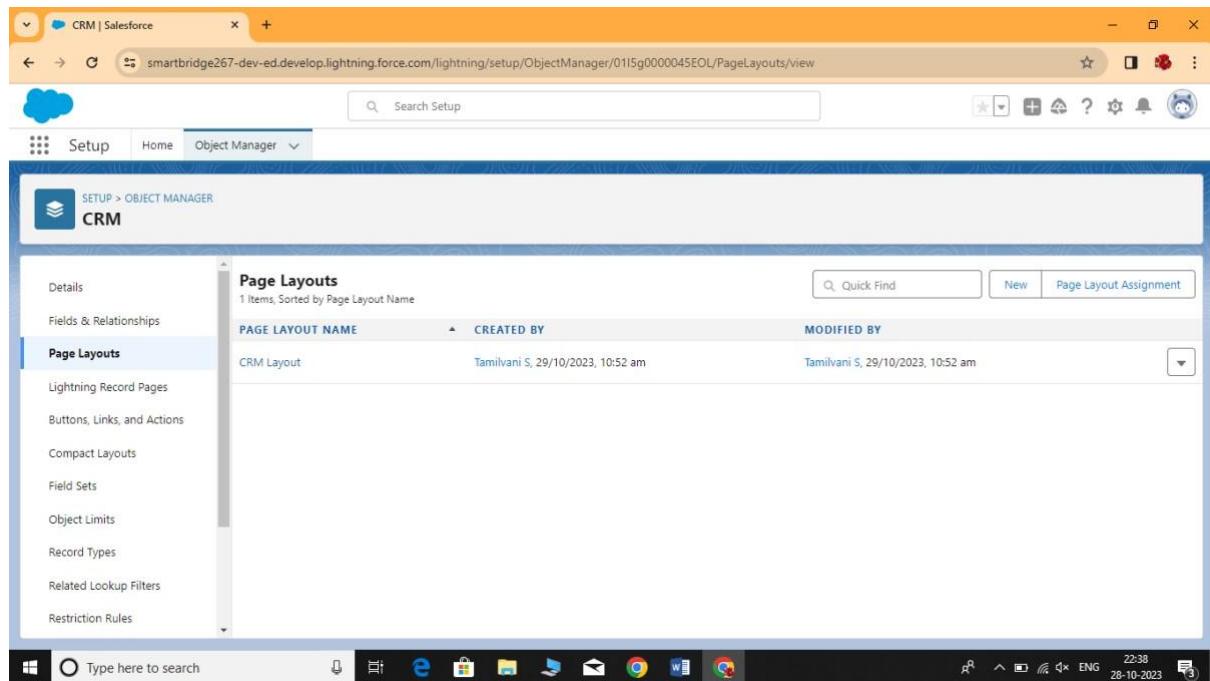
The screenshot shows the Salesforce Setup interface. The top navigation bar includes links for Setup, Home, and Object Manager. The main content area is titled 'Translist' under 'SETUP > OBJECT MANAGER'. On the left, there's a sidebar with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Restriction Rules. The 'Fields & Relationships' section is currently selected. It displays a table with 14 items, sorted by Field Label. The table has three columns: Field Name, Field Type, and Description. Some fields have dropdown arrows next to them. The bottom of the screen shows a Windows taskbar with icons for File Explorer, Edge, and other applications.

2.5 Customize User Interface

Customize your app's page layouts, compact layouts, and actions.

Page Layout

A page layout determines the fields, sections, related lists, and buttons that appear when users view or edit a record. You can modify an object's default page layout or create a custom page layout.



The screenshot shows the Salesforce Setup interface with the following details:

- Page Layouts** is selected in the left sidebar under **Object Manager**.
- Page Layouts** section header with a subtext: "1 Items, Sorted by Page Layout Name".
- PAGE LAYOUT NAME**, **CREATED BY**, and **MODIFIED BY** columns.
- CRM Layout** listed in the table, created by **Tamilvani S** on **29/10/2023, 10:52 am**, modified by **Tamilvani S** on the same date and time.
- Quick Find**, **New**, and **Page Layout Assignment** buttons at the top right.
- Search Setup** bar at the top center.
- Setup** and **Home** buttons at the top left.
- Object Manager** dropdown at the top left.
- Windows Taskbar** at the bottom with icons for File Explorer, Edge, Store, File, Mail, Google Chrome, and others.
- System Status Bar** at the bottom right showing "22:38", "28-10-2023", and battery level.

2.6 Business Logic

Validation Rules

Validation rules let you set up business-specific criteria to prevent users from saving invalid data in one or more fields.

A validation rule evaluates a formula when a record is saved.

