Project Title: Garage Management System

Project Overview:

This project is focused on developing a comprehensive **Garage Management System** to address the challenges associated with efficient garage operations and vehicle management. The goal is to deliver an innovative solution by leveraging **Salesforce's cloud-based platform** to streamline processes such as service scheduling, inventory management, and customer interaction. Through this project, we aim to enhance **operational efficiency, customer satisfaction, and data accuracy** while supporting the long-term goals of improving service delivery and operational scalability for the **garage management team**.

The Garage Management System is a valuable tool for automotive repair facilities, helping them deliver top-notch service, increase operational efficiency, and build lasting customer relationships. With its user-friendly interface and powerful features, GMS empowers garages to thrive in a competitive market while ensuring a seamless and satisfying experience for both customers and staff.

This project leverages Salesforce’s platform, integrating its customer relationship management (CRM) capabilities with tailored functionalities specific to garage management. With the use of Salesforce Cloud solutions, the system allows garage owners and managers to easily manage customer appointments, track service progress, monitor inventory, and generate reports in real time.

This project addresses the challenges faced by traditional garage management systems, such as fragmented data handling, manual record-keeping, and inefficient workflows. GMS simplifies these processes by centralizing data, automating repetitive tasks, and providing actionable insights through real-time analytics. The solution is highly customizable, ensuring it adapts to the specific requirements of businesses, whether they are small workshops or large multi-branch service centers.

This project overcomes traditional garage management by Centralized storage of customer data, including contact details, service preferences, and historical interactions.Enables personalized service delivery by providing easy access to customer and vehicle service history.Also Facilitates the creation and assignment of work orders based on customer requests.Tracks the progress of ongoing repairs and services, ensuring timely delivery.

Objectives:

Business Goals:

Enhance Operational Efficiency:

The Garage Management System aims to automate routine tasks such as customer scheduling, inventory tracking, and invoicing, reducing manual labor and increasing operational efficiency. By leveraging Salesforce's robust platform, the goal is to streamline workflows, improve service turnaround time, and reduce errors caused by manual processes.

Improve Customer Experience:

A primary business goal is to enhance the customer experience by providing a user-friendly platform for appointment scheduling, transparent service updates, and seamless communication. By integrating Salesforce CRM, the system ensures personalized customer interactions, timely notifications, and quick issue resolution, leading to higher customer satisfaction and retention.

Optimize Resource Management:

The system's objective is to help garage owners optimize the use of their resources, such as technician time, spare parts, and tools. By tracking service histories, inventory levels, and employee schedules, the system provides insights into resource utilization, helping the business make informed decisions and minimize downtime.

Increase Revenue Generation:

By automating service management, inventory control, and invoicing, the Garage Management System aims to improve billing accuracy and ensure timely payments, leading to an increase in revenue. Additionally, the integration of upsell opportunities and customer history will help businesses identify potential sales for additional services or parts, enhancing revenue streams.

Data-Driven Decision Making:

The system aims to empower garage owners and managers with actionable insights through comprehensive reports and analytics. By leveraging Salesforce's data visualization tools, managers will be able to make informed decisions about customer preferences, service performance, inventory management, and overall business strategies.

Specific Outcomes:

Streamlined Service Scheduling:

- Implementation of an intuitive scheduling system to manage and track customer appointments efficiently.
- Reduced appointment conflicts and minimized scheduling errors.

Enhanced Customer Relationship Management (CRM):

- Integration of a comprehensive customer database, enabling personalized interactions and improved communication.
- Ability to track customer history, service preferences, and feedback.

Inventory and Parts Management:

- Automated tracking of spare parts and inventory levels, ensuring timely stock replenishment and reducing shortages.
- Integration with suppliers for seamless ordering and tracking.

Real-Time Data Access and Reporting:

- Creation of real-time dashboards to monitor garage operations, customer requests, and technician performance.
- Generation of detailed reports for performance analysis and decision-making.

Improved Workflow Automation:

- Automation of routine tasks such as service reminders, invoicing, and follow-up communications, reducing manual efforts and errors.
- Optimized technician assignment based on skill and availability.

Seamless Payment Integration:

- Integration with payment gateways for secure and hassle-free billing and payment processing directly through the platform.
- Support for various payment methods, including credit cards and online transactions.

Enhanced User Experience (UX):

- Development of user-friendly interfaces for both customers and garage staff, improving ease of use and engagement.
- Mobile-optimized features for on-the-go access to services and updates.

Scalable Solution for Future Growth:

- A flexible and scalable system that can grow with the business, accommodating additional services, locations, and customers.
- Integration potential with other business functions, such as sales and marketing, to support future expansion.

Improved Data Security and Compliance:

- Implementation of robust security measures to protect sensitive customer and business data.
- Compliance with industry standards and regulations, ensuring privacy and data integrity.

Cost Savings and Increased Profitability:

- Reduction in operational costs through automation and efficiency gains.
- Improved profitability due to better inventory management and service tracking.

Salesforce Key Features and Concepts Utilized:

Object:

What Is an Object?

Salesforce objects are database tables that permit you to store data that is specific to an organization. What are the types of Salesforce objects .

Salesforce objects are of two types:

Standard Objects: Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.

Custom Objects: Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization. They are the heart of any application and provide a structure for sharing data.

Tabs:

What is Tab ?

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

Types of Tabs:

Custom Tabs:

Custom object tabs are the user interface for custom applications that you build in salesforce.com. They look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.

Web Tabs:

Web Tabs are custom tabs that display web content or applications embedded in the salesforce.com window. Web tabs make it easier for your users to quickly access content and applications they frequently use without leaving the salesforce.com application.

Visualforce Tabs:

Visualforce Tabs are custom tabs that display a Visualforce page. Visualforce tabs look and behave like standard salesforce.com tabs such as accounts, contacts, and opportunities.

Lightning Component Tabs:

Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app.

Lightning Page Tabs:

Lightning Page Tabs let you add Lightning Pages to the mobile app navigation menu.

Lightning Page tabs don't work like other custom tabs. Once created, they don't show up on the All Tabs page when you click the Plus icon that appears to the right of your current tabs. Lightning Page tabs also don't show up in the Available Tabs list when you customise the tabs for your apps.

The Lightning App:

An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps give your 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. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching between apps.

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:

Standard Fields

Custom Fields

Standard Fields:

As the name suggests, the Standard Fields are the predefined fields in Salesforce that perform a standard task. The main point is that you can’t simply delete a Standard Field until it is a non-required standard field. Otherwise, users have the option to delete them at any point from the application freely. Moreover, we have some fields that you will find common in every Salesforce application. They are,

Created By

Owner

Last Modified

Field Made During object Creation

Custom Fields:

On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organiser or company can use them if necessary. It means you need not always include them in the records, unlike Standard fields. Hence, the final decision depends on the user, and he can add/remove Custom Fields of any given form.

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.

Profiles:

A profile is a group/collection of settings and permissions that define what a user can do in salesforce. Profile controls “Object permissions, Field permissions, User, permissions, Tab settings, App settings, Apex class access, Visualforce page access, Page layouts, Record Types, Login hours & Login IP ranges. You can define profiles by the user's job function. For example System Administrator, Developer, Sales Representative.

Types of profiles in salesforce:

Standard profiles:

By default salesforce provides below standard profiles

Contract Manager

Read Only

Marketing User

Solutions Manager

Standard User

System Administrator.

We cannot deleted standard ones

Each of these standard ones includes a default set of permissions for all of the standard objects available on the platform.

Custom Profiles:

Custom ones defined by us.

They can be deleted if there are no users assigned with that particular one.

Role & Role Hierarchy:

A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organization can have to data. Simply put, it describes what a user could see within the Salesforce organization.

Users:

A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records. Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what features and records the user can access.

Public groups:

Public groups are a valuable tool for Salesforce administrators and developers to streamline user management, data access, and security settings. By creating and using public groups effectively, you can maintain a secure and organized Salesforce environment while ensuring that users have appropriate access to the resources they

need.
Sharing Setting:
Salesforce allows you to configure sharing settings to control how records are accessed and shared within your organization. These settings are crucial for maintaining data security and privacy. Salesforce provides a variety of tools and mechanisms to define and enforce sharing rules, such as:
Organization-Wide Default (OWD) Settings:
These settings define the default level of access for all objects within your Salesforce org.
OWD settings include Private, Public Read-Only, Public Read/Write, and Controlled by Parent.OWD settings can be configured for each standard and custom object.
Role Hierarchy:
Salesforce uses a role hierarchy to determine record access.
Users at higher levels in the hierarchy have greater access to records owned by or shared with users lower in the hierarchy. The role hierarchy is often used in combination with OWD settings to grant different levels of access.
Profiles and Permission Sets:
Profiles and permission sets allow administrators to specify object-level and field-level permissions for users.
Profiles are typically used to grant general object and field access, while permission sets can be used to extend those permissions to specific users.
Sharing Rules:
Sharing rules are used to extend access to records for users who meet specific criteria.
They can be used to grant read-only or read-write access to records owned by other users.
Manual Sharing:
Administrators and record owners can manually share specific records with other users or groups.
Flows:
In Salesforce, a flow is a powerful tool that allows you to automate business processes, collect and update data, and guide users through a series of screens or steps. Flows are built using a visual interface and can be created without any coding knowledge.
Apex Trigger:
Apex can be invoked by using triggers. Apex triggers enable you to perform custom actions
before or after changes to Salesforce records, such as insertions, updates, or deletions.
A trigger is Apex code that executes before or after the following types of operations:

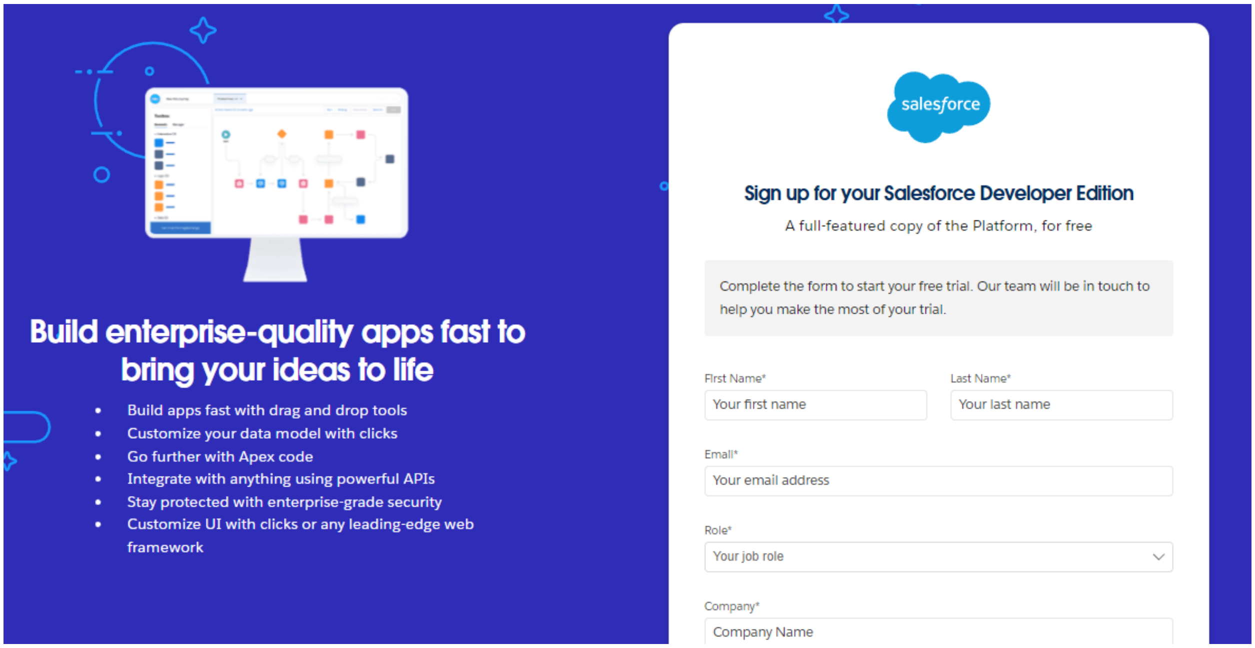
insert
update
delete
merge
upsert
undelete
For example, you can have a trigger run before an object's records are inserted into the database, after records have been deleted, or even after a record is restored from the Recycle Bin.
You can define triggers for top-level standard objects that support triggers, such as a Contact or an Account, some standard child objects, such as a CaseComment, and custom objects. To define a trigger, from the object management settings for the object whose triggers you want to access, go to Triggers.
There are primarily two types of Apex Triggers:
Before Trigger: This type of trigger in Salesforce is used either to update or validate the values of a record before they can be saved into the database. So, basically, the before trigger validates the record first and then saves it. Some criteria or code can be set to check data before it gets ready to be inserted into the database.
After Trigger: This type of trigger in Salesforce is used to access the field values set by the system and affect any change in the record. In other words, the after trigger makes changes to the value from the data inserted in some other record.
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.
Types of Reports in Salesforce:
Tabular
Summary
Matrix
Joined Reports
Dashboards:
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. Before building, reading, and sharing dashboards, review these dashboard basics.

Detailed Steps to Solution Design:

The solution design process for the Garage Management System (GMS) involves creating a comprehensive framework for the project, ensuring that the business requirements are met using Salesforce's capabilities. This step-by-step guide will detail the design and implementation phases that ensure the GMS is scalable, efficient, and user-friendly.

Step-1:

- Creating a developer org in salesforce.
- Go to https://developer.salesforce.com/signup



1. First name & Last name
2. Email
3. Role : Developer
4. Company : College Name
5. County : India
6. Postal Code : pin code
7. Username : should be a combination of your name and company

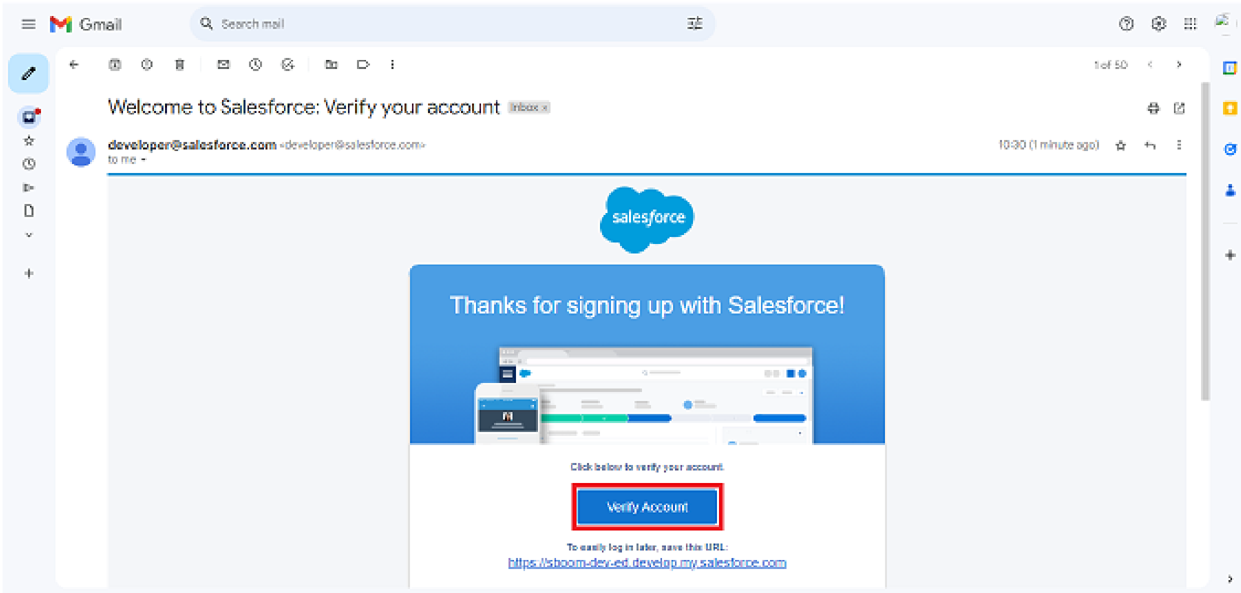
This need not be an actual email id, you can give anything in the format : username@organization.com

Click on sign me up after filling these.

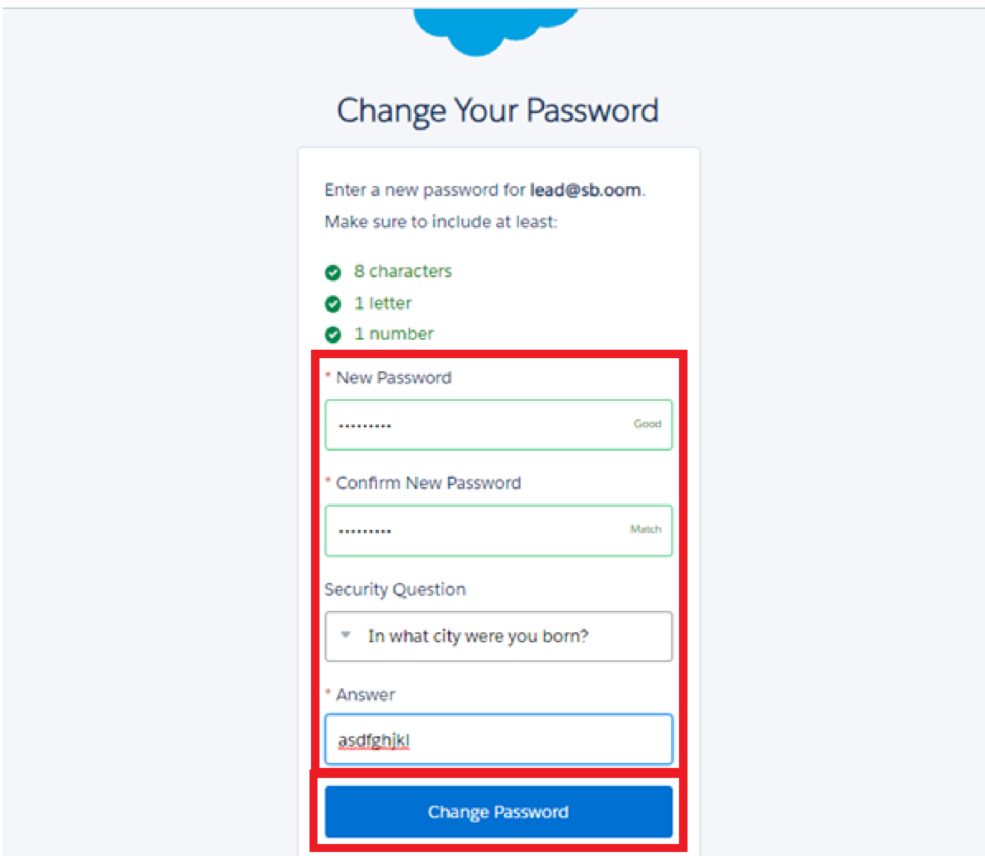
Step-2:

- Account activation
- Go to the inbox of the email that you used while signing up. Click on the verify

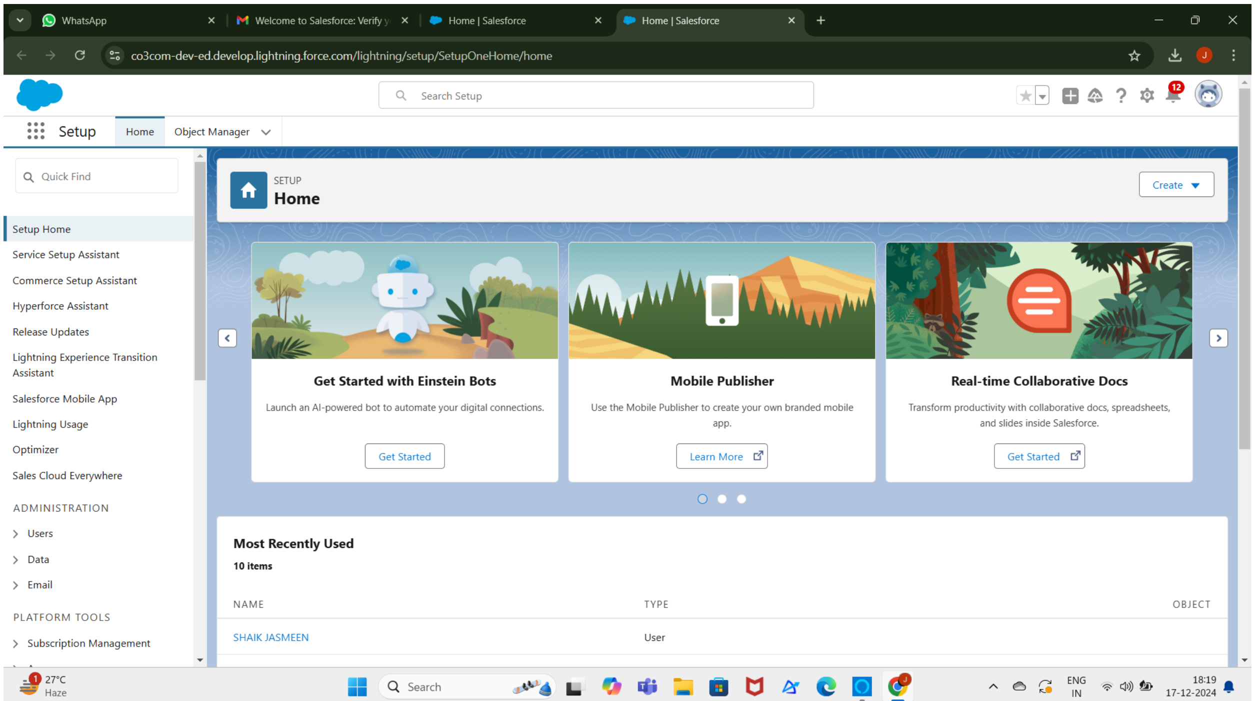
account to activate your account. The email may take 5-10mins.



- Click on Verify Account
- Give a password and answer a security question and click on change password.



- Then you will redirect to your salesforce setup page.

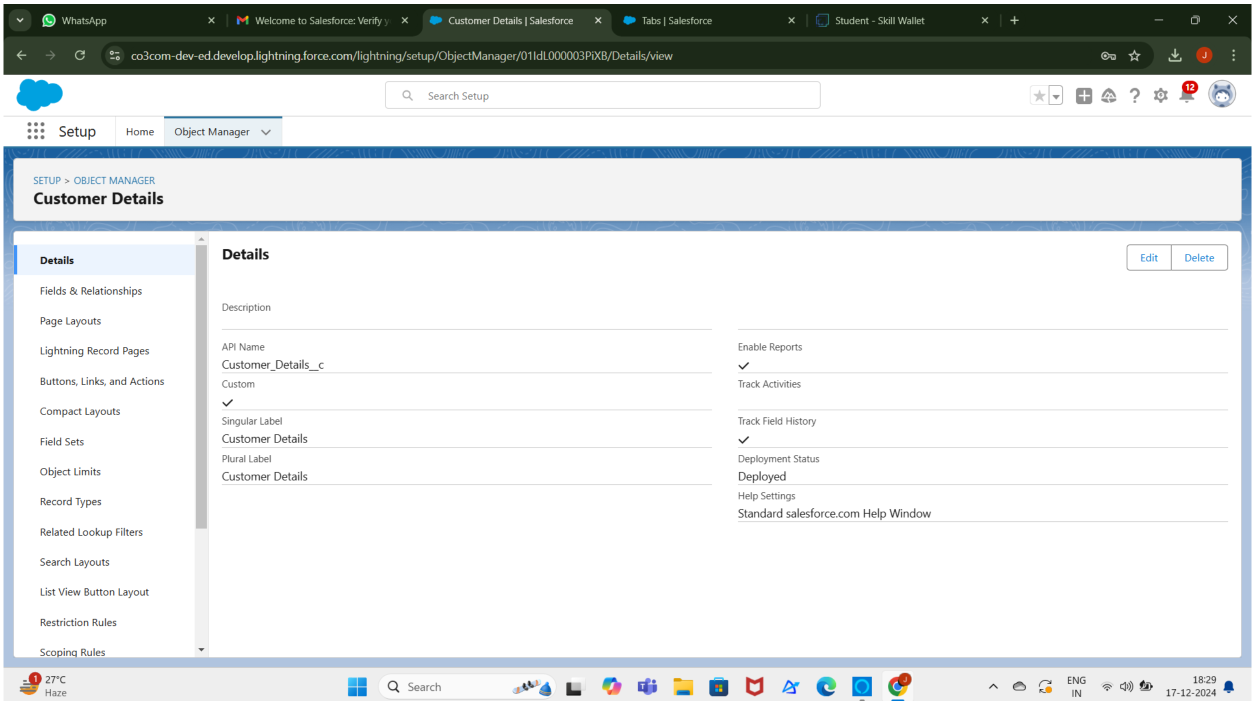


Step-3:

Create Customer Details Object:

To create an object:

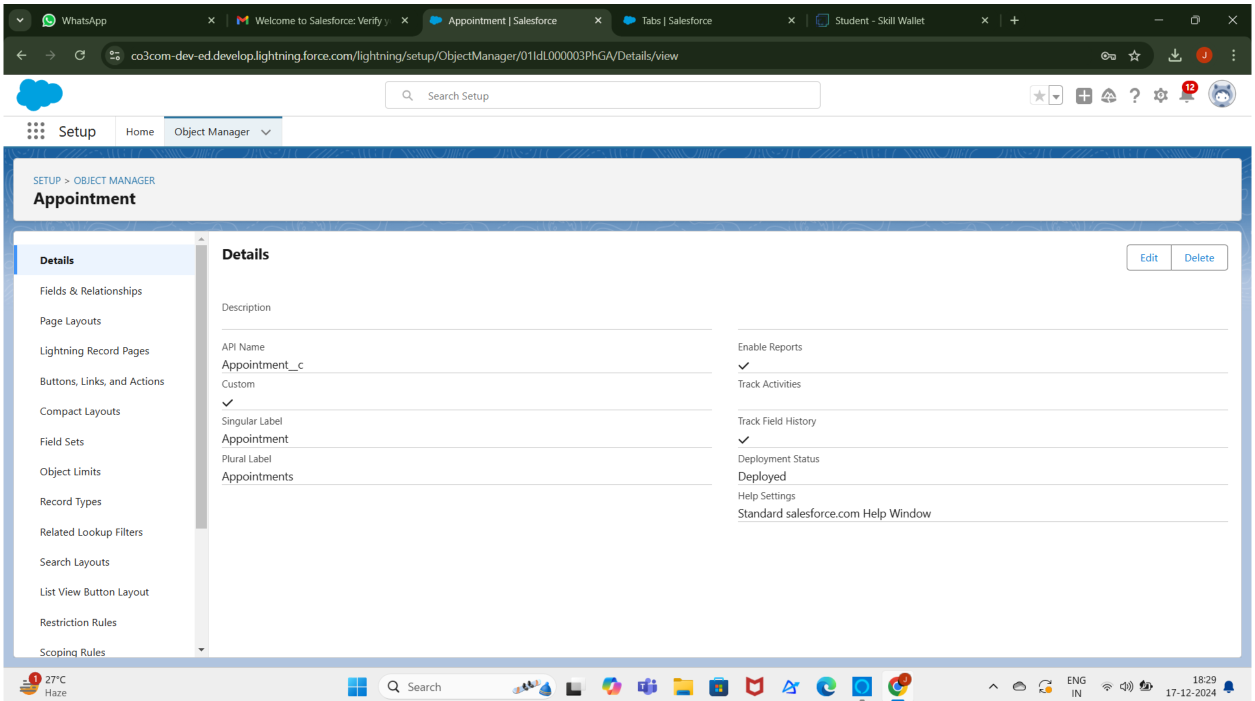
- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name >> Customer Details
- Plural label name >> Customer Details
- Enter Record Name Label and Format
- Record Name >> Customer Name
- Data Type >> Text
- Click on Allow reports and Track Field History,
- Allow search >> Save.



Create Appointment Object:

To create an object:

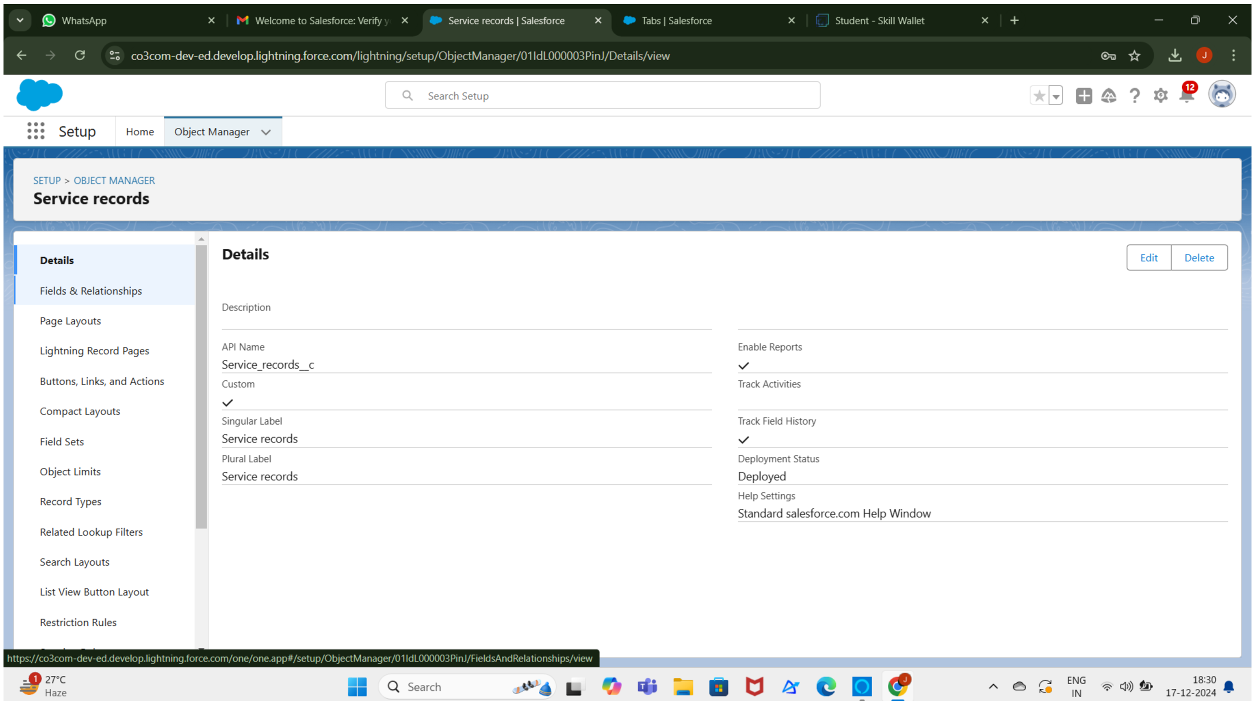
- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name >> Appointment
- Plural label name >> Appointments
- Enter Record Name Label and Format
- Record Name >> Appointment Name
- Data Type >> Auto Number
- Display Format >> app-{000}
- Starting number >> 1
- Click on Allow reports and Track Field History,
- Allow search >> Save.



Create Service records Object:

To create an object:

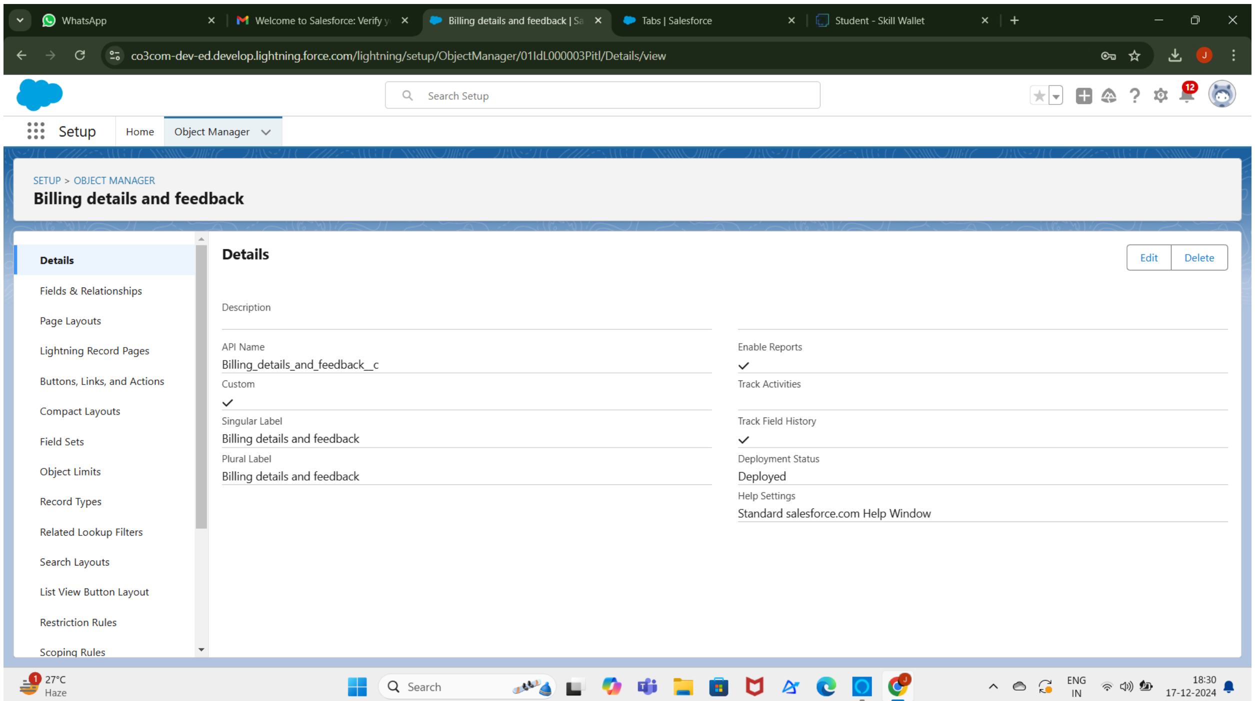
- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name >> Service records
- Plural label name >> Service records
- Enter Record Name Label and Format
- Record Name >>Service records Name
- Data Type >> Auto Number
- Display Format >> ser-{000}
- Starting number >> 1
- Click on Allow reports and Track Field History,
- Allow search >> Save.



Create Billing details and Feedbacks Object:

To create an object:

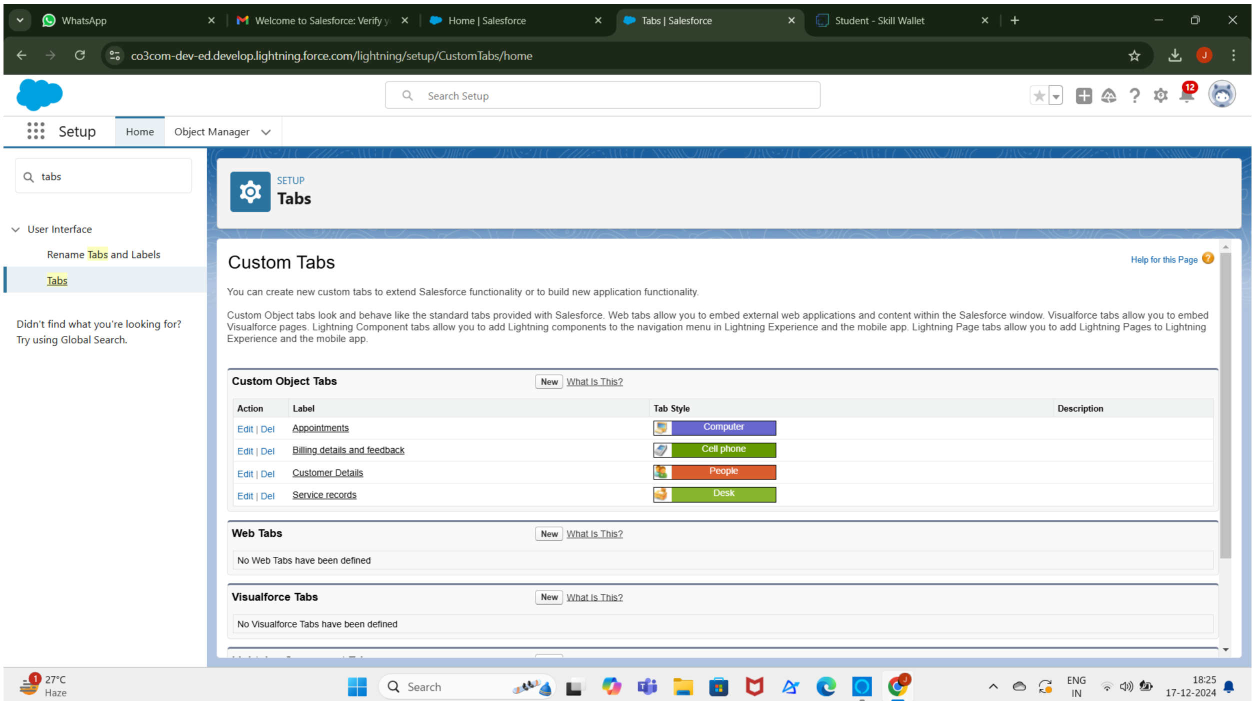
- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name >> Billing details and feedback
- Plural label name >> Billing details and feedback
- Enter Record Name Label and Format
- Record Name >> Billing details and feedback Name
- Data Type >> Auto Number
- Display Format >> bill-{000}
- Starting number >> 1
- Click on Allow reports and Track Field History,
- Allow search >> Save.



Step-4:

Creating a custom tabs:

- Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
- Select Object(Customer Details) >> 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
- Now create the Tabs for the remaining Objects, they are “ Appointments, Service records,Billing details and feedback”.



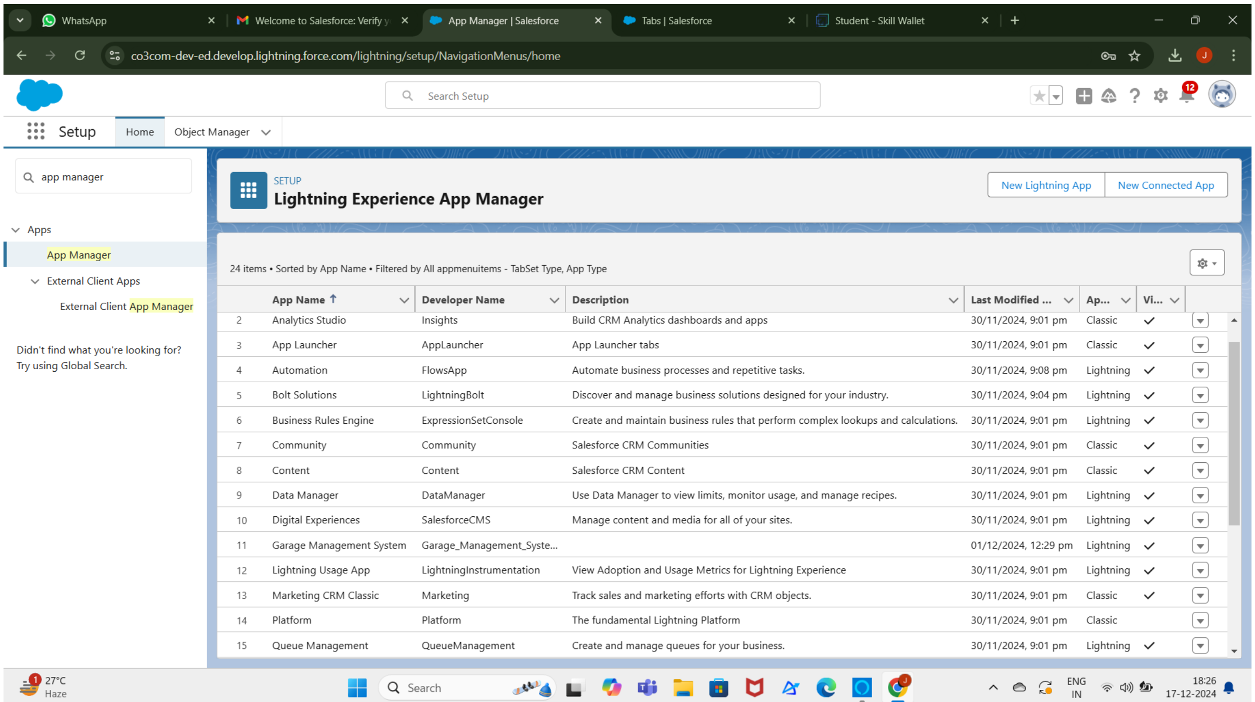
Step-5:

Creating a lightning app:

To create a lightning app page:

- Go to setup page >> search “app manager” in quick find >> select “app manager” >> click on New lightning App.

- Fill the app name in app details as Garage Management Application >> Next >> (App option page) keep it as default >> Next >> (Utility Items) keep it as default >> Next.
- Select the items (Customer Details,Appointments, Service records, Billing details and feedback, Reports and Dashboards) from the search bar and move it using the arrow button >> Next.
- To Add User Profiles:
- Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.



Step-6:

Creation of fields for the Customer Details object

- Go to setup >> click on Object Manager >> type object name(Customer Details) in search bar >> click on the object.
- Now click on "Fields & Relationships" >> New
- Select Data Type as a "Phone"
- Click on next.

Fill the Above as following:

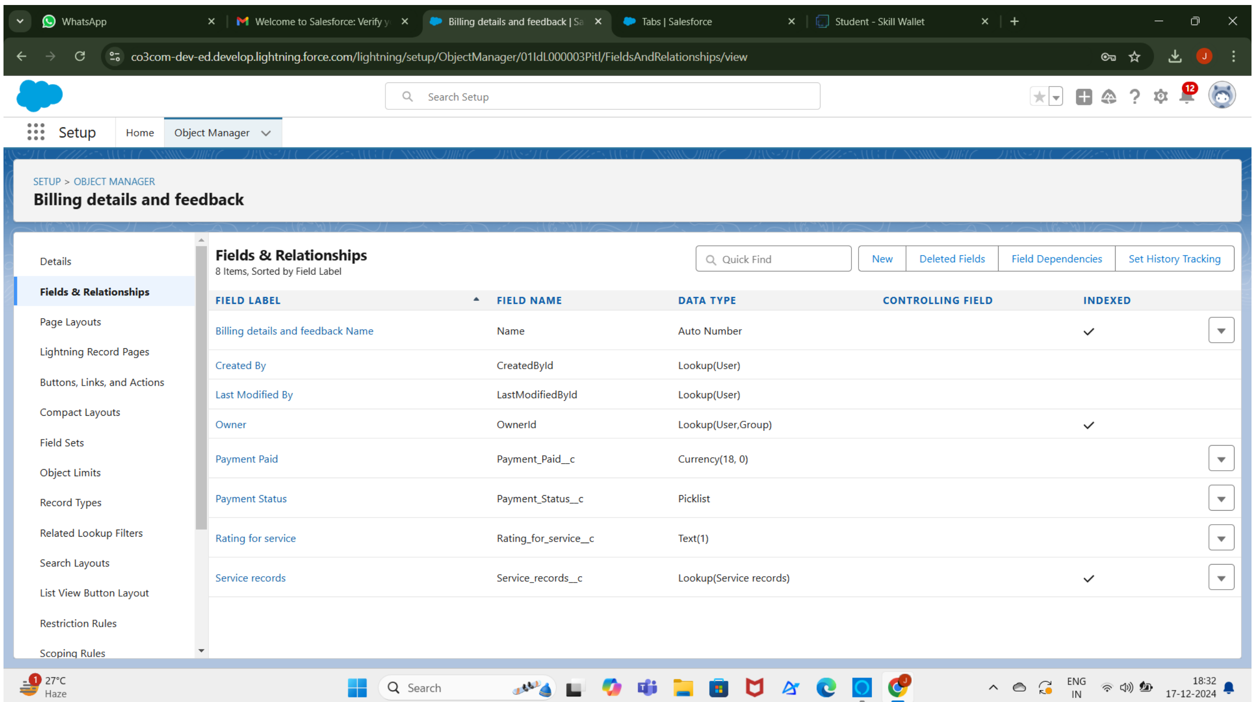
- Field Label: Phone number
- Field Name : gets auto generated
- Click on Next >> Next >> Save and new.

To create another fields in an object:

- Go to setup >> click on Object Manager >> type object name(Customer Details) in search bar >> click on the object.
- Now click on "Fields & Relationships" >> New
- Select Data type as a "Email" and Click on Next

Fill the Above as following:

- Field Label : Gmail
- Field Name : gets auto generated
- Click on Next >> Next >> Save and new.