If a rule's criteria aren't met, users see a custom error message and the record doesn't save.

Use validation rules to improve data quality by applying conditions, ensuring proper formatting, and enforcing consistency.

CHAPTER-3

USERS & DATA SECURITY

3.1 User Creation & Setup Approvals

Before customizing the travel app, first create a new user, Eric Executive, and set him up as manager. This involves assigning roles and profiles so that Eric has the correct permissions to approve travel requests.

The screenshot shows the Salesforce Setup interface for managing users. The left sidebar navigation includes 'Setup', 'Home', 'Object Manager', and sections for 'Users' (selected), 'Permission Set Groups', 'Permission Sets', 'Profiles', 'Public Groups', 'Queues', 'Roles', and 'User Management Settings'. Under 'Users', there are links for 'Feature Settings', 'Data.com', and 'Prospector'. A search bar at the top says 'users'. The main content area is titled 'All Users' and displays a table of users with columns for Action, Full Name, Alias, Username, Role, Active, and Profile. The table lists several users, including '1_Manager', 'Bank_Manager', 'Chatter_Executor', 'S_Tamilvan', 'Sales_Manager', 'User_Integration', and 'User_Security'. The 'Profile' column indicates various profiles like 'Manager', 'Management', 'Chatter Free User', 'System Administrator', 'Salesforce API Only System Integrations', 'Analytics Cloud Integration User', and 'Analytics Cloud Security User'. The bottom of the page includes buttons for 'New User', 'Reset Password(s)', and 'Add Multiple Users'.