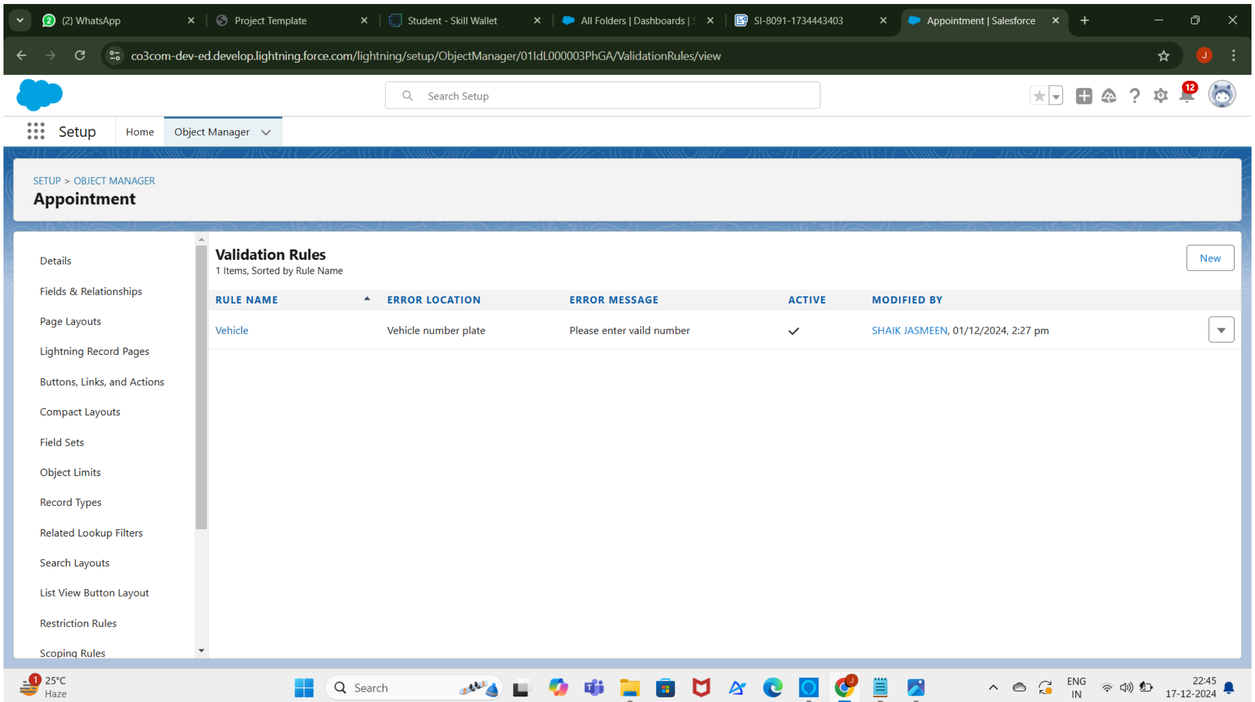


- Creation of Lookup Field on Appointment Object
- Creation of Checkbox Field on Appointment Object
- Creation of Date Field on Appointment Object
- Creation of Currency Field on Appointment Object
- Creation of Text Fields in Billing details and feedback object
- Creation of Picklist Fields in Service records object
- Creation of Formula Field in Service Records Object

Step-7:

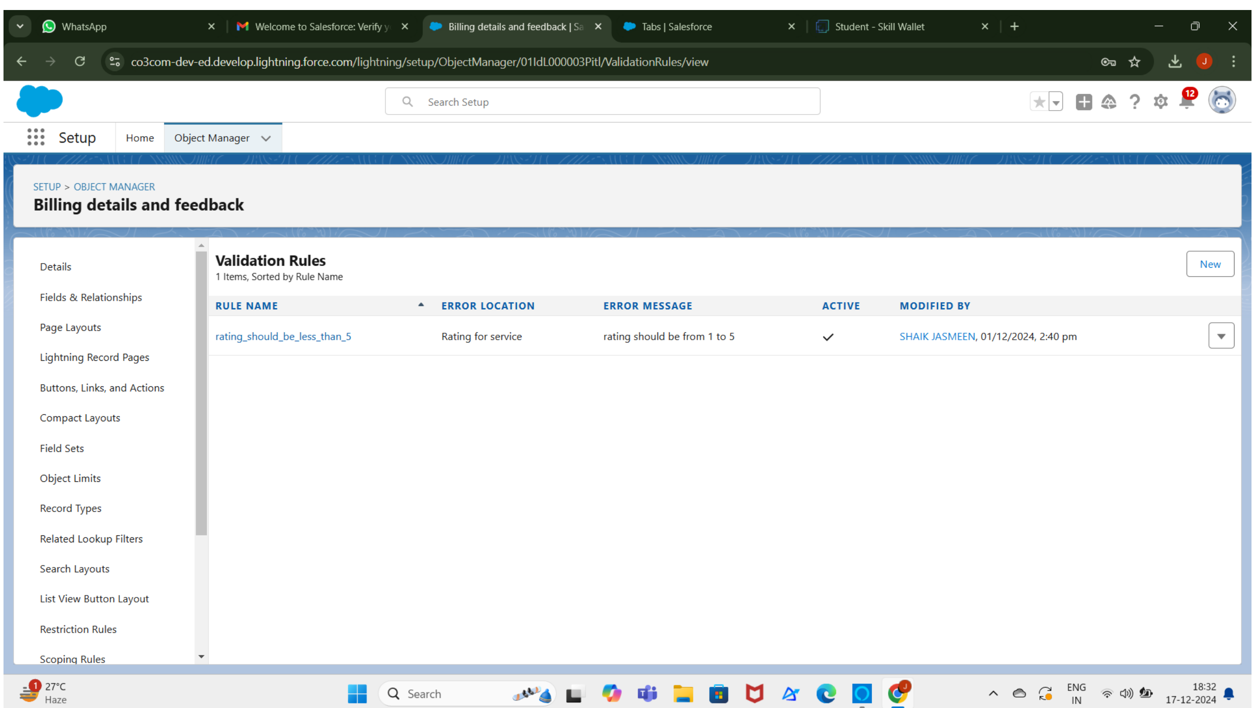
create a validation rule to an Appointment Object:

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



create a validation rule to an Billing details and feedback Object:

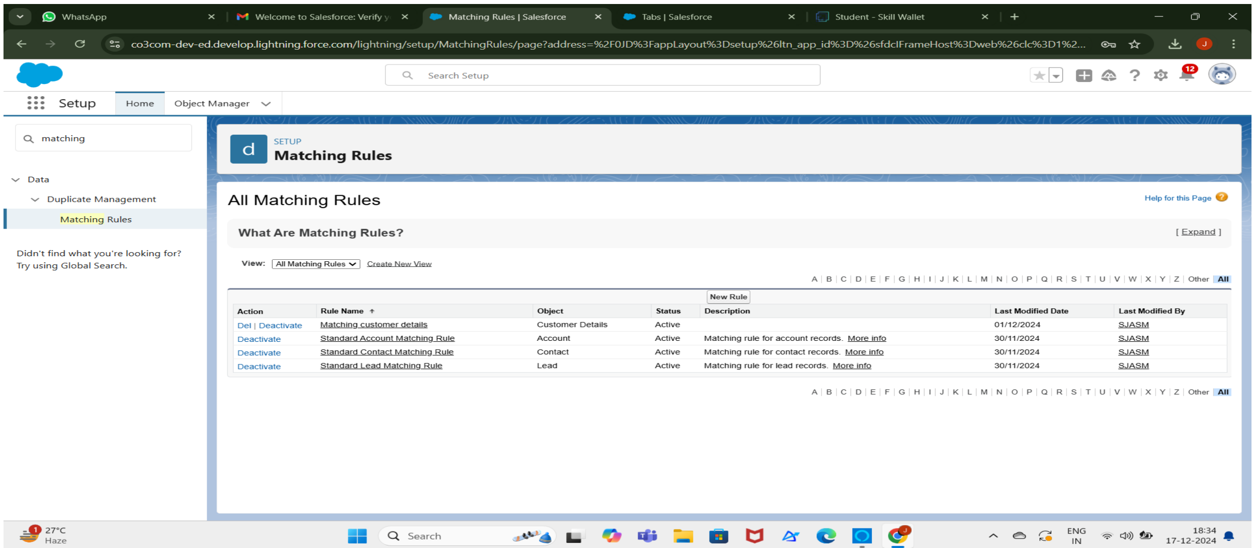
- Go to the setup page >> click on object manager >> From drop down click edit for Billing details and feedback object.
- Click on the validation rule >> click New.



Step-8:

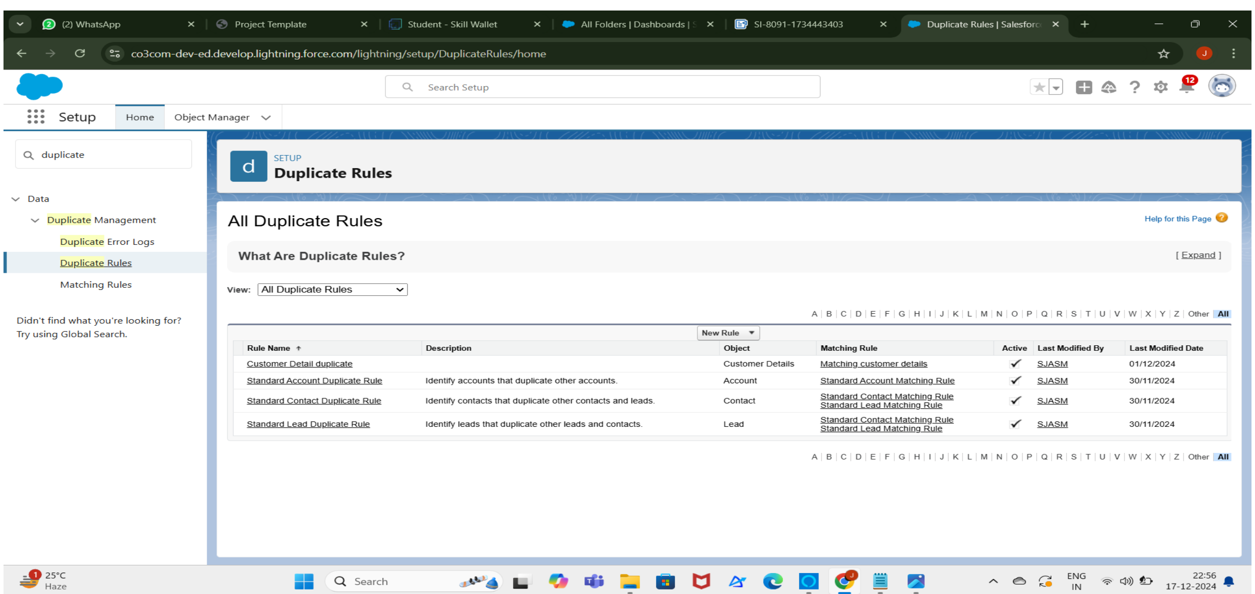
create a matching rule to an Customer details Object:

- Go to quick find box in setup and search for matching Rule.
- Click on matching rule >> click on New Rule.



create a Duplicate rule to an Customer details Object:

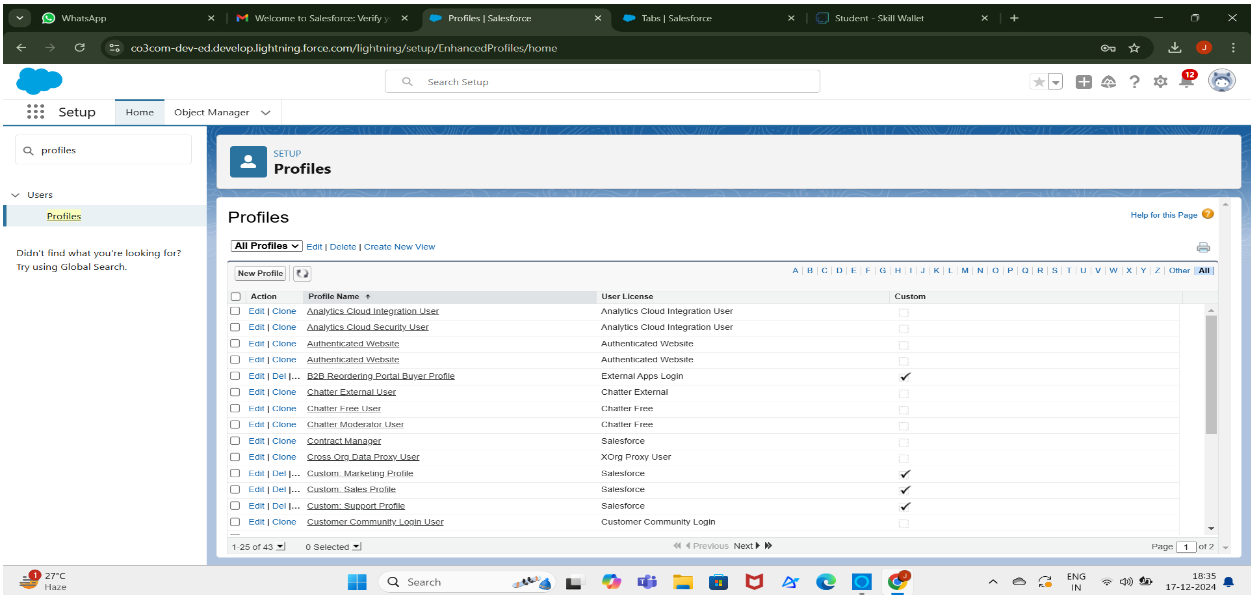
- Go to quick find box in setup and search for Duplicate rules.
- Click on Duplicate rule >> click on New Rule >> select customer details object

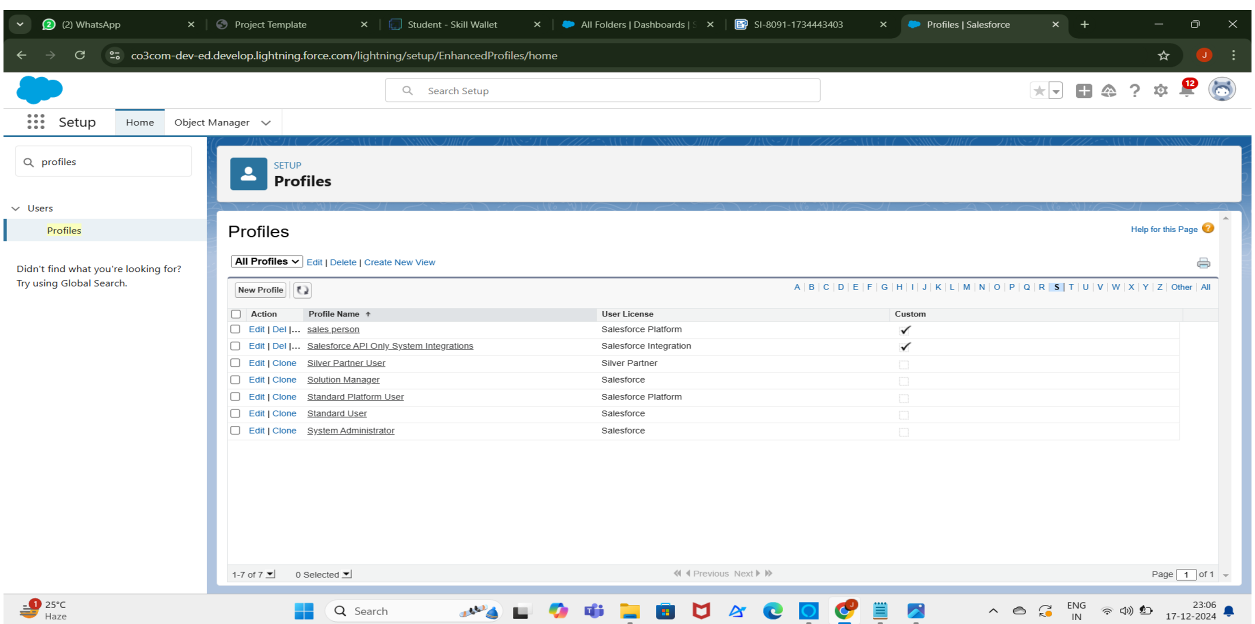


Step-9: Manager Profile & Sales person profiles

To create a new profile:

- Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Standard User) >> enter profile name (Manager) >> Save.
- Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Salesforce Platform User) >> enter profile name (sales person) >> Save.





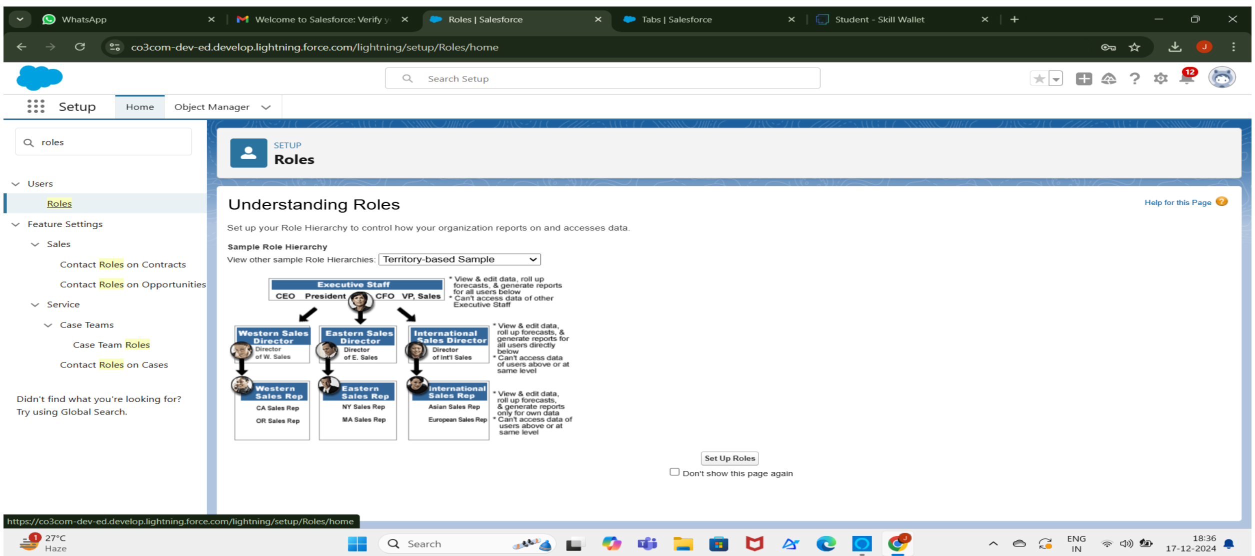
Step-10: Role & Role Hierarchy

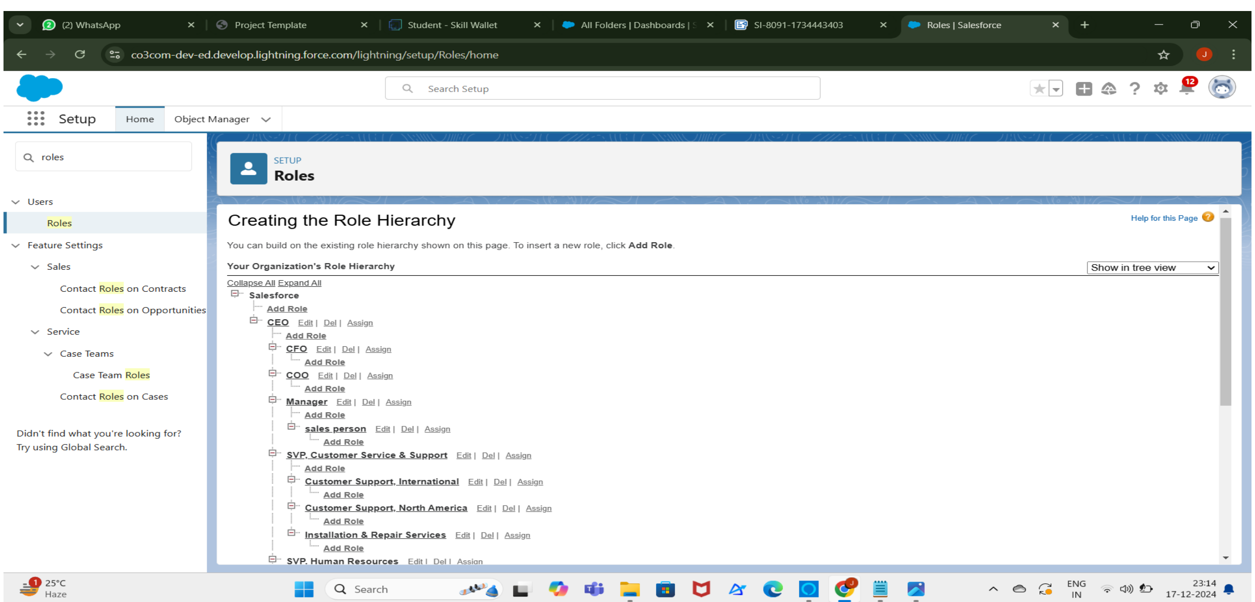
Creating Manager Role:

- Go to quick find >> Search for Roles >> click on set up roles.
- Click on Expand All and click on add role under whom this role works.
- Give Label as “Manager” and Role name gets auto populated. Then click on Save.

Creating another two roles under manager

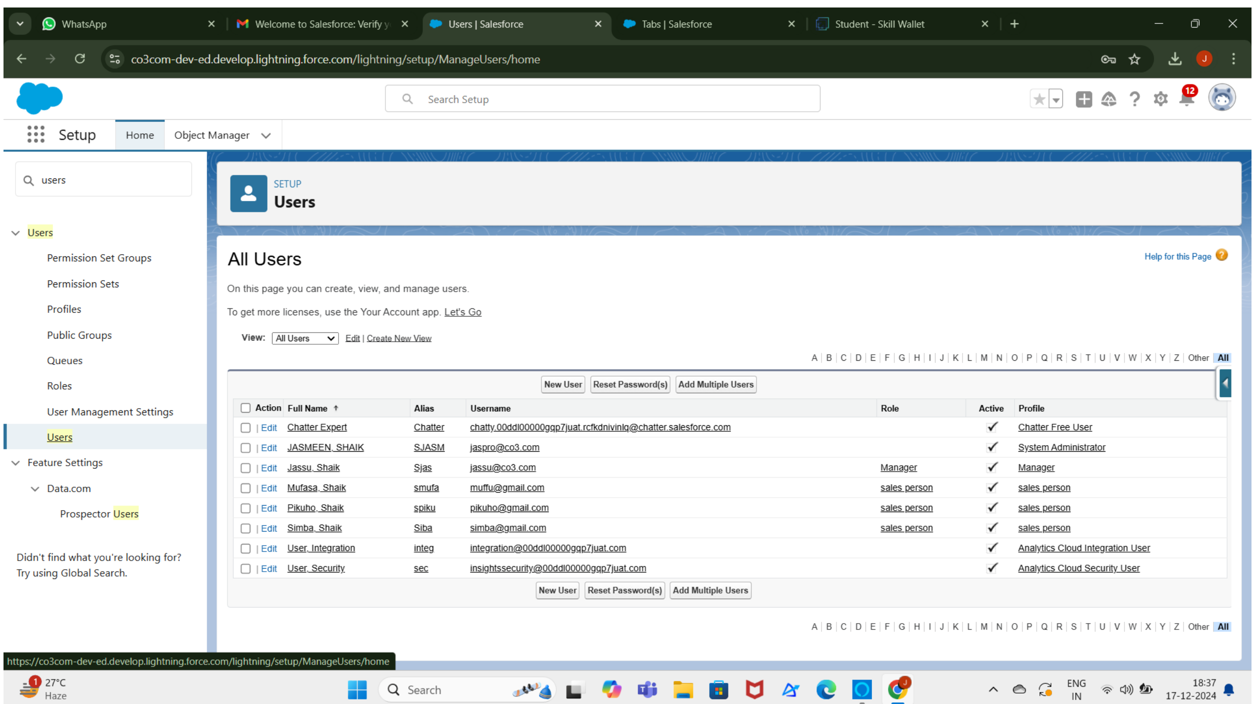
- Go to quick find >> Search for Roles >> click on set up roles.
- Click plus on CEO role, and click add role under manager.





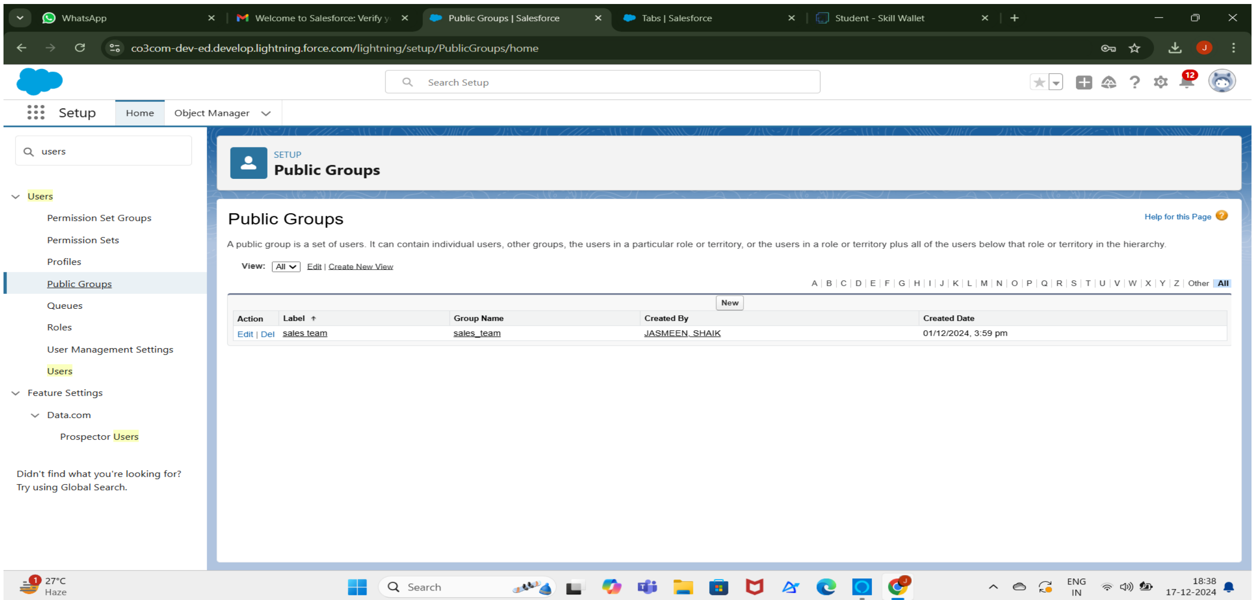
Step-11: Create Users

- Go to setup >> type users in quick find box >> select users >> click New user.
- Fill in the fields
- Repeat the steps and create another user using
- Role : sales person
- User licence : Salesforce Platform
- Profile : sales person
- create atleast 3 users with these permissions.



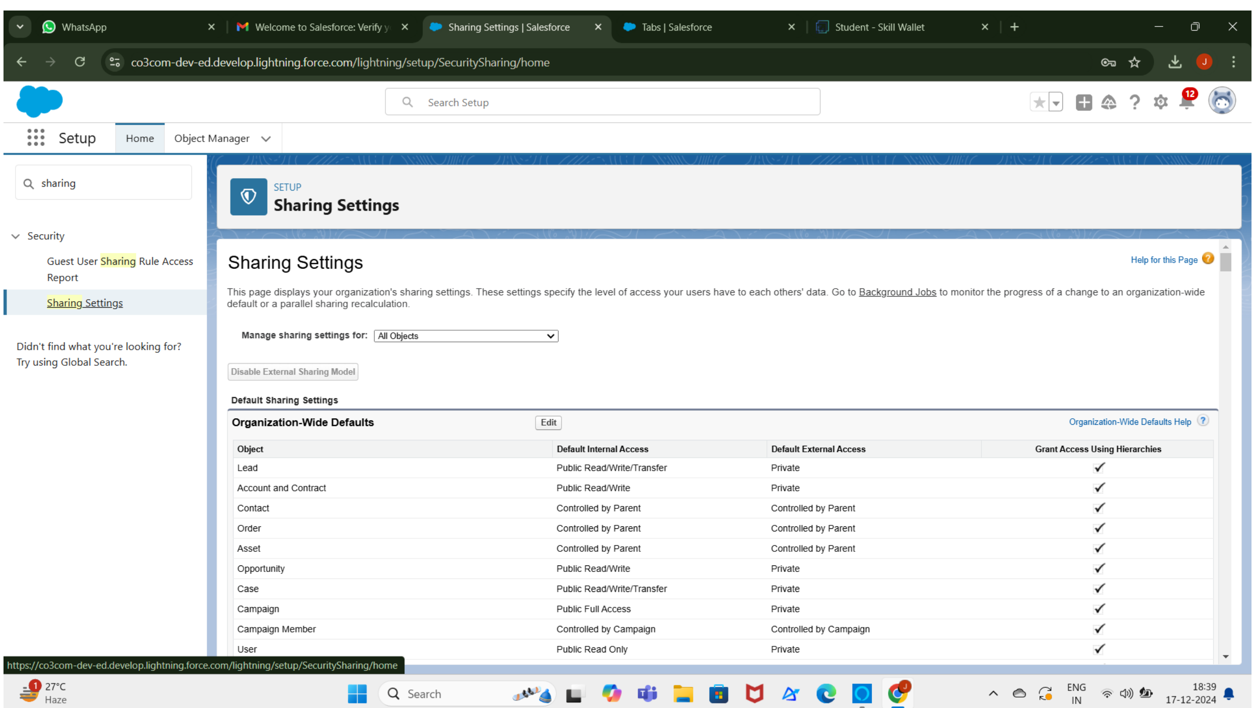
Step-12: Creating New Public Groups

- Go to setup >> type users in quick find box >> select public groups >> click New
- As “sales team”.



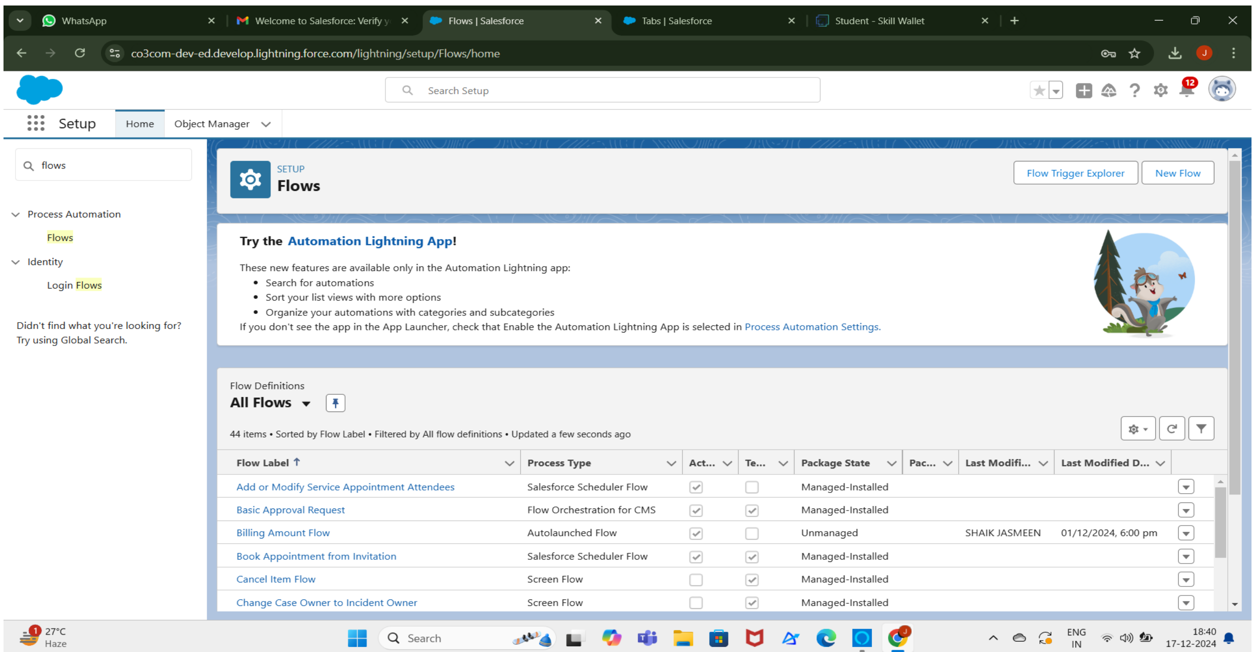
Step-13: Creating Sharing Settings

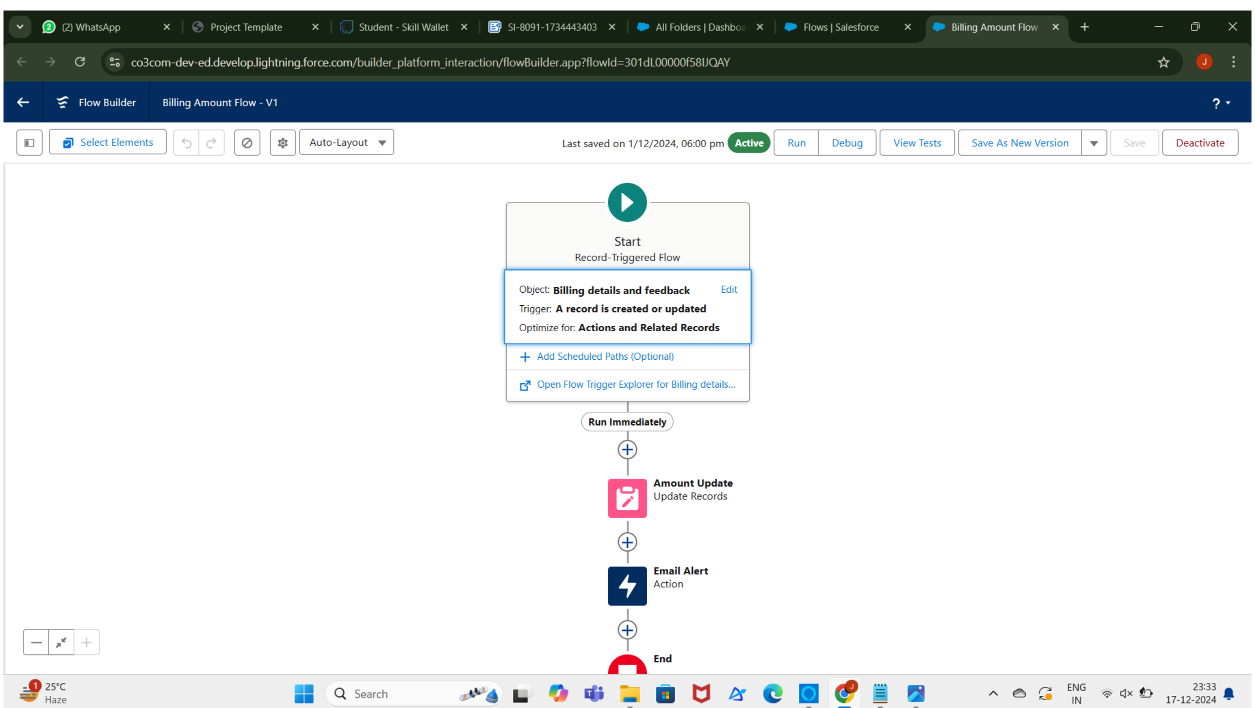
- Go to setup >> type users in quick find box >> select Sharing Settings >> click Edit.
- Change the OWD setting of the Service records Object to private.



Step-14: Create a Flow

- Go to setup >> type Flow in quick find box >> Click on the Flow and Select the New Flow.
- Select the Record-triggered flow and Click on Create.





Step-15: Apex Handler

UseCase : This use case works for Amount Distribution for each Service the customer selected for there Vehicle.

Login to the respective trailhead account and navigate to the gear icon in the top right corner.

- Click on the Developer console. Now you will see a new console window.
- In the toolbar, you can see FILE. Click on it and navigate to new and create New apex class.
- Name the class as “AmountDistributionHandler ”.

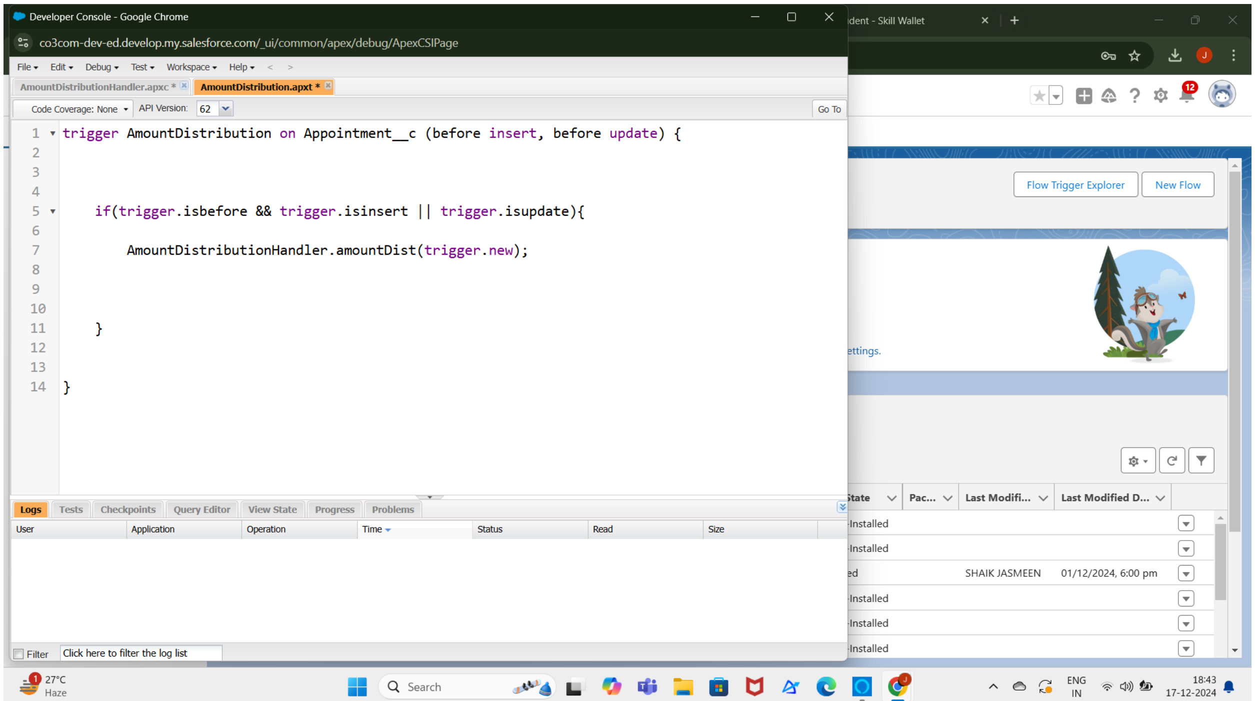
Trigger Handler :

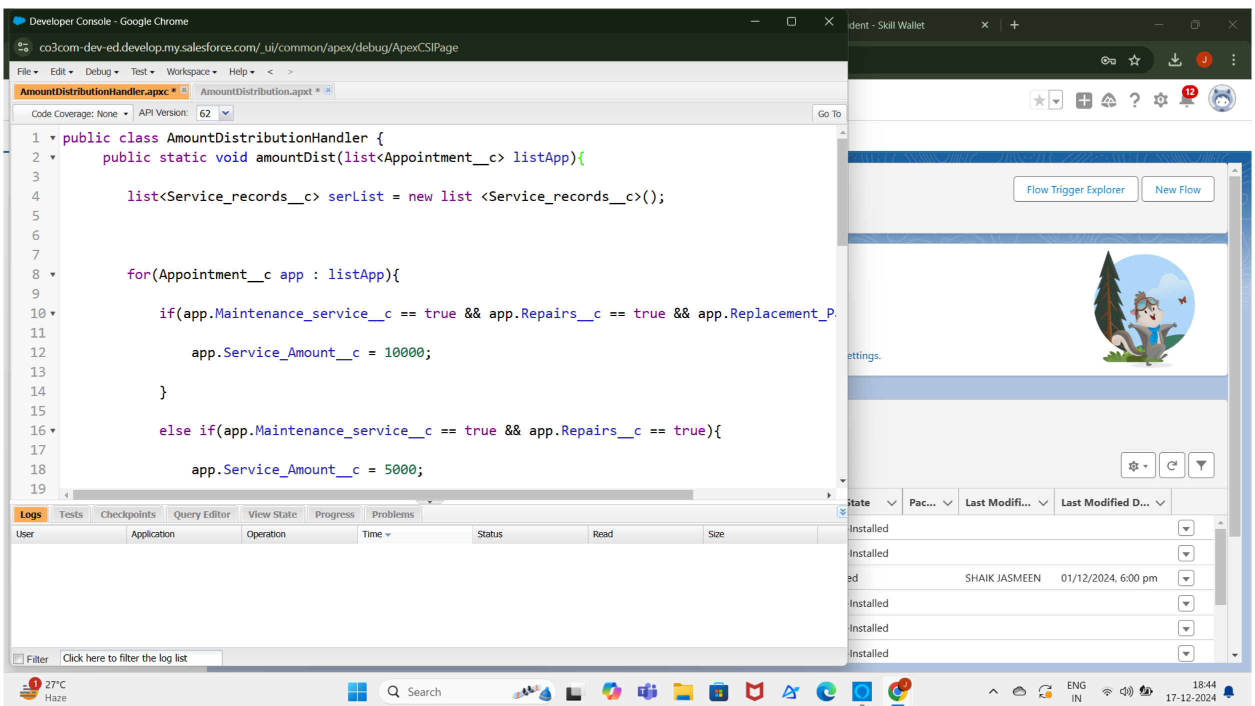
How to create a new trigger :While still in the trailhead account, navigate to the gear icon in the top right corner.

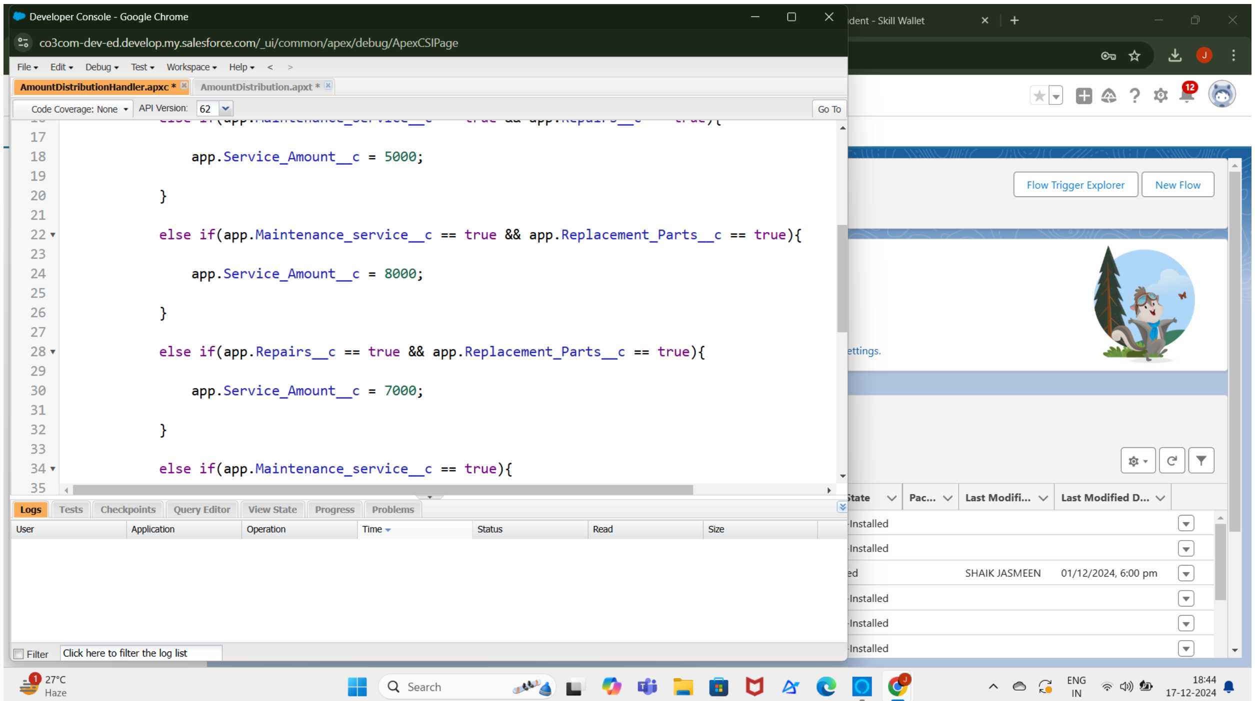
- Click on developer console and you will be navigated to a new console window.
- Click on File menu in the tool bar, and click on new? Trigger.
- Enter the trigger name and the object to be triggered.
- Name : AmountDistribution
- sObject : Appointment__c

After the code written do as follows;