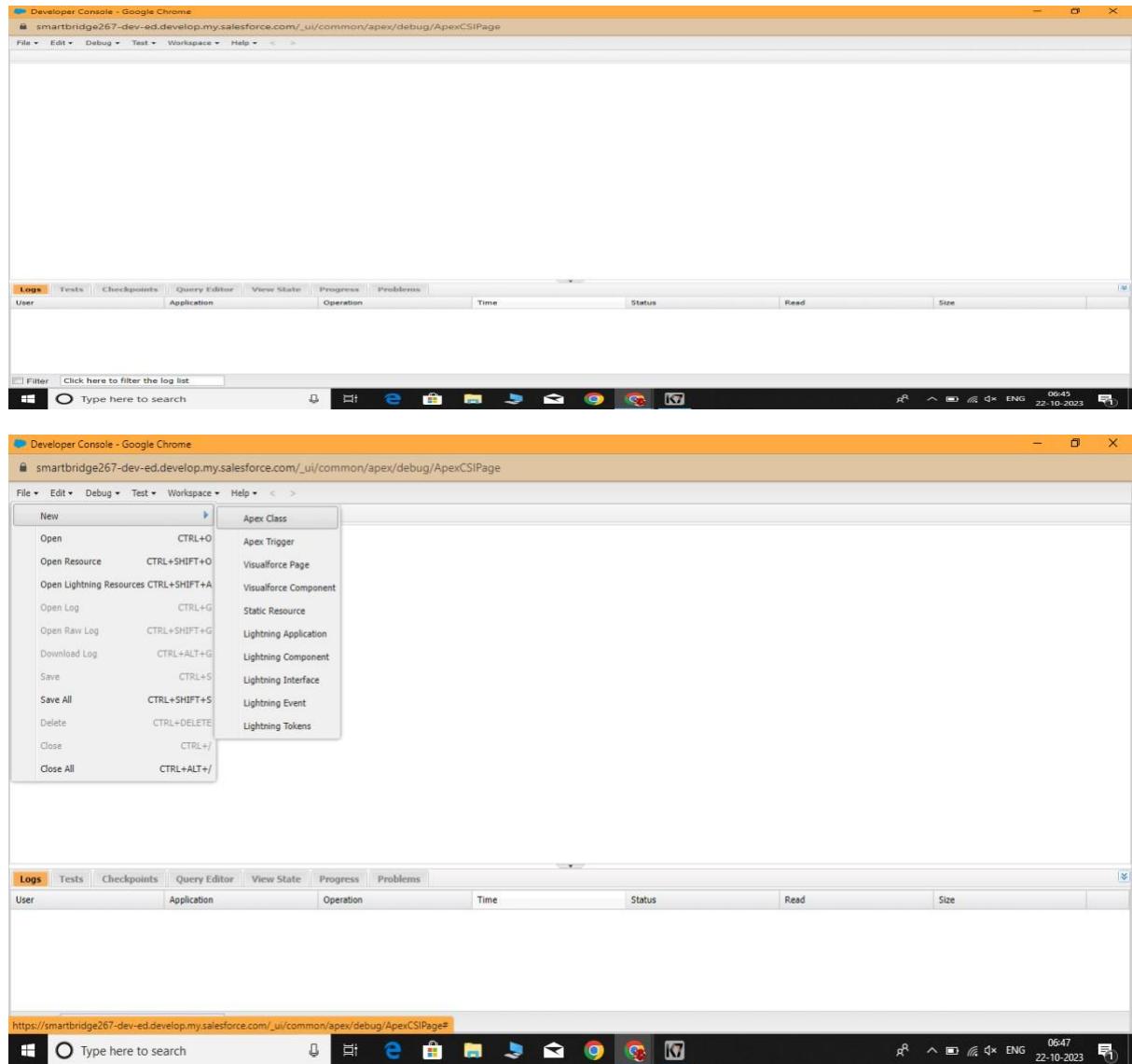
CHAPTER-4

APEX & THEIR SCHEDULERS

4.1 Apex Creation

Apex is a programming language that's used within the Salesforce platform for developing custom functionality and automating business processes.

Apex is used to add custom code to Salesforce applications. It allows you to create complex business processes, automate workflows, and extend the functionality of your Salesforce organization.



Developer Console - Google Chrome
smartbridge267-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >

Grandsum.apxc

Code Coverage: None API Version: 59 Go To

```
1 public class Grandsum {  
2  
3 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

User	Application	Operation	Time	Status	Read	Size

Filter Click here to filter the log list

Type here to search

R 06:50 22-10-2023 ENG

Developer Console - Google Chrome
smartbridge267-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >

New Apex Class Apex Trigger

Open CTRL+O Open Resource CTRL+SHIFT+O Open Lightning Resources CTRL+SHIFT+A Open Log CTRL+G Open Raw Log CTRL+SHIFT+G Download Log CTRL+ALT+G Save CTRL+S Save All CTRL+SHIFT+S Delete CTRL+DELETE Close CTRL+/ Close All CTRL+ALT+/_

Visualforce Page Visualforce Component Static Resource Lightning Application Lightning Component Lightning Interface Lightning Event Lightning Tokens

Go To

Logs Tests Checkpoints Query Editor View State Progress Problems

User	Application	Operation	Time	Status	Read	Size

https://smartbridge267-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

Type here to search

R 06:52 22-10-2023 ENG

Developer Console - Google Chrome
smartbridge267-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

Saving: Grandsum.apxc * | accmail.apxc *

Code Coverage: None | API Version: 59 | Go To

```
1 trigger accmail on Tranlist__c (after insert)
2 {
3     if(trigger.isafter)
4     {
5         if(trigger.isInsert)
6         {
7             handlerTransist.doc(trigger.new);
8             translist__c trr=new translist__c();
9
10        }
11    }
12 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

User	Application	Operation	Time	Status	Read	Size

Filter Click here to filter the log list

Type here to search

07:14 22-10-2023

Developer Console - Google Chrome
smartbridge267-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

Saving: Grandsum.apxc * | accmail.apxc * | handlerTransist.apxc *

Code Coverage: None | API Version: 59 | Go To

```
1 public class handlerTransist {
2     public static void doc(List<Translist__c> tr){
3         List<detailsOfCustomer__c> dc=new List<detailsOfCustomer__c>();
4         for(Translist__c t:tr)
5         {
6             detailsOfCustomer__c d=new detailsOfCustomer__c();
7             d.tid_c=t.transid_c;
8             d.contactNo_c=t.ContactNo_c;
9             d.Name=t.Name;
10            dc.add(d);
11        }
12        insert dc;
13    }
14 }
15 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

User	Application	Operation	Time	Status	Read	Size

Filter Click here to filter the log list

Type here to search

07:31 22-10-2023

The screenshot shows the Salesforce Developer Console interface. The main area displays an Apex class named 'testclass.apxc'. The code implements the 'Schedulable' interface and contains logic to query 'translist_c' objects, manipulate sets and lists, and perform a loop operation. Below the code editor, there are tabs for Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. The status bar at the bottom shows system information like battery level, signal strength, and the date/time (22-10-2023, 09:03).