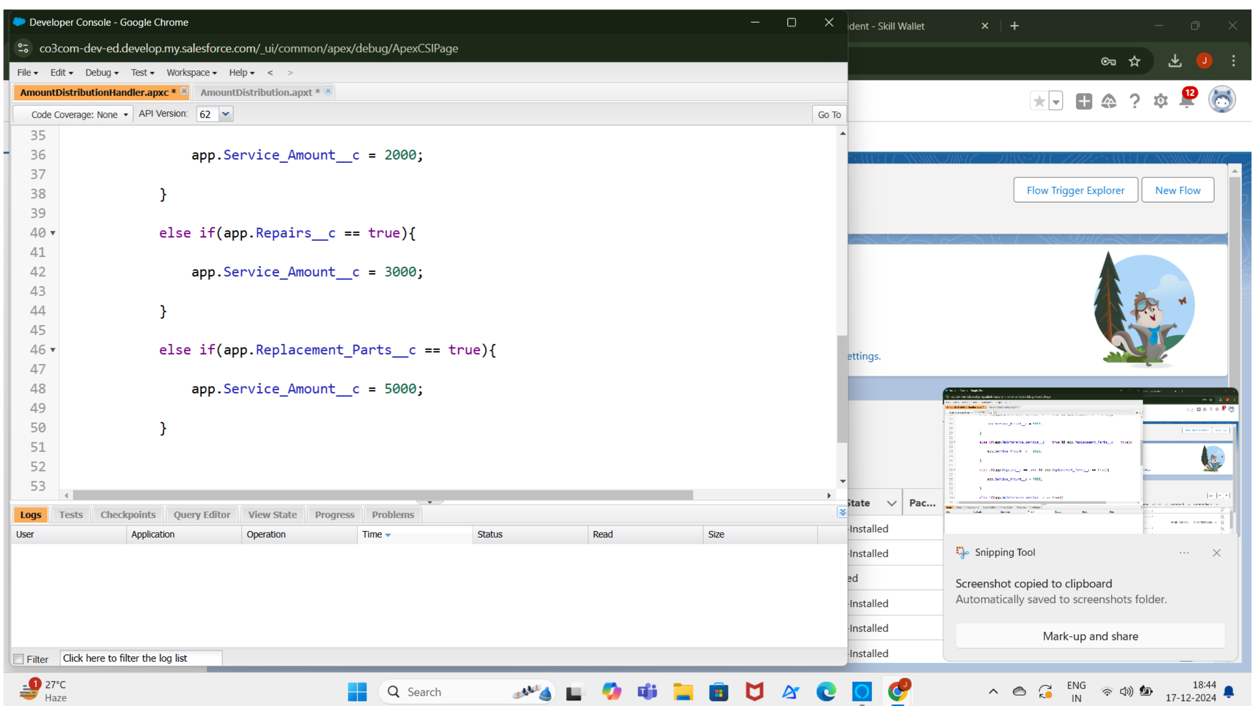
- Save
- Run All


Developer Console - Google Chrome
co3com-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
AmountDistributionHandler.apxc *
AmountDistribution.apxt *
Code Coverage: None
API Version: 62
trigger AmountDistribution on Appointment__c (before insert, before update) {
if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
AmountDistributionHandler.amountDist(trigger.new);
}
}
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
Flow Trigger Explorer
New Flow
Last Modified D...
SHAIK JASMEEN
01/12/2024, 6:00 pm
Installed
Filter
Click here to filter the log list
27°C
Haze
Search
18:43
17-12-2024


Developer Console - Google Chrome
co3com-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
AmountDistributionHandler.apxc *
AmountDistribution.apxt *
Code Coverage: None
API Version: 62
public class AmountDistributionHandler {
public static void amountDist(list<Appointment__c> listApp){
list<Service_records__c> serList = new list <Service_records__c>();
for(Appointment__c app : listApp){
if(app.Maintenance_service__c == true && app.Repairs__c == true && app.Replacement_P
app.Service_Amount__c = 10000;
}
else if(app.Maintenance_service__c == true && app.Repairs__c == true){
app.Service_Amount__c = 5000;
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
Flow Trigger Explorer
New Flow
Last Modified D...
SHAIK JASMEEN
01/12/2024, 6:00 pm
Installed
Filter
Click here to filter the log list
27°C
Haze
Search
18:44
17-12-2024



Developer Console - Google Chrome
co3com-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
AmountDistributionHandler.apxc *
AmountDistribution.apxt *
Code Coverage: None
API Version: 62
Go To
app.Service_Amount__c = 5000;
}
else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
app.Service_Amount__c = 8000;
}
else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
app.Service_Amount__c = 7000;
}
else if(app.Maintenance_service__c == true){
Logs Tests Checkpoints Query Editor View State Progress Problems
User Application Operation Time Status Read Size
Filter Click here to filter the log list
Flow Trigger Explorer
New Flow
ettings.
State Pac... Last Modifi... Last Modified D...
Installed
Installed
SHAIK JASMEEN 01/12/2024, 6:00 pm
Installed
Installed
Installed
27°C Haze
Search
ENG IN
18:44 17-12-2024



Developer Console - Google Chrome
co3com-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
AmountDistributionHandler.apxc *
AmountDistribution.apxt *
Code Coverage: None
API Version: 62
Go To
app.Service_Amount__c = 2000;
}
else if(app.Repairs__c == true){
app.Service_Amount__c = 3000;
}
else if(app.Replacement_Parts__c == true){
app.Service_Amount__c = 5000;
}
Logs Tests Checkpoints Query Editor View State Progress Problems
User Application Operation Time Status Read Size
Filter Click here to filter the log list
Flow Trigger Explorer
New Flow
ettings.
Snipping Tool
Screenshot copied to clipboard
Automatically saved to screenshots folder.
Mark-up and share
27°C Haze
Search
ENG IN
18:44 17-12-2024

Step-16: Reports

create a report folder

- Click on the app launcher and search for reports.
- Click on the report tab, click on new folder.

Sharing a report folder

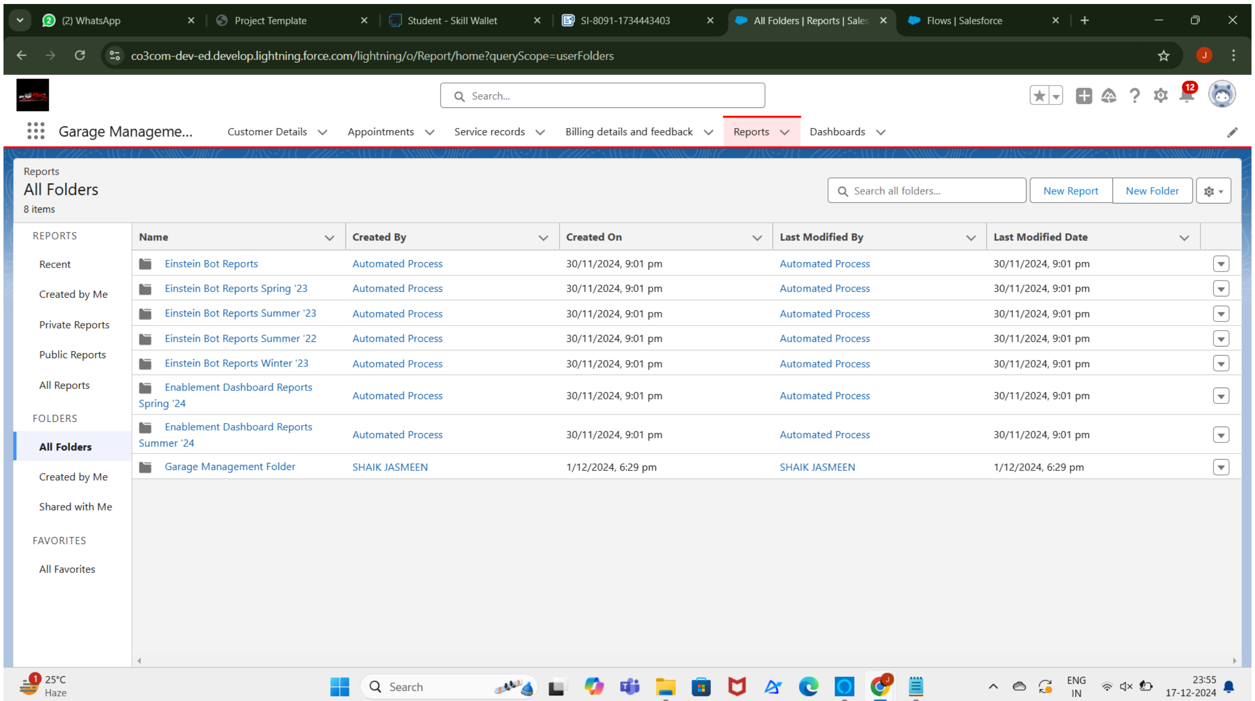
- Go to the app >> click on the reports tab.
- Click on the All folder , click on the Drop down arrow for Garage Management folder, and Click on share.
- Select the share with as “roles”, in name field search for “manager”, give “view” as access for that role.
- Then click share, and click on Done.

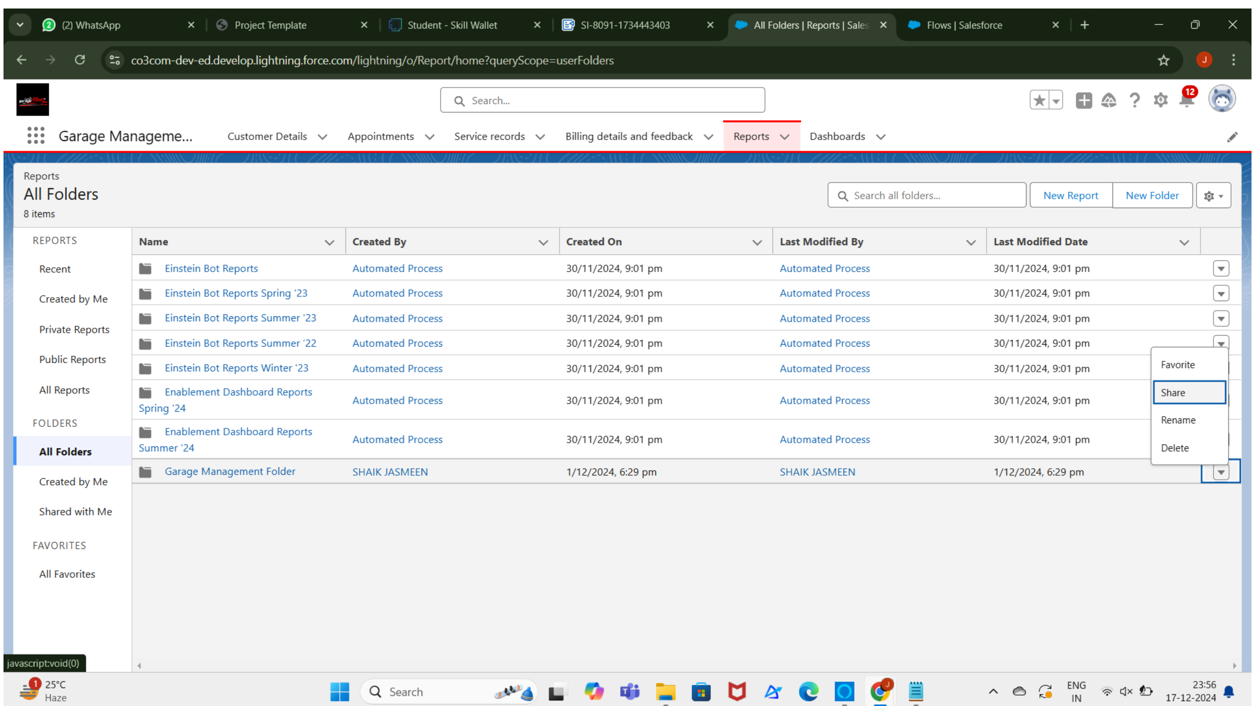
Create Report Type

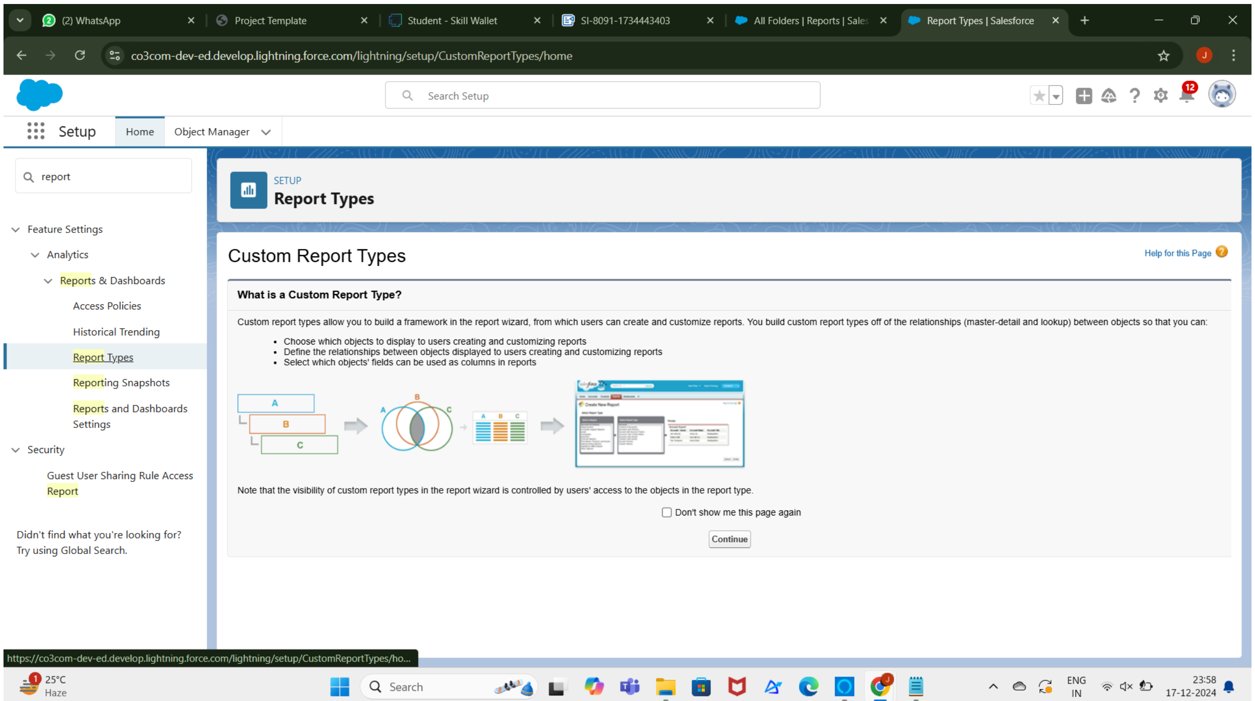
- Go to setup >> type users in quick find box >> select Report Type >> click on Continue.
- Click on new custom report type.
- Select the Primary object as “ Customer details” .
- Give the Report type Label as “ Service information ”
- Report type Name is autopopulated.
- Keep the Description as same.
- Select Store in Category as “ other Reports ”
- Select the deployment status as “ Depolyed ”, click on Next.
- now , Click on Related object box.
- Click on Select Object, choose Appointment Object

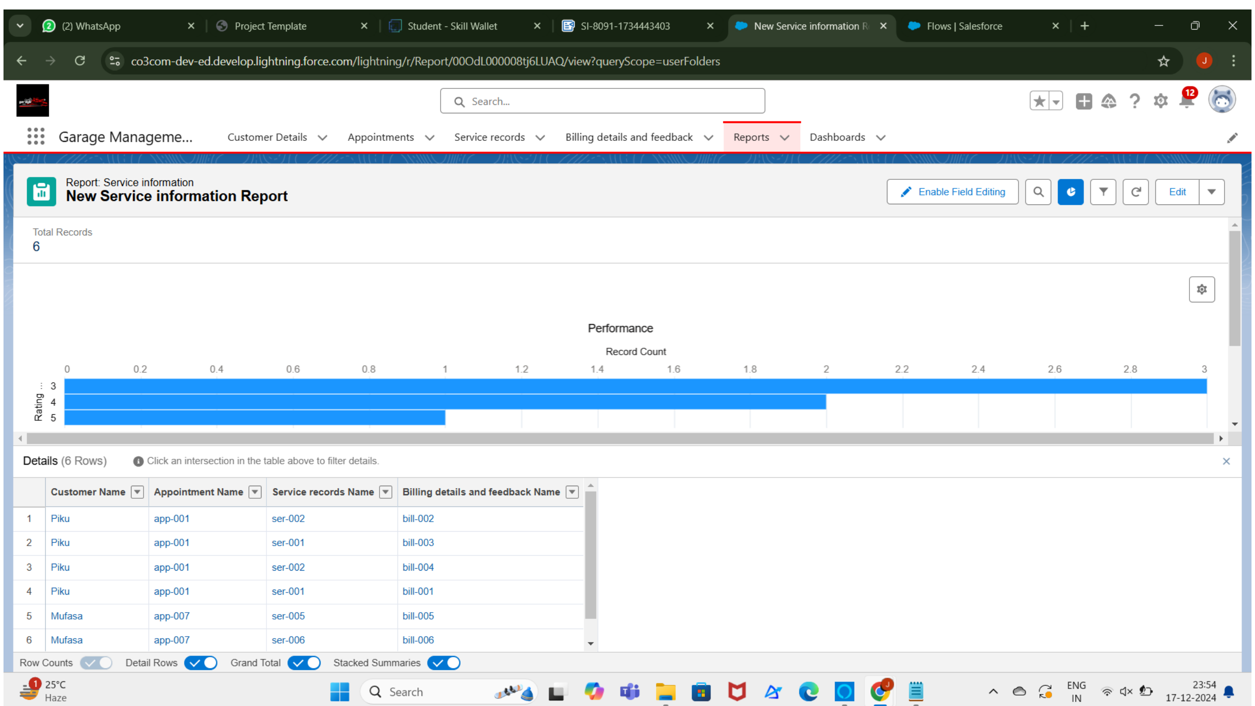
Create Report

- Go to the app >> click on the reports tab
- Click New Report.


co3com-dev-ed.develop.lightning.force.com/lightning/o/Report/home?queryScope=userFolders
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Reports
All Folders
8 items
New Report
New Folder
REPORTS
Recent
Created by Me
Private Reports
Public Reports
All Reports
FOLDERS
All Folders
Created by Me
Shared with Me
FAVORITES
All Favorites
Name
Created By
Created On
Last Modified By
Last Modified Date
Einstein Bot Reports
Einstein Bot Reports Spring '23
Einstein Bot Reports Summer '23
Einstein Bot Reports Summer '22
Einstein Bot Reports Winter '23
Enablement Dashboard Reports Spring '24
Enablement Dashboard Reports Summer '24
Garage Management Folder
Automated Process
30/11/2024, 9:01 pm
SHAIK JASMEEN
1/12/2024, 6:29 pm

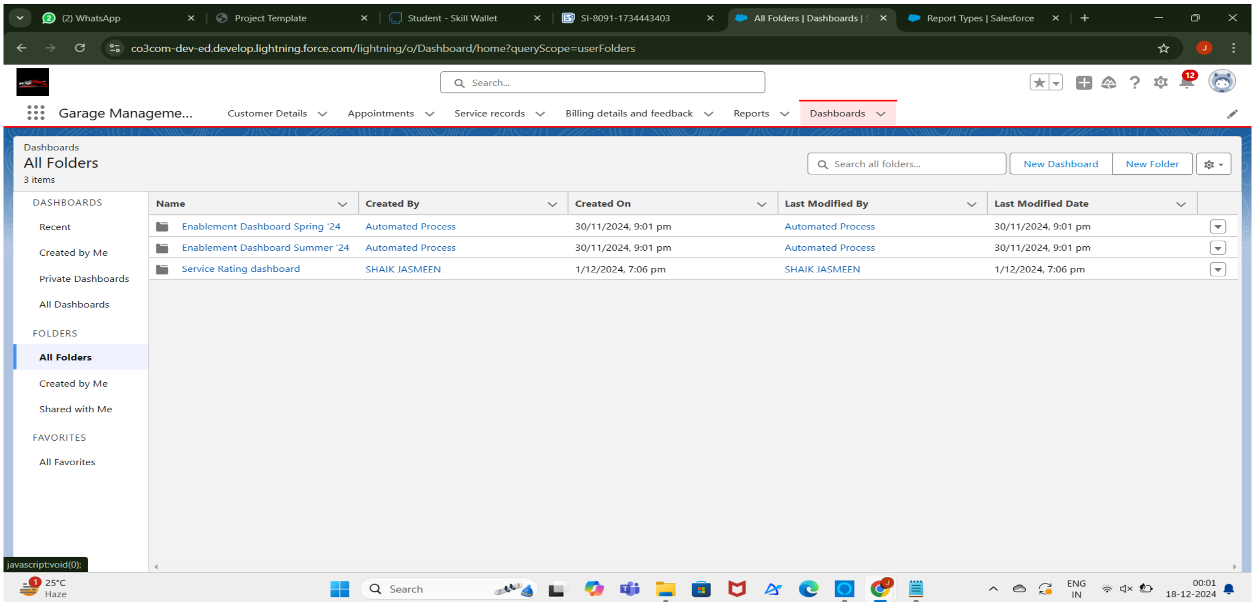

co3com-dev-ed.develop.lightning.force.com/lightning/o/Report/home?queryScope=userFolders
Garage Manageme...
Reports
All Folders
8 items
New Report
New Folder
Name
Created By
Created On
Last Modified By
Last Modified Date
Einstein Bot Reports
Einstein Bot Reports Spring '23
Einstein Bot Reports Summer '23
Einstein Bot Reports Summer '22
Einstein Bot Reports Winter '23
Enablement Dashboard Reports Spring '24
Enablement Dashboard Reports Summer '24
Garage Management Folder
Automated Process
30/11/2024, 9:01 pm
SHAIK JASMEEN
1/12/2024, 6:29 pm
Favorite
Share
Rename
Delete


co3com-dev-ed.develop.lightning.force.com/lightning/setup/CustomReportTypes/home
Setup
Home
Object Manager
report
Feature Settings
Analytics
Reports & Dashboards
Access Policies
Historical Trending
Report Types
Reporting Snapshots
Reports and Dashboards Settings
Security
Guest User Sharing Rule Access Report
Didn't find what you're looking for? Try using Global Search.
SETUP
Report Types
Custom Report Types
Help for this Page
What is a Custom Report Type?
Custom report types allow you to build a framework in the report wizard, from which users can create and customize reports. You build custom report types off of the relationships (master-detail and lookup) between objects so that you can:
Choose which objects to display to users creating and customizing reports
Define the relationships between objects displayed to users creating and customizing reports
Select which objects' fields can be used as columns in reports
Note that the visibility of custom report types in the report wizard is controlled by users' access to the objects in the report type.
Don't show me this page again
Continue

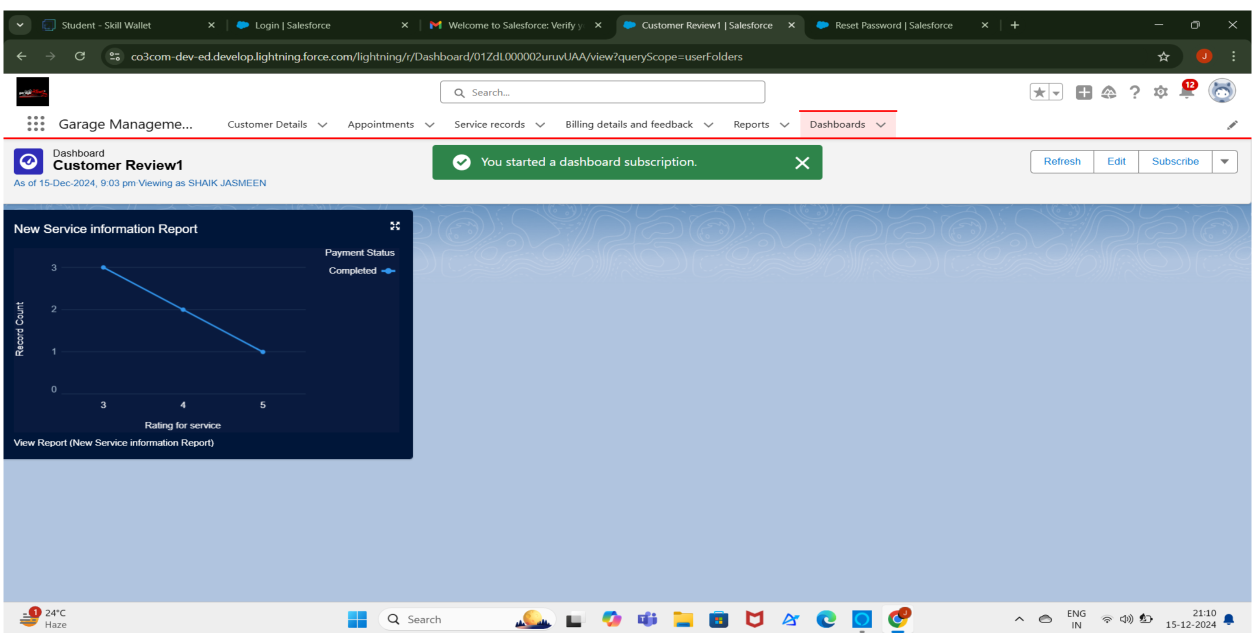

co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/view?queryScope=userFolders
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Report: Service information
New Service information Report
Enable Field Editing
Edit
Total Records
6
Performance
Record Count
Rating
Details (6 Rows)
Click an intersection in the table above to filter details.
Customer Name
Appointment Name
Service records Name
Billing details and feedback Name
Piku
app-001
ser-002
bill-002
Piku
app-001
ser-001
bill-003
Piku
app-001
ser-002
bill-004
Piku
app-001
ser-001
bill-001
Mufasa
app-007
ser-005
bill-005
Mufasa
app-007
ser-006
bill-006
Row Counts
Detail Rows
Grand Total
Stacked Summaries

Step-17: Create Dashboard Folder

- Click on the app launcher and search for dashboard.
- Click on dashboard tab.
- Click new folder, give the folder label as “ Service Rating dashboard”.
- Folder unique name will be auto populated.
- Click save.