```
1 * public class testclass implements Schedulable {
2     public void execute(Schedulablecontext ctx)
3     {
4         List<translist_c> d=[select transid_c order by transid_c id];
5         List<translist_c> t=[select transid_c ,Product_c,name,mailid_c order by transid_c id];
6         set<translist_c> s=new set <translist_c>(d);
7         list<translist_c> ls=new List<translist_c>();
8         list<translist_c> p=[select Product_c from translist_c];
9         list<translist_c> tc=new List<translist_c>();
10        for(translist_c c:s)
11        {
12            for(translist_c ts:t)
13            {
14                if(c.transid_c == ts.transid_c && !ls.contains(ts))
15                {
16                    ls.add(ts);
17                    integer c1=0;
18                    string s1=ts.Product_c;
19                    for(translist_c tr:t)
20                    {
21                        if(tr.Product_c!=s1)
22                        {
```

4.2 Apex Schedulers

Apex schedulers in Salesforce are a way to automate the execution of Apex code at specified intervals. This allows you to perform tasks or processes on a scheduled basis without manual intervention. Apex schedulers are used to define scheduled jobs. These jobs consist of Apex code that you want to run at specific intervals.

Apex Classes ~ Salesforce - Developer Edition - Google Chrome

empathetic-badger-8wyxm5-dev-ed.trailblaze.my.salesforce.com/_ui/common/data/LookupPage?lkf...

Lookup

Search...

You can use "*" as a wildcard next to other characters to improve your search results.

Recently Viewed Apex Classes

Name	Namespace Prefix	Api Version
testclass		58

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(1) WhatsApp | Get Started with Pick... | Lightning Experience | TAMILVANI S - Trailblazer | Apex Classes | Salesforce | New Tab

smartbridge267-dev-ed.develop.lightning.force.com/lightning/setup/ApexClasses/home

Setup Home Object Manager

Q apex

Apex Classes

Apex Classes

Apex Code is an object oriented programming language that allows developers to develop on-demand business applications on the Lightning Platform.

Percent of Apex Used: 0% You are currently using 137 characters of Apex Code (excluding comments and @isTest annotated classes) in your organization, out of an allowed limit of 6,000,000 characters. Note that the amount in use includes both Apex Classes and Triggers defined in your organization.