Create New Dashboard:



Testing and Validation:

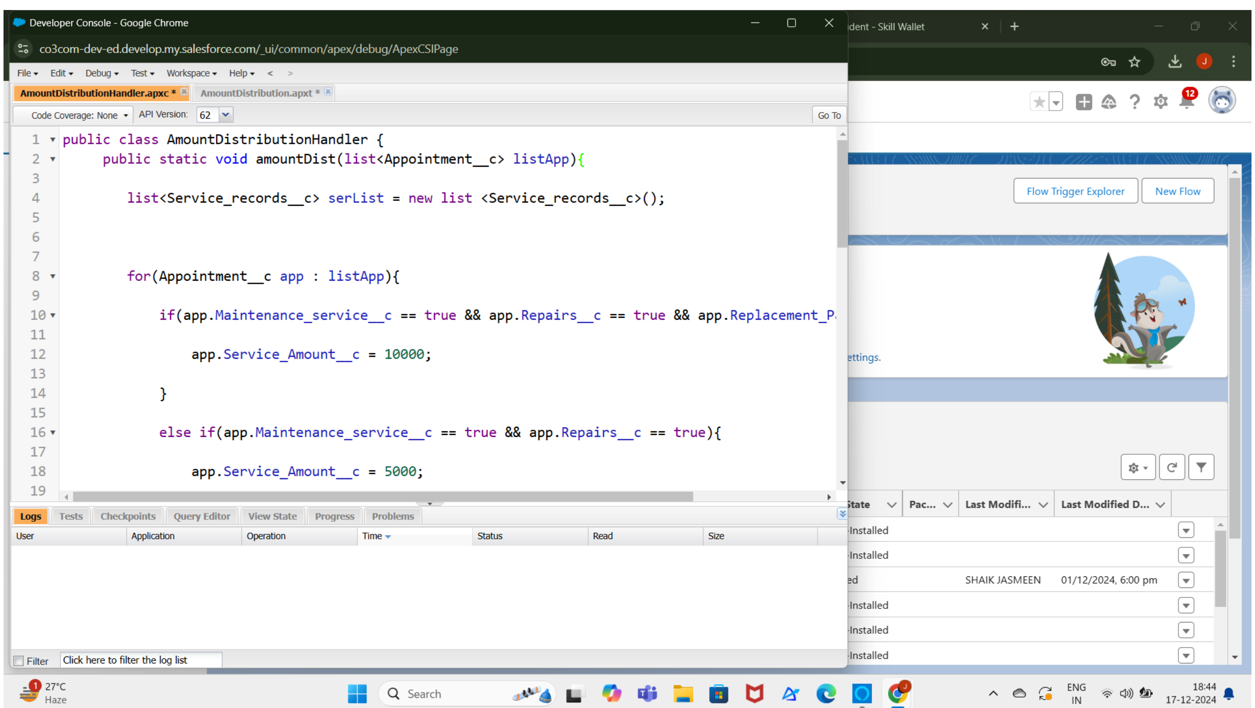
Testing and Validation Approach for Garage Management System in Salesforce

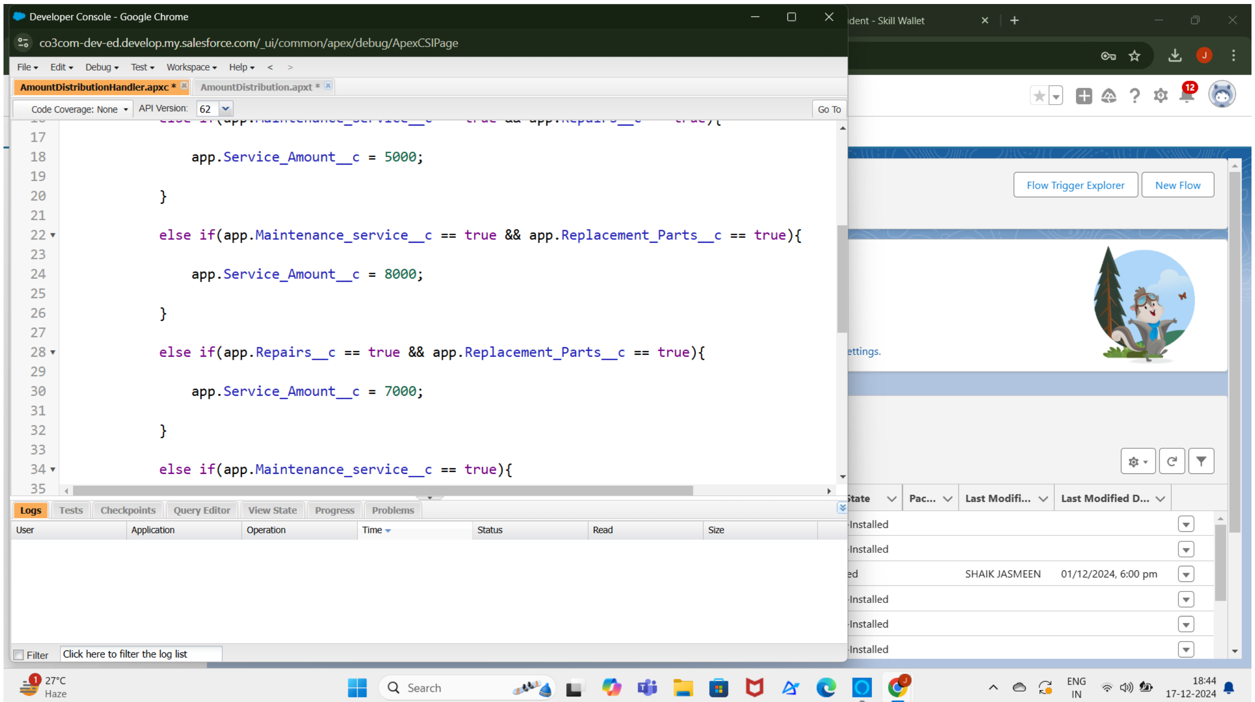
In Salesforce, testing and validation are crucial to ensure the proper functioning of the system, especially in an environment like a Garage Management System (GMS), where different components such as Apex classes, triggers, and user interfaces are involved. Below is a detailed approach to testing, which includes Unit Testing (for Apex classes and triggers) and User Interface (UI) Testing for your project.

Step-1: Apex Handler (Unit Testing)

UseCase : This use case works for Amount Distribution for each Service the customer selected for there Vehicle.

- Login to the respective trailhead account and navigate to the gear icon in the top right corner.
- Click on the Developer console. Now you will see a new console window.
- In the toolbar, you can see FILE. Click on it and navigate to new and create New apex class.
- Name the class as “AmountDistributionHandler ”.




Developer Console - Google Chrome
co3com-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
AmountDistributionHandler.apxc *
AmountDistribution.apxt *
Code Coverage: None
API Version: 62
Go To
app.Service_Amount__c = 5000;
}
else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
app.Service_Amount__c = 8000;
}
else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
app.Service_Amount__c = 7000;
}
else if(app.Maintenance_service__c == true){
Logs Tests Checkpoints Query Editor View State Progress Problems
User Application Operation Time Status Read Size
Filter
Click here to filter the log list
ident - Skill Wallet
Flow Trigger Explorer
New Flow
ettings.
State Pac... Last Modifi... Last Modified D...
Installed
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ed SHAIK JASMEEN 01/12/2024, 6:00 pm
Installed
Installed
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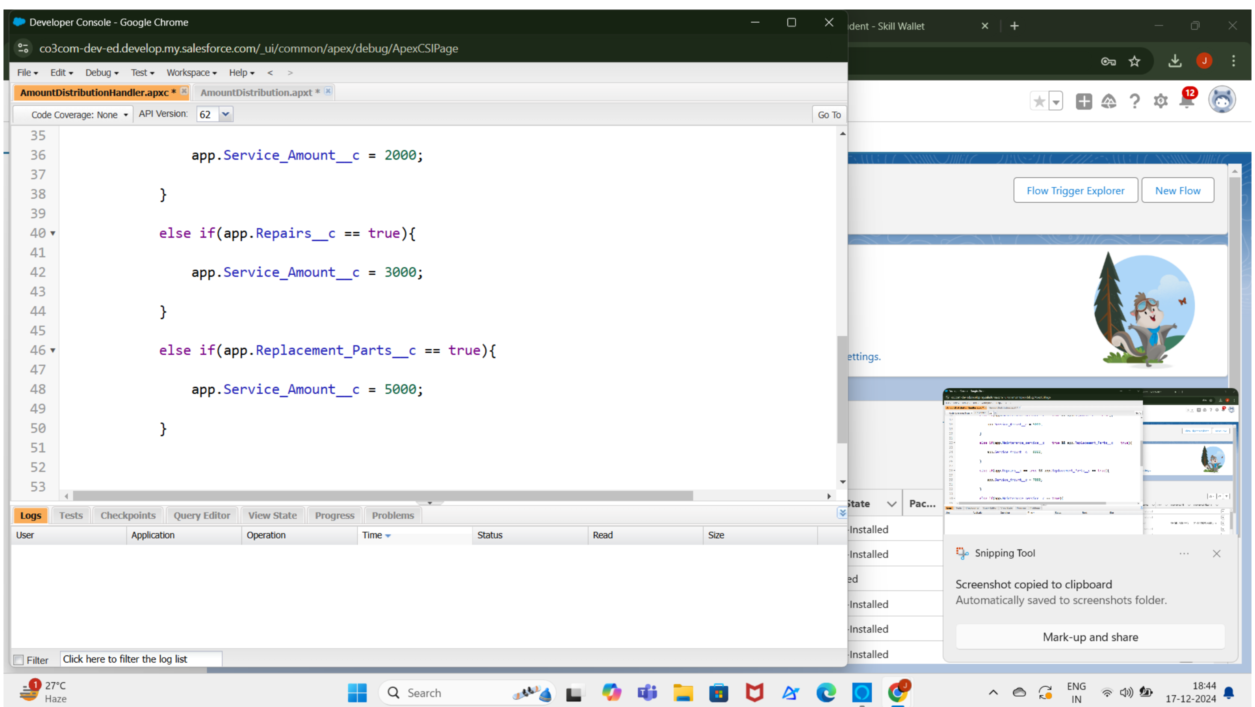
27°C
Haze
Search
ENG
IN
18:44
17-12-2024


Developer Console - Google Chrome
co3com-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
AmountDistributionHandler.apxc *
AmountDistribution.apxt *
Code Coverage: None
API Version: 62
Go To
app.Service_Amount__c = 2000;
}
else if(app.Repairs__c == true){
app.Service_Amount__c = 3000;
}
else if(app.Replacement_Parts__c == true){
app.Service_Amount__c = 5000;
}
Logs Tests Checkpoints Query Editor View State Progress Problems
User Application Operation Time Status Read Size
Filter
Click here to filter the log list
ident - Skill Wallet
Flow Trigger Explorer
New Flow
ettings.
State Pac...
Snipping Tool
Screenshot copied to clipboard
Automatically saved to screenshots folder.
Mark-up and share
Installed
Installed
ed
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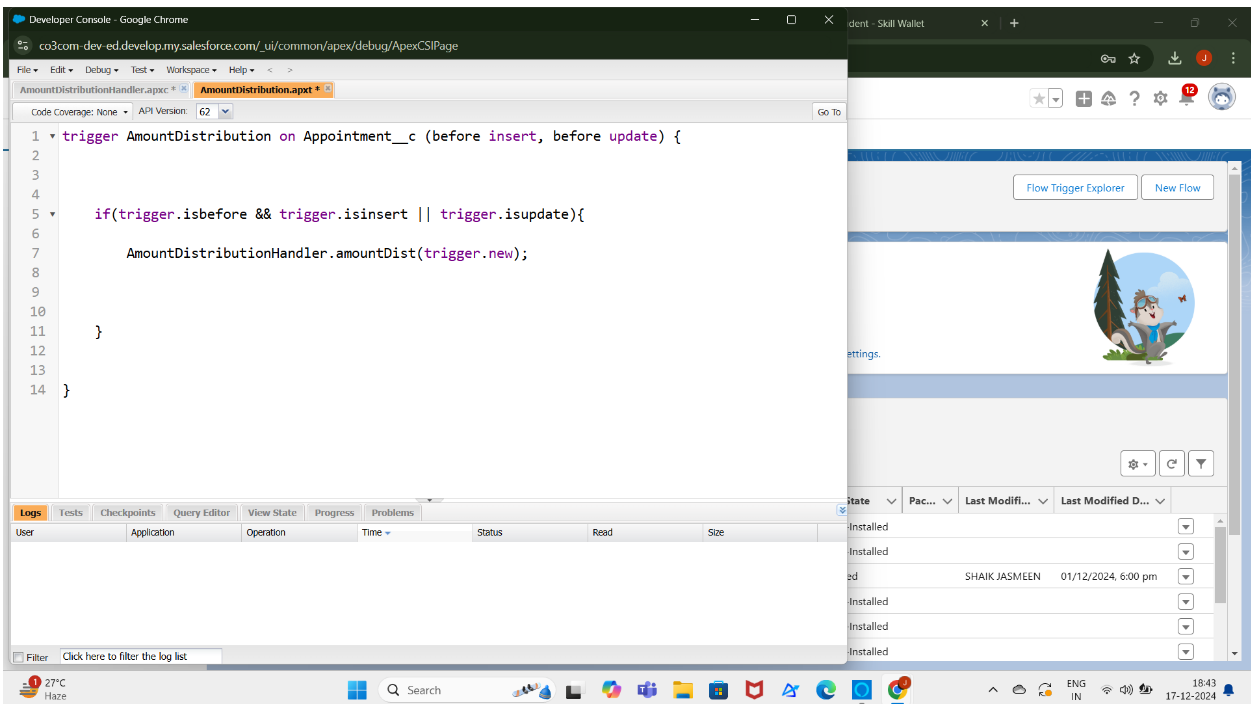
Installed
Installed
27°C
Haze
Search
ENG
IN
18:44
17-12-2024

Trigger Handler :

How to create a new trigger :

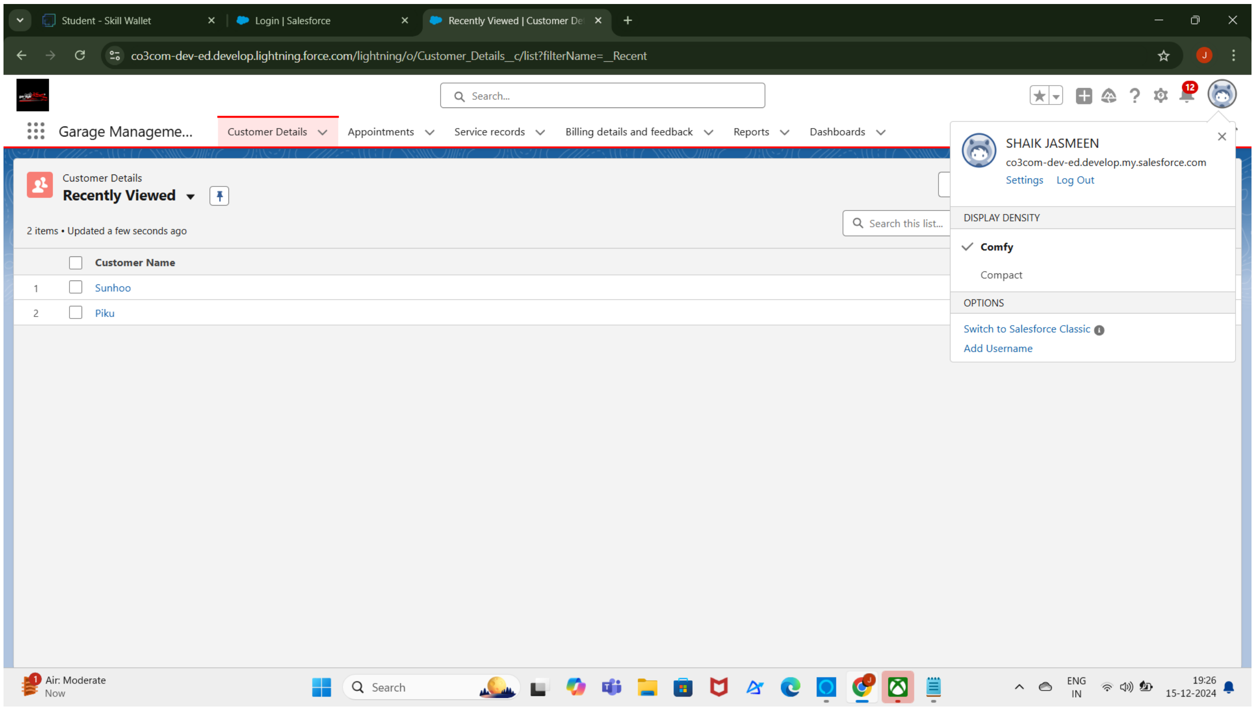
- While still in the trailhead account, navigate to the gear icon in the top right corner.
- Click on developer console and you will be navigated to a new console window.
- Click on File menu in the tool bar, and click on new? Trigger.
- Enter the trigger name and the object to be triggered.
- Name : AmountDistribution
- sObject : Appointment__c