Estimate your organization's code coverage [\[i\]](#)
Compile all classes [\[i\]](#)

View: All [Create New View](#)

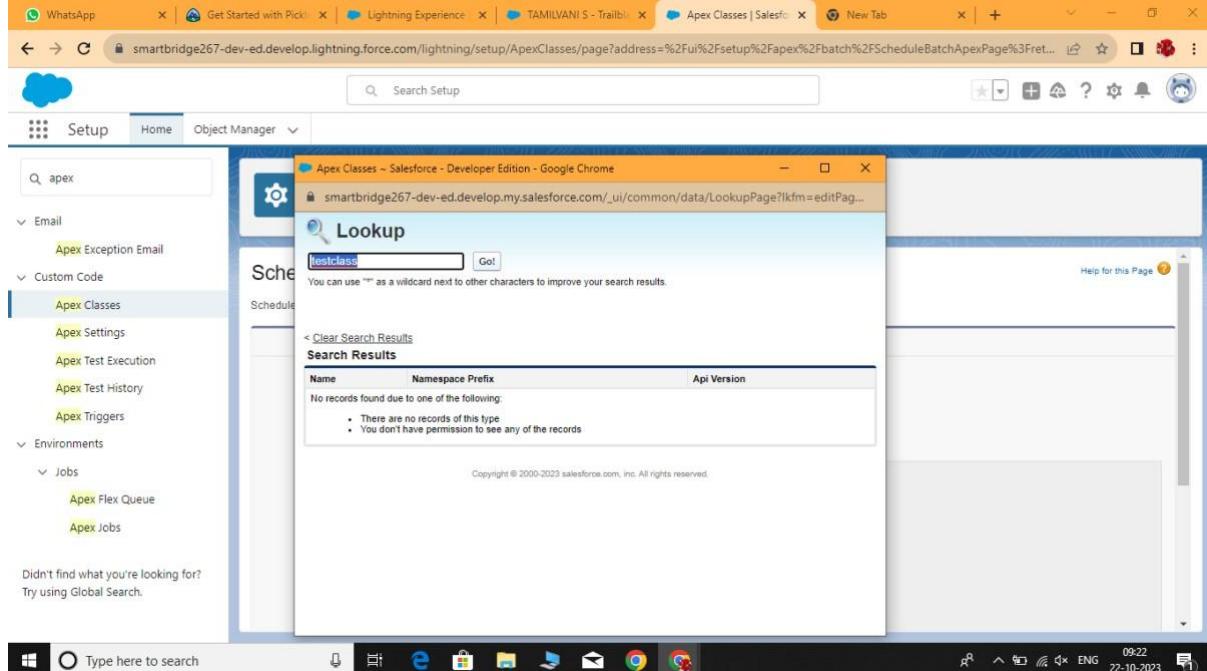
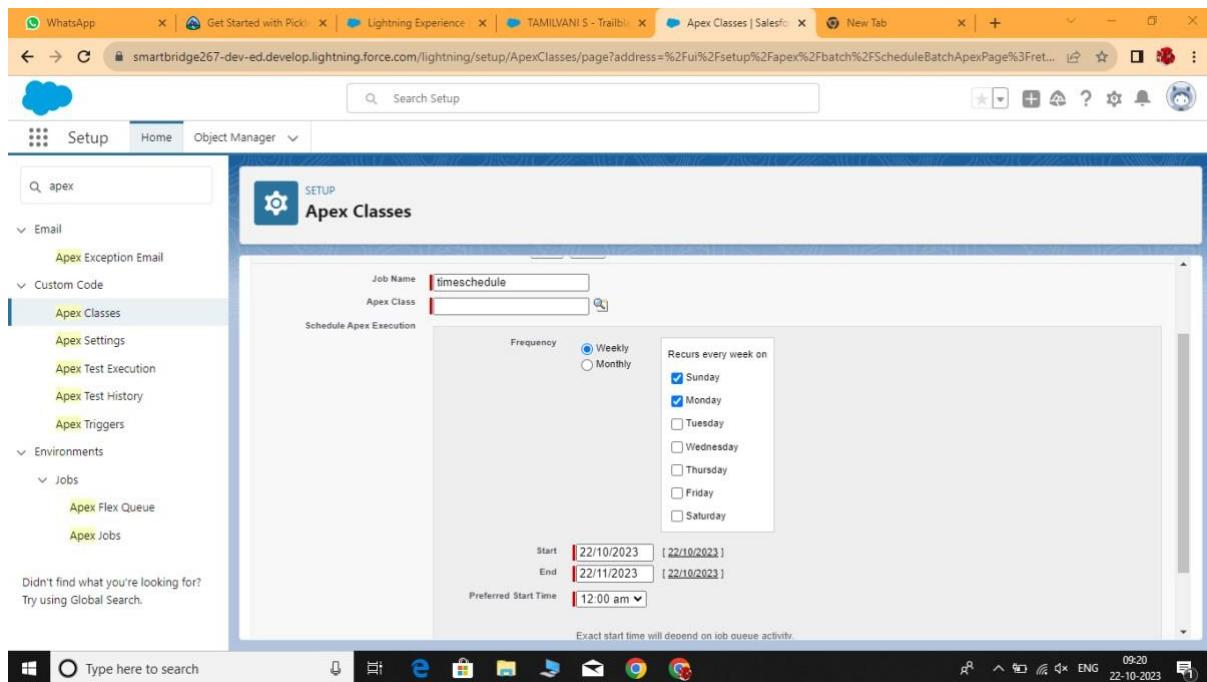
Action	Name	Namespace Prefix	Api Version	Status	Size Without Comments	Last Modified By	Has Trace Flags
Edit Del Security	Grandsum		59.0	Active	26	Tamilvani S	22/10/2023, 7:04 pm
Edit Del Security	handlerTranslat		59.0	Active	33	Tamilvani S	22/10/2023, 7:30 pm
Edit Del Security	testclass		59.0	Active	27	Tamilvani S	22/10/2023, 7:54 pm

Didn't find what you're looking for?
Try using Global Search.

Dynamic Apex Classes

https://smartbridge267-dev-ed.develop.lightning.force.com/one/one.app#/setup/...

Type here to search



Schedule Apex Execution

Frequency Weekly Monthly

Recur every week on

Sunday
 Monday
 Tuesday
 Wednesday
 Thursday
 Friday
 Saturday

Start [24/07/2023]
End [24/07/2023]
Preferred Start Time

Exact start time will depend on job queue activity.

Save **Cancel**

WhatsApp | Get Started with | Lightning Experience | TAMILVANI S - Tr | Apex Jobs | Sales | Apex Jobs ~ Sales | New Tab | + | - | X

smartbridge267-dev-ed.develop.lightning.force.com/lightning/setup/AsyncApexJobs/home

Setup Home Object Manager ▾

Apex Jobs

Click here to go to the new batch jobs page

Apex Jobs

Monitor the status of all Apex jobs, and optionally, abort jobs that are in progress.

Percent of Asynchronous Apex Used: 0%
You have currently used 0 asynchronous Apex operations out of an allowed 24-hour organization limit of 250,000. To learn about how this limit is calculated and what contributes to it, see the Lightning Platform Apex Limits topic.

View: All ▾ Create New View

Submitted Date	Job Type	Status	Status Detail	Total Batches	Batches Processed	Failures	Submitted By	Completion Date	Apex Class	Apex Method	Apex Job ID
No records to display.											

Didn't find what you're looking for?
Try using Global Search.

javascriptrvoid(0)

Type here to search

9:39 22-10-2023 ENG

Final Views

The screenshot shows a Salesforce Lightning interface for a Tranlist record named 'Ananya'. The record details are as follows:

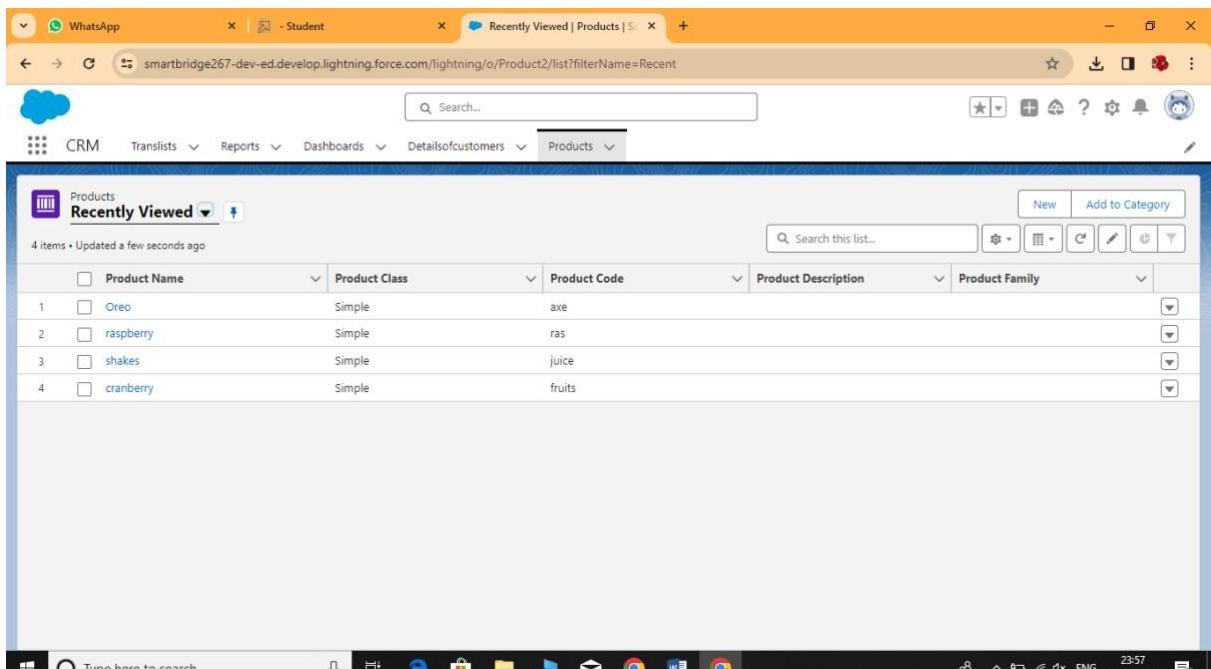
Field	Value
Tranlist Name	Ananya
TransId	986
listname	Juices
ContactNo	9884679751
EmailId	oiu@gmail.com
DateofTrans	02/10/2023
SubTot	986
Discount	

The record is owned by 'Tamilvani S'. The interface includes standard Salesforce navigation and action buttons like 'New Contact', 'Edit', and 'New Opportunity'.