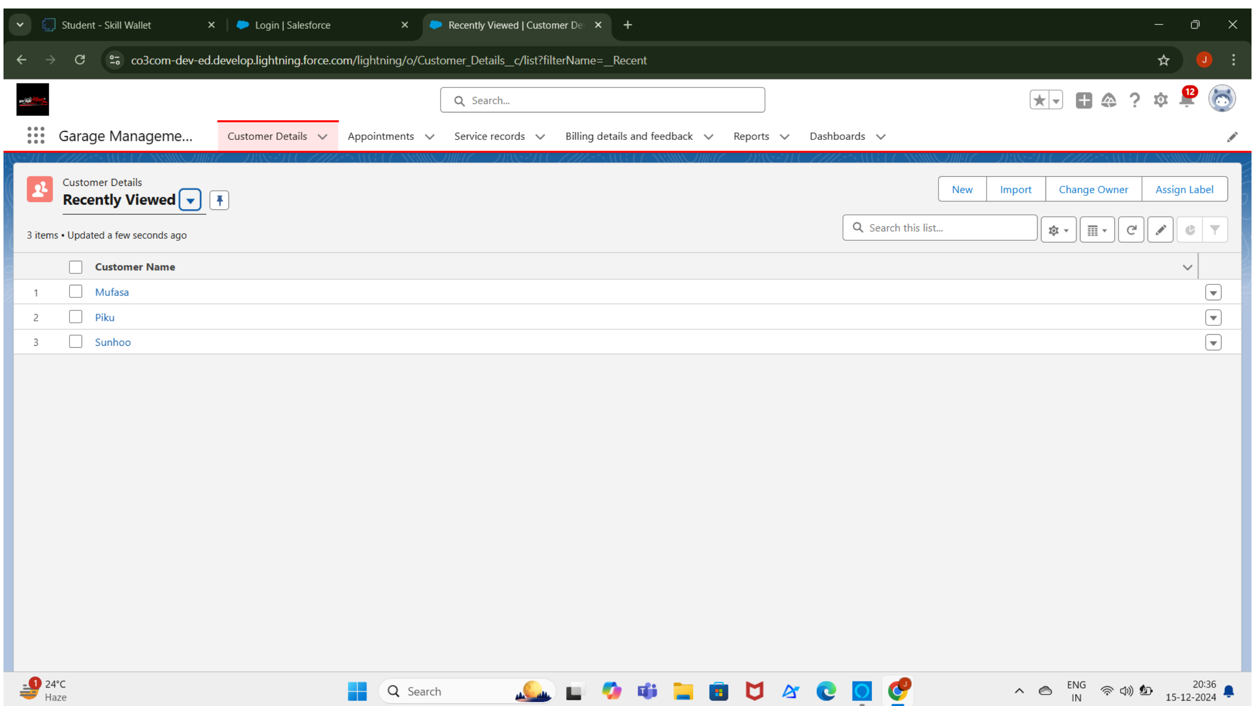


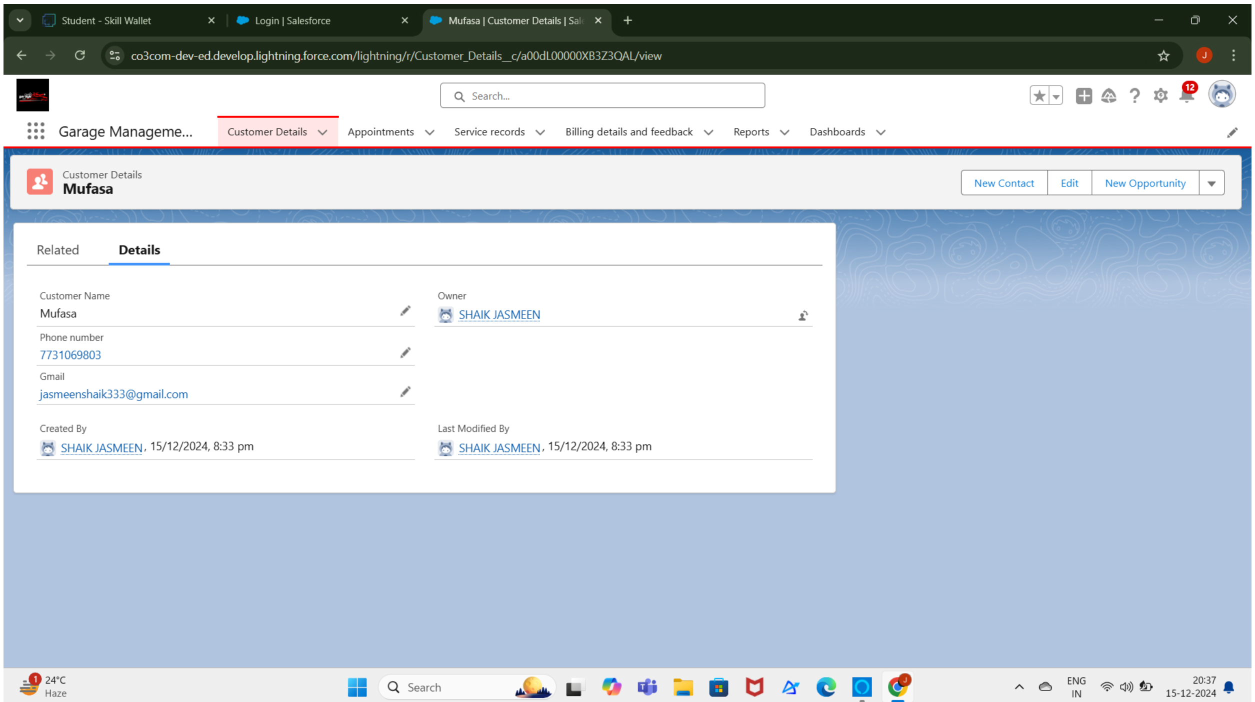
Step-2: User Interface (UI) Testing

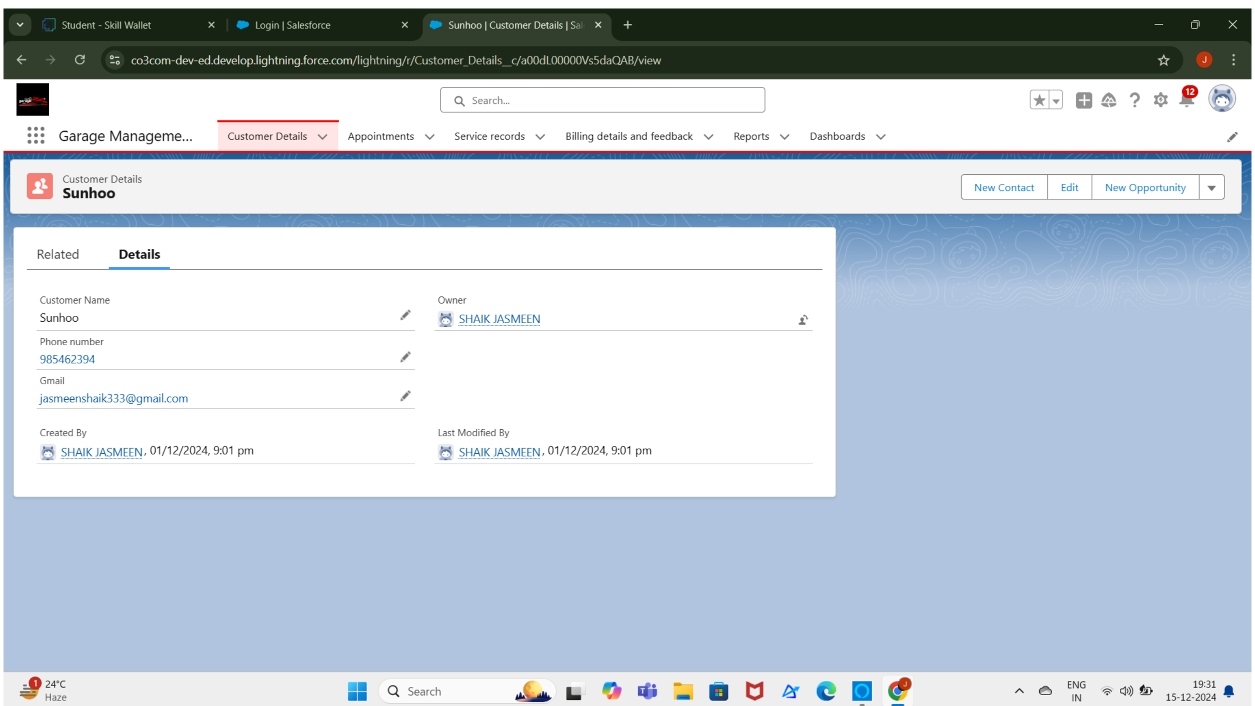
To create a record in the follow objects follow these steps:

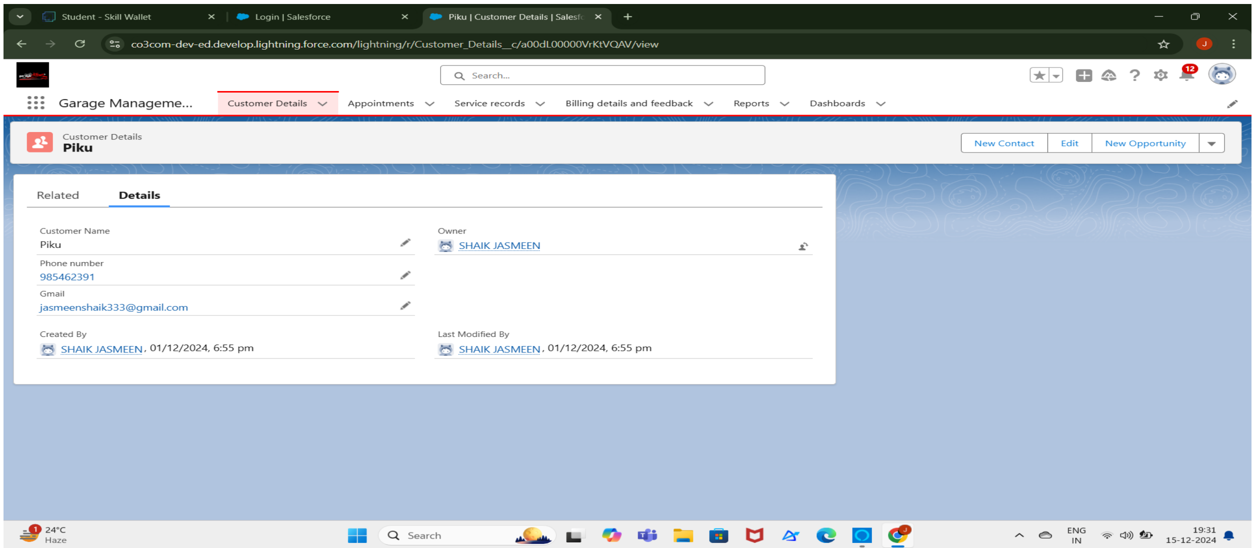
- Click on the app launcher located at the left side of the screen.
- Search for " **Garage Management System**" and click on it.
- Click on the " **Customer details** tab".
- Click on new and fill the details as shown below figs, and click save.


Student - Skill Wallet
Login | Salesforce
Recently Viewed | Customer De
co3com-dev-ed.develop.lightning.force.com/lightning/o/Customer_Details__c/list?filterName=__Recent
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Customer Details
Recently Viewed
2 items • Updated a few seconds ago
Search this list...
Customer Name
1 Sunhoo
2 Piku
SHAIK JASMEEN
co3com-dev-ed.develop.my.salesforce.com
Settings Log Out
DISPLAY DENSITY
Comfy
Compact
OPTIONS
Switch to Salesforce Classic
Add Username
Air: Moderate
Now
Search
ENG
IN
19:26
15-12-2024


Student - Skill Wallet
Login | Salesforce
Recently Viewed | Customer De
co3com-dev-ed.develop.lightning.force.com/lightning/o/Customer_Details__c/list?filterName=__Recent
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Customer Details
Recently Viewed
New
Import
Change Owner
Assign Label
3 items • Updated a few seconds ago
Search this list...
Customer Name
1 Mufasa
2 Piku
3 Sunhoo
24°C
Haze
Search
ENG
IN
20:36
15-12-2024

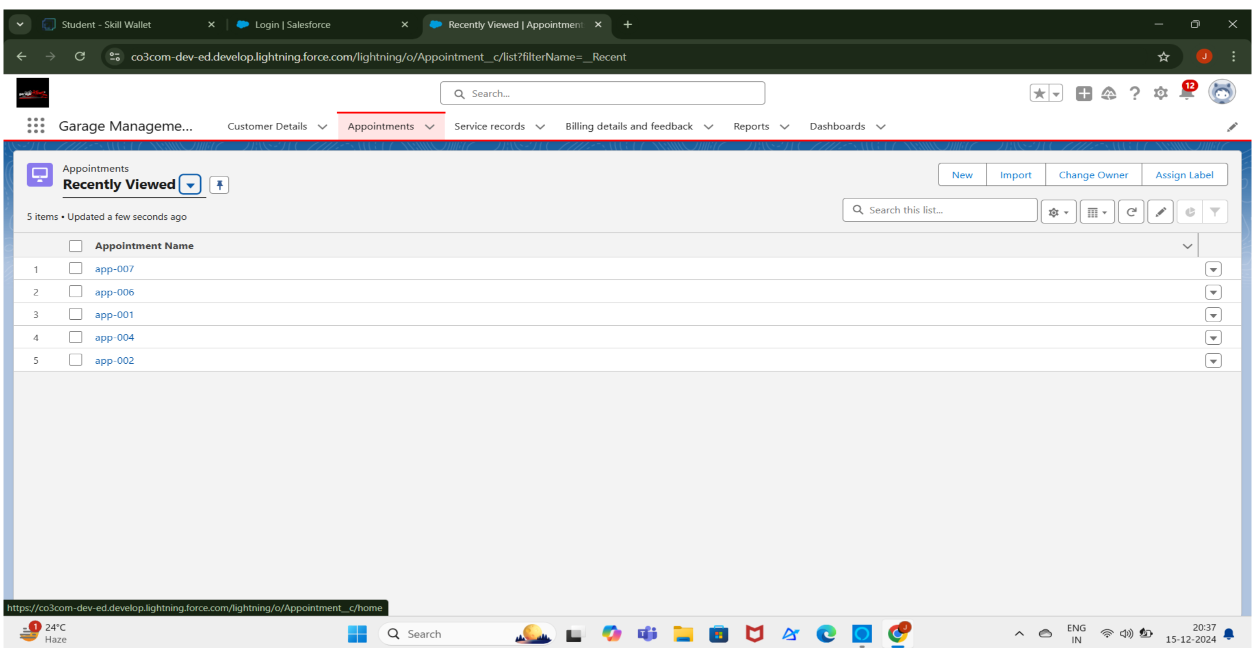

Student - Skill Wallet
Login | Salesforce
Mufasa | Customer Details | Sal
co3com-dev-ed.develop.lightning.force.com/lightning/r/Customer_Details__c/a00dL00000XB3Z3QAL/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Customer Details
Mufasa
New Contact
Edit
New Opportunity
Related
Details
Customer Name
Mufasa
Owner
SHAIK JASMEEN
Phone number
7731069803
Gmail
jasmeenshaik333@gmail.com
Created By
SHAIK JASMEEN, 15/12/2024, 8:33 pm
Last Modified By
SHAIK JASMEEN, 15/12/2024, 8:33 pm
24°C
Haze
Search
ENG
IN
20:37
15-12-2024

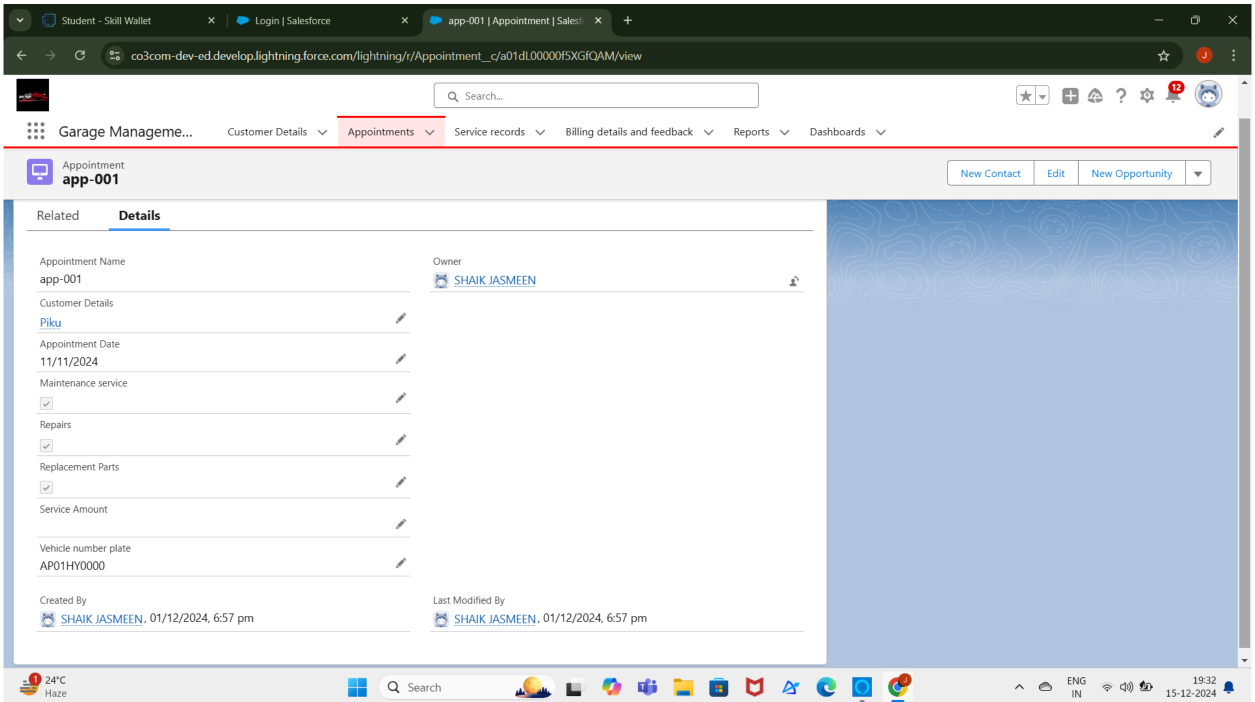

Student - Skill Wallet
Login | Salesforce
Sunhoo | Customer Details | Sal
co3com-dev-ed.develop.lightning.force.com/lightning/r/Customer_Details__c/a00dL00000Vs5daQAB/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Customer Details
Sunhoo
New Contact
Edit
New Opportunity
Related
Details
Customer Name
Sunhoo
Owner
SHAIK JASMEEN
Phone number
985462394
Gmail
jasmeenshaik333@gmail.com
Created By
SHAIK JASMEEN, 01/12/2024, 9:01 pm
Last Modified By
SHAIK JASMEEN, 01/12/2024, 9:01 pm
24°C
Haze
Search
ENG
IN
19:31
15-12-2024



Step-3: Now, Create the Appointment Record:

- Click on the "**Appointment** tab".
- Enter the customer details as created, while entering Appointment Date enter the date less than the created date.
- Match the validation while entering the vehicle number plate.
- Select the services you need.
- Click on save to see the Service Amount.




Student - Skill Wallet
Login | Salesforce
app-001 | Appointment | Salesf
co3com-dev-ed.develop.lightning.force.com/lightning/r/Appointment__c/a01dL00000f5XGfQAM/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Appointment
app-001
New Contact
Edit
New Opportunity
Related
Details
Appointment Name
app-001
Owner
SHAIK JASMEEN
Customer Details
Piku
Appointment Date
11/11/2024
Maintenance service
Repairs
Replacement Parts
Service Amount
Vehicle number plate
AP01HY0000
Created By
SHAIK JASMEEN, 01/12/2024, 6:57 pm
Last Modified By
SHAIK JASMEEN, 01/12/2024, 6:57 pm
24°C
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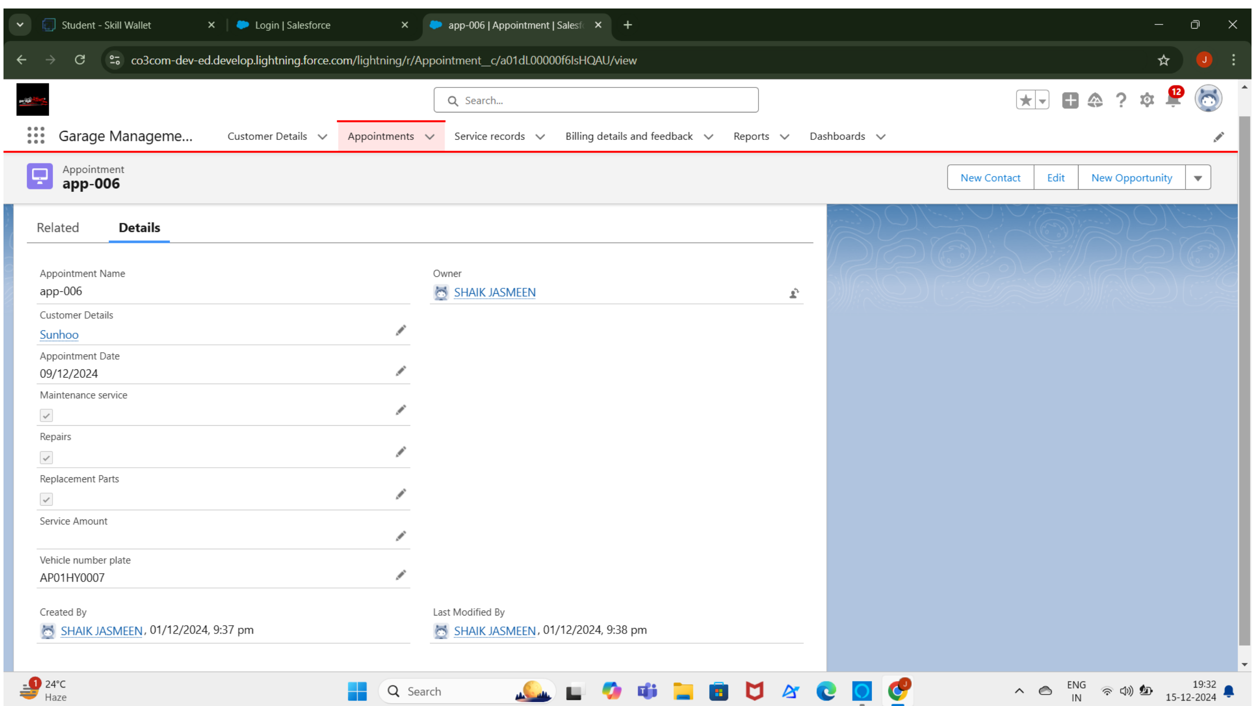
Search
ENG
IN
19:32
15-12-2024