The screenshot shows a Salesforce Lightning interface for a Product record named 'Oreo'. The record details are as follows:

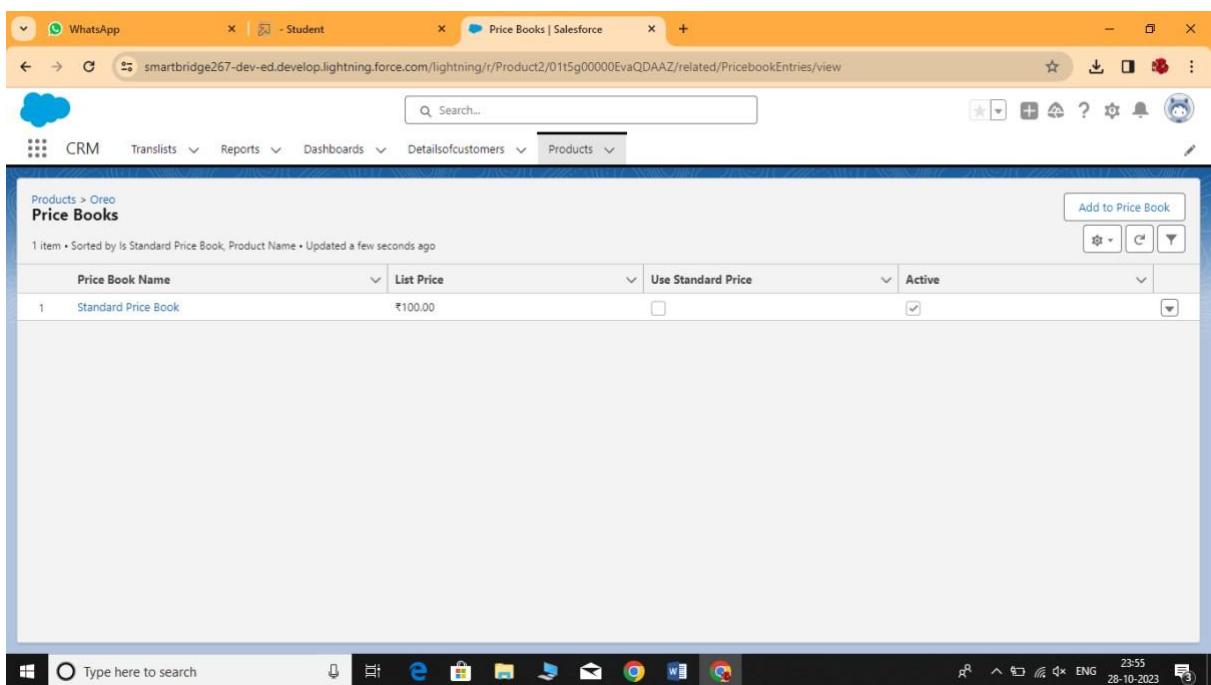
Field	Value
Product Code	axe
Product Family	

The record is active. The interface includes standard Salesforce navigation and action buttons like 'New Contact', 'New Opportunity', and 'New Case'.



Products Recently Viewed

	Product Name	Product Class	Product Code	Product Description	Product Family
1	Oreo	Simple	axe		
2	raspberry	Simple	ras		
3	shakes	Simple	juice		
4	cranberry	Simple	fruits		



Products > Oreo
Price Books

1 item • Sorted by Is Standard Price Book, Product Name • Updated a few seconds ago

Price Book Name	List Price	Use Standard Price	Active
1 Standard Price Book	₹100.00	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CHAPTER-5

REPORTS & DASHBOARD

5.1 Reports

A Salesforce report is a list of data generated based on filter criteria. Salesforce Reports helped us predict trends and gives us the advantage to increase profits.

The report builder provides a drag-and-drop interface to easily build and customize your reports.

Create Report

Category

Recently Used

All

- Accounts & Contacts
- Opportunities
- Customer Support Reports
- Leads
- Campaigns
- Activities
- Contracts and Orders
- Price Books, Products and Assets
- Administrative Reports
- File and Content Reports

Select a Report Type

Report Type Name	Category
Activities with translists	Standard
translists	Standard
translists with Lead	Standard
translists with transOrders	Standard
translists with transOrders and translists no	Standard
translists History	Standard

Details

translists Standard Report Type

Start Report

Fields (22)

Created By You

translists Report

Created By Others

No Reports Yet

Objects Used in Report Type

Owner

translists



Save Report

* Report Name
translists Report

Report Unique Name ⓘ
translists_Report_L2W

Report Description

Folder
Private Reports

REPORT ▾ prod_reports / translists

Previewing a limited number of records. Run the report to see everything.

Update Preview Automatically |

Outline Filters ⓘ

ProductRelated ↑ (1)

	translists: listname	ContactNo	Subtot	GrandTotal	DatesofTrans	
- (1)	Mani Deepak	9705864946	2,000	2,000	01/07/2023	
	rakesh	-	-	0	-	
	penku	-	1,500	1,500	-	
	SUNNY	-	2,570	2,570	-	
	deepak	-	2,000	2,000	-	
	mani	-	1,000	1,000	-	
	mani	-	-	0	-	
	mani	-	2,000	2,000	-	
	Mani Deepak	9705864942	500	400	20/06/2023	
	Rakesh	9374964947	1,350	1,026	29/06/2023	
	Varaprasad	9239723282	2,000	1,300	25/06/2023	
			Subtotal	14,920	13,796	
	Crocs (2)					
	yewwarth	9203810382	900	900	27/06/2023	
	Naveen	9059733793	2,300	1,725	-	
			Subtotal	3,200	2,625	
	Face Mask (1)	Rakesh	99000392020	1,200	1,080	-

Row Counts Detail Rows Subtotals Grand Total

Conditional Form

Save Report As

* Report Name
prod_reports

Report Unique Name ⓘ
prod_reports_8Em

Report Description

Folder
Private Reports

5.2 Dashboard

A dashboard provides an interactive visual display of key metrics and trends. Multiple dashboard components can be shown together on a single dashboard layout, creating rich visual displays of multiple reports that have a common theme. **Dashboard on Translist object**

The screenshot shows the 'New Dashboard' creation interface. It includes fields for 'Name' (with a red asterisk), 'Description', and 'Folder' (with options 'Private Dashboards' and 'Select Folder'). At the bottom right are 'Cancel' and 'Create' buttons. Below this is a 'Select Report' modal.

Select Report

Reports	Recent
Created by Me	translists Report Mani Deepak Pooni - 04-Jul-2023, 9:24 am · Private Reports
Private Reports	rep1 Mani Deepak Pooni - 30-Jun-2023, 11:52 am · Private Reports
Public Reports	cust_rept Mani Deepak Pooni - 30-Jun-2023, 11:46 am · Private Reports
All Reports	Users Not Logged in Last 7 Days Mani Deepak Pooni - 24-May-2023, 12:45 pm · Adoption Reports
Folders	Opportunities by Rep Mani Deepak Pooni - 24-May-2023, 12:00 pm · Global Sales Reports

At the bottom right of the modal are 'Cancel' and 'Select' buttons.

Add Component

Report

translists Report

Use chart settings from report i

Display As

Groups

Add group...

Columns

Add column...

translists: listname

Preview

translists Report

translists: listna...	translists: ID	ContactNo	Su...	Disc...
rakesh	a055i00000UIO	-	-	-
Rakesh	a055i00000Tdv;	9374984	1k	24
SUUNY	a055i00000UIQ	-	3k	0
triveni	a055i00000Tdv	8923681	1k	30
Varaprasad	a055i00000Tdu	9239723	2k	35

[View Report \(translists Report\)](#)

Add Component

Report

translists Report

Use chart settings from report

Display As

Value

Sum of Subtot

Sliced By

translists: ID

Preview

translists Report

Sum of Subtot

translists: ID

translists: ID	Value
a055i00000Tdpac	500
a055i00000Tdulz	1.9k
a055i00000Tdv4o	2k
a055i00000TdvZb	1.3k
a055i00000Te0BX	1.4k
a055i00000UMUiA	2k

[View Report \(translists Report\)](#)

Edit Component