Student - Skill Wallet
Login | Salesforce
app-006 | Appointment | Salesf
co3com-dev-ed.develop.lightning.force.com/lightning/r/Appointment__c/a01dL00000f6IsHQAU/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Appointment
app-006
New Contact
Edit
New Opportunity
Related
Details
Appointment Name
app-006
Owner
SHAIK JASMEEN
Customer Details
Sunhoo
Appointment Date
09/12/2024
Maintenance service
Repairs
Replacement Parts
Service Amount
Vehicle number plate
AP01HY0007
Created By
SHAIK JASMEEN, 01/12/2024, 9:37 pm
Last Modified By
SHAIK JASMEEN, 01/12/2024, 9:38 pm
24°C
Haze
Search
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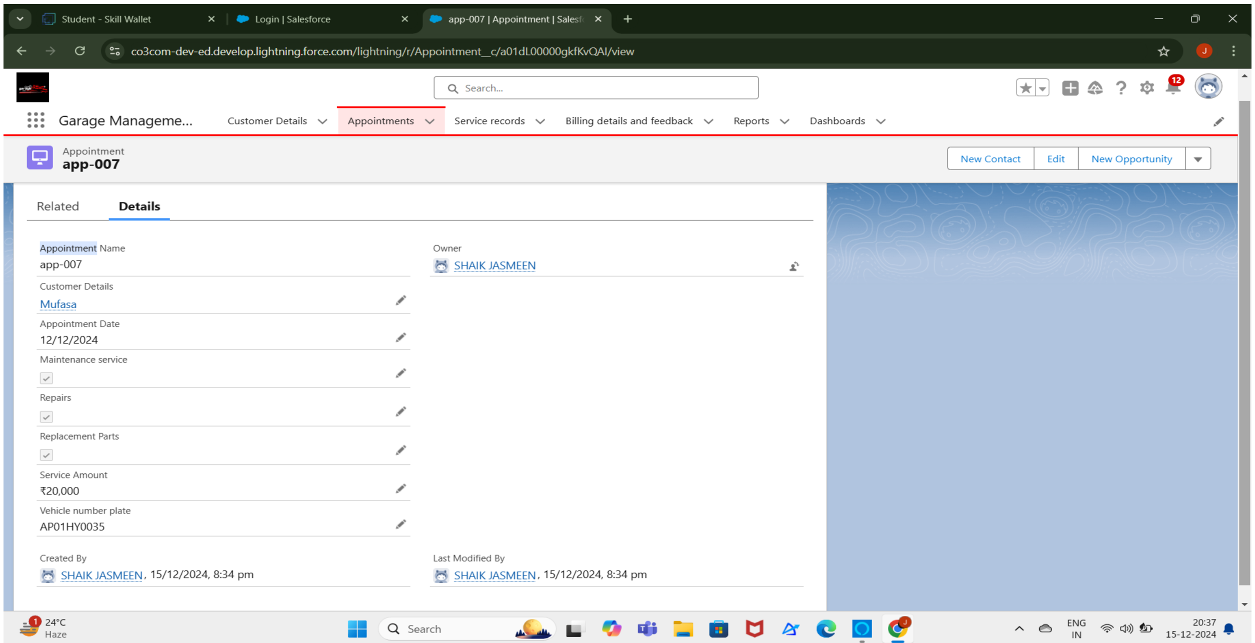
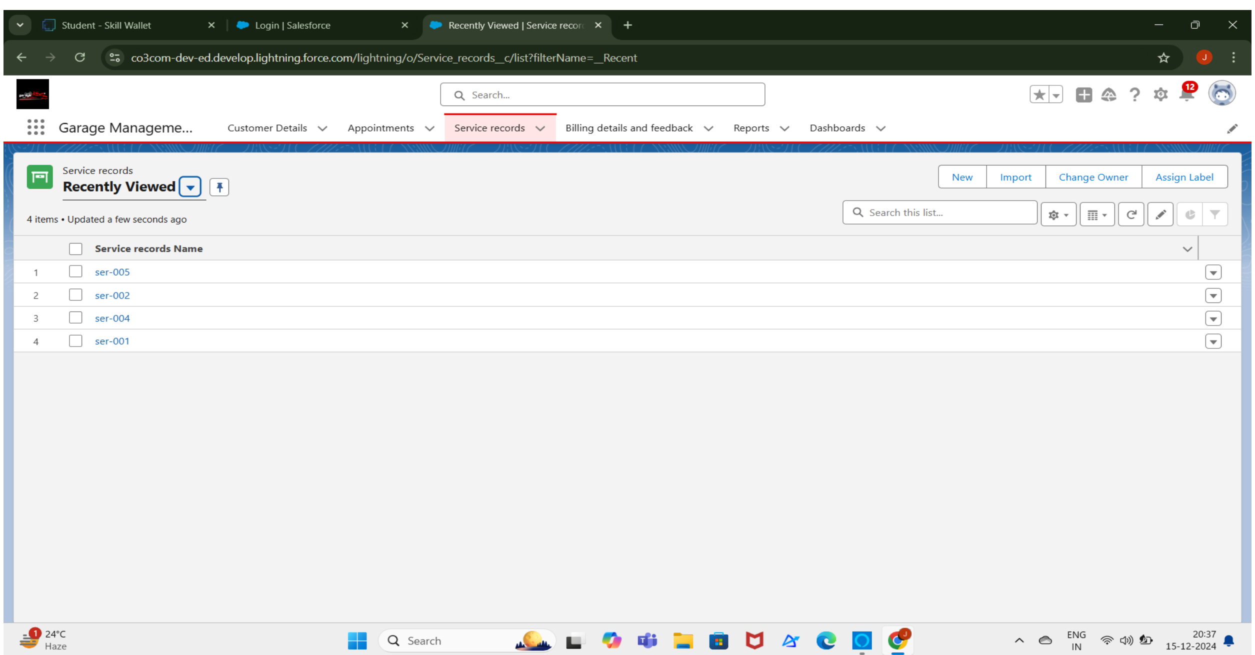
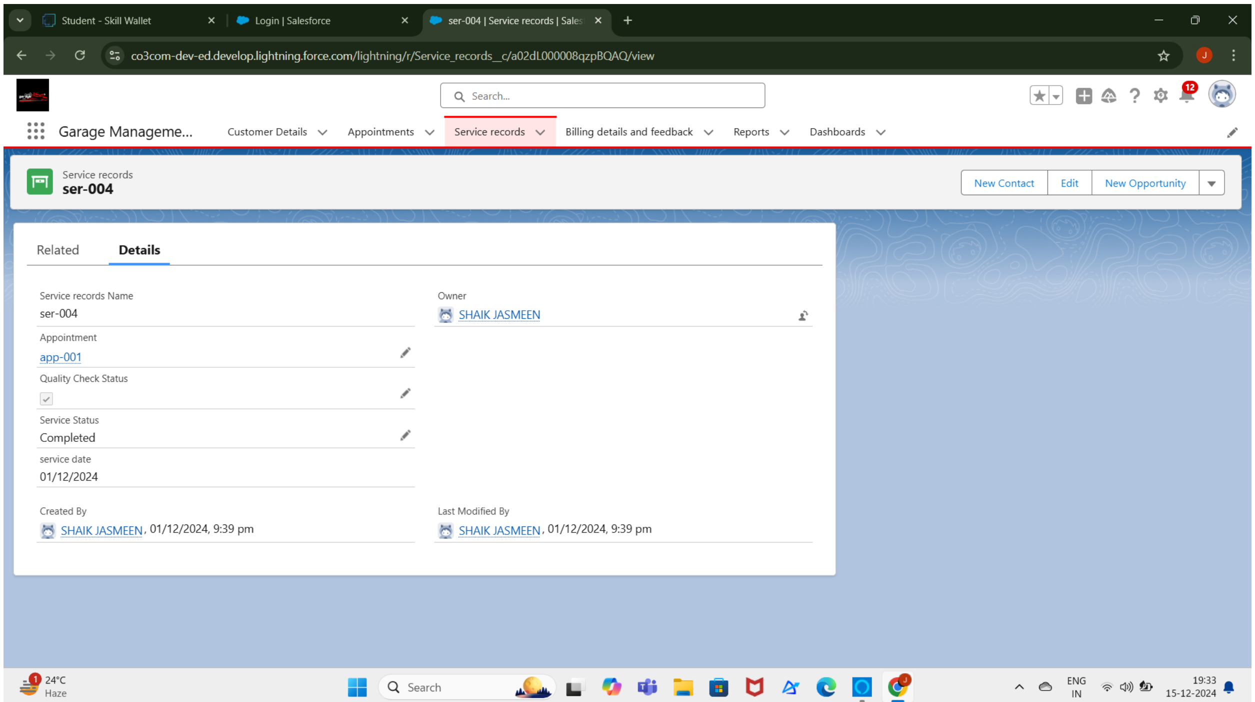
IN
19:32
15-12-2024

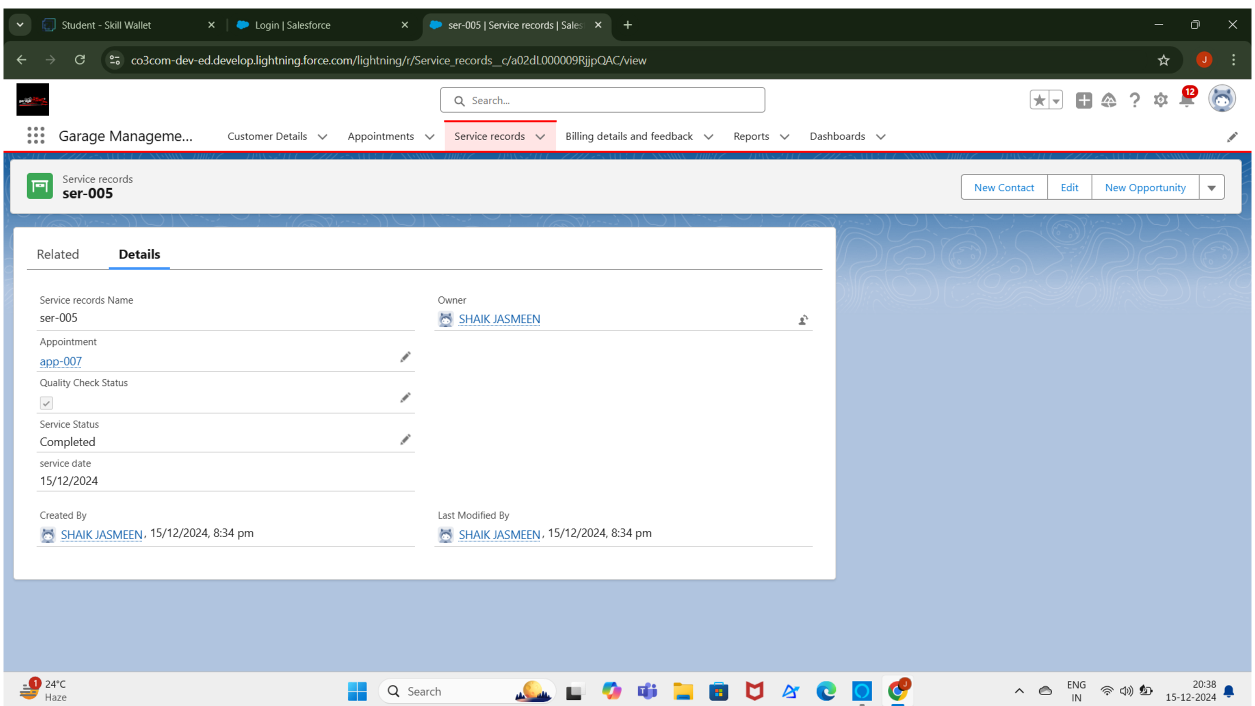


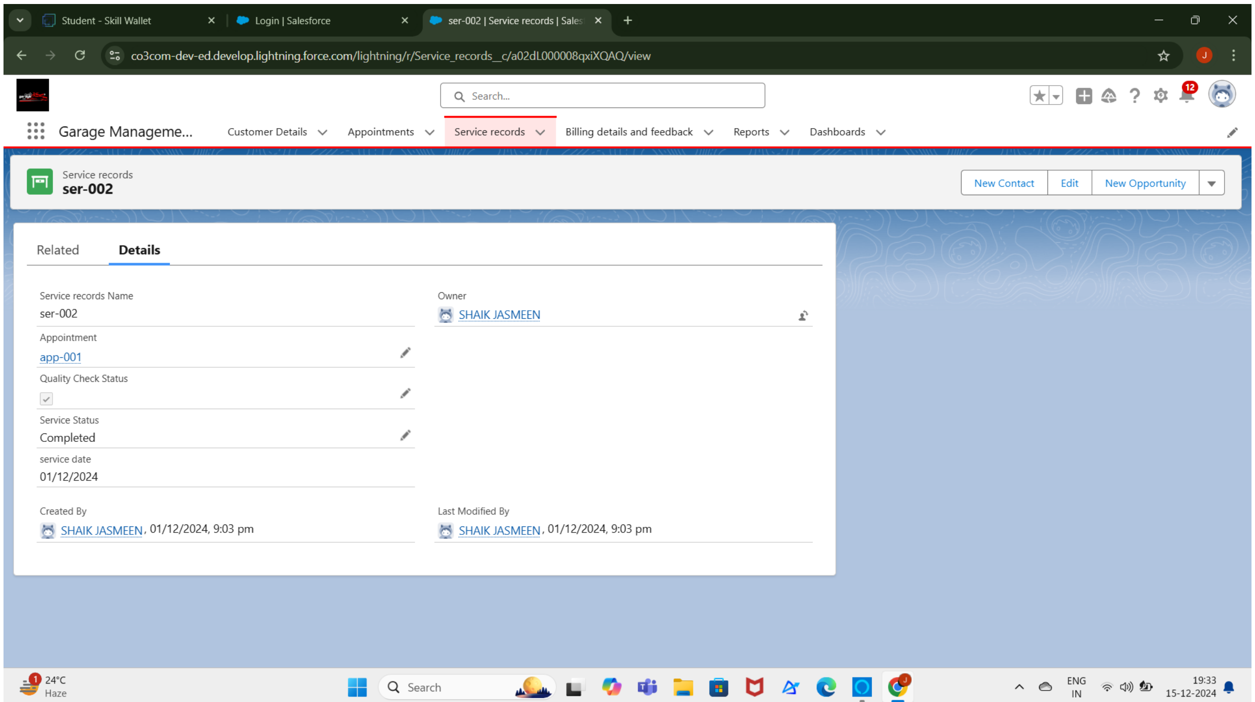
Step-4: Now, Create a service Record :

- Click on the "**Service record** tab".
- Enter the Appointment, and started is selected as default.
- Click on save.
- Open the record and click on Quality check status as true, Click on save.
- Now automatically Service status will be moved to completed.



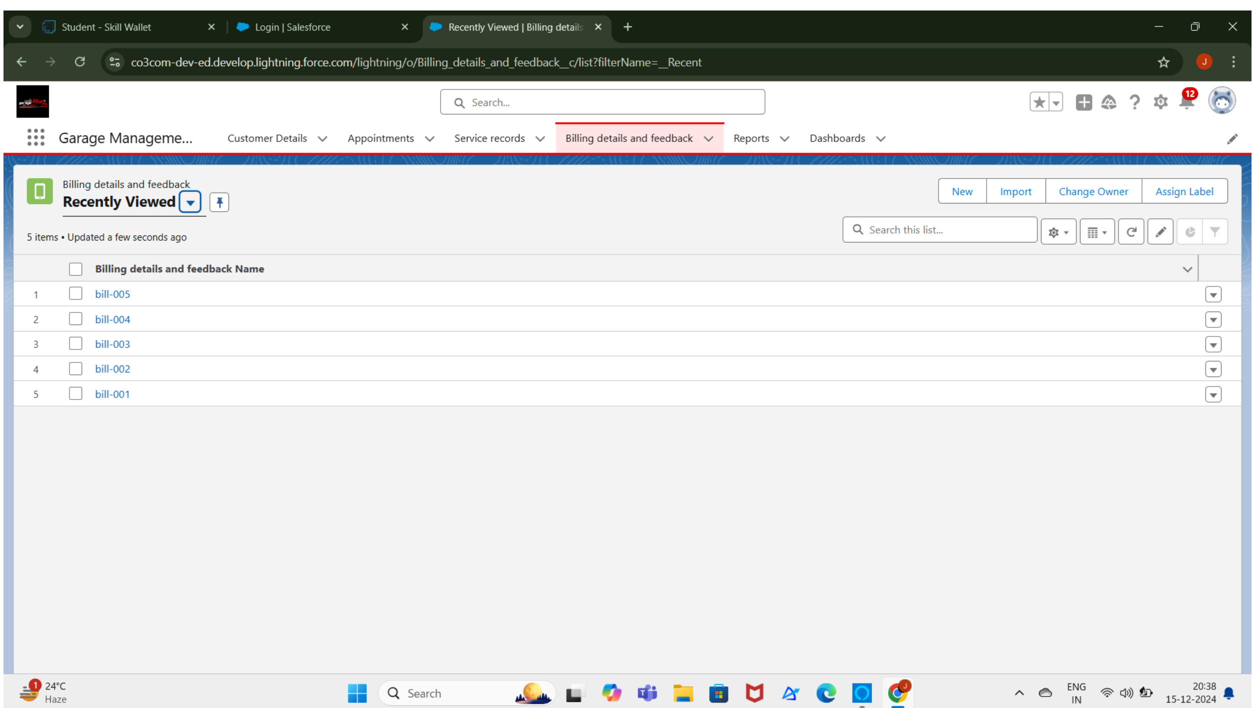

Student - Skill Wallet
Login | Salesforce
ser-004 | Service records | Sales
co3com-dev-ed.develop.lightning.force.com/lightning/r/Service_records__c/a02dL000008qzpBQAQ/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Service records
ser-004
New Contact
Edit
New Opportunity
Related
Details
Service records Name
ser-004
Owner
SHAIK JASMEEN
Appointment
app-001
Quality Check Status
Service Status
Completed
service date
01/12/2024
Created By
SHAIK JASMEEN, 01/12/2024, 9:39 pm
Last Modified By
SHAIK JASMEEN, 01/12/2024, 9:39 pm
24°C
Haze
Search
ENG
IN
19:33
15-12-2024

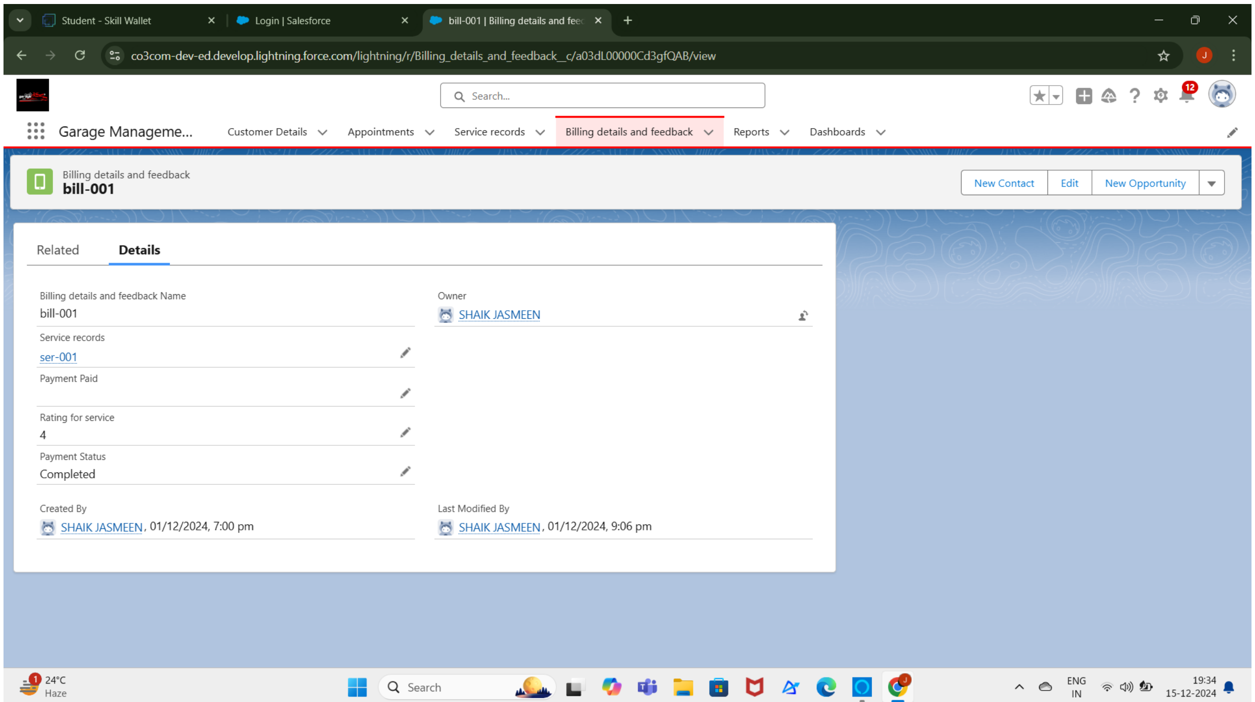

Student - Skill Wallet
Login | Salesforce
ser-005 | Service records | Sales
co3com-dev-ed.develop.lightning.force.com/lightning/r/Service_records__c/a02dL000009RjjpQAC/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Service records
ser-005
New Contact
Edit
New Opportunity
Related
Details
Service records Name
ser-005
Owner
SHAIK JASMEEN
Appointment
app-007
Quality Check Status
Service Status
Completed
service date
15/12/2024
Created By
SHAIK JASMEEN, 15/12/2024, 8:34 pm
Last Modified By
SHAIK JASMEEN, 15/12/2024, 8:34 pm
24°C
Haze
Search
ENG
IN
20:38
15-12-2024

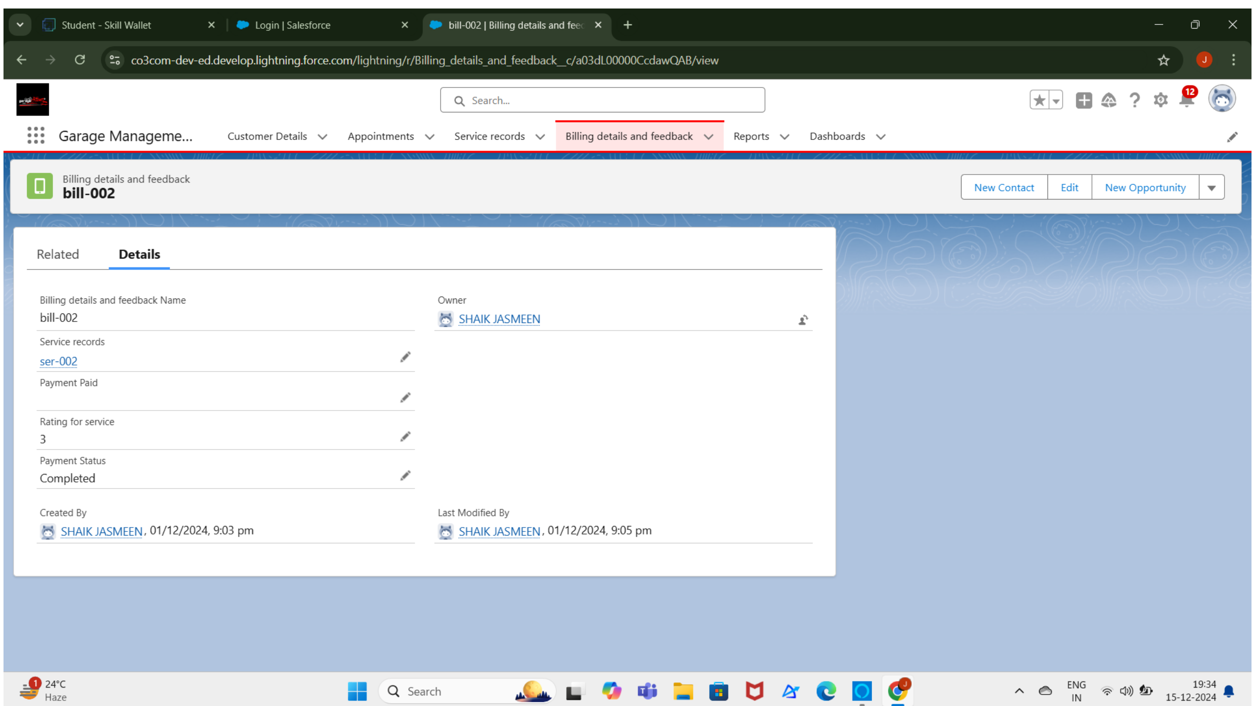