Mode

Standard Dynamic (i)

Measure

Record Count

Segment Ranges

0 ►

10 ►

30 ►

50 ►

Display Units

Sales Total

A gauge chart titled "Sales Total" with a scale from 0 to 50. The needle points to 13, which is labeled as 26% of the range (10 to 30). The gauge has three segments: red for 0-10, orange for 10-30, and teal for 30-50.

13 (26%)
(10 to 30)

[View Report \(translists Report\)](#)

Cancel Update

Dashboard on Item Object

New Dashboard

* Name

Description

Folder
 Select Folder

Cancel Create

Select Report

Reports

Recent

- Created by Me
- Private Reports
- Public Reports
- All Reports

Folders

- Created by Me
- Shared with Me
- All Folders

Select Report

Reports and Folders
Cancel
Select

Add Component

Report

Use chart settings from report i

Display As

Table
Bar
Gauge
Map
Line
Scatter

Donut
Card

Grid

Value

Sliced By

Preview

prod_reports

A donut chart titled "Record Count" for the report "prod_reports". The chart shows the distribution of record counts across five categories: Crocs (2), Face Mask (1), Haldiram Sweet (3), Oreo Mega pack (2), and Premium Perfume (1). The total count is 9.

Category	Count	Percentage
Crocs	2	22.22%
Face Mask	1	11.11%
Haldiram Sweet	3	33.33%
Oreo Mega pack	2	22.22%
Premium Perfume	1	11.11%

View Report (prod_reports)

Cancel
Add



CHAPTER 6

CONCLUSION

In conclusion, the development of an employee CRM applications for corporates is a critical step towards streamlining and enhancing the E-Commerce management process within organizations. This application serves as a centralized, efficient, and user-friendly tool for managing employee requests, approvals, and associated processes.

In building an employee CRM application, it's essential to engage relevant stakeholders, including HR, finance, and IT teams, to ensure that the application aligns with organizational goals and requirements. Furthermore, thorough testing and training should be conducted to guarantee a smooth and successful implementation.

By addressing these key points and creating a tailored CRM application that aligns with the unique needs and policies of the corporate, organizations can enhance their E-Commerce management processes, improve cost control, and provide a more satisfying experience for employees and administrators alike.

CHAPTER-7

PROJECT DEMONSTRATION

Github:

<https://github.com/Tamil0101/NMPROJECT>

Demo link:

<https://youtube.com/@pavithrakannan3897?si=quN6OeA0nxv74cbp>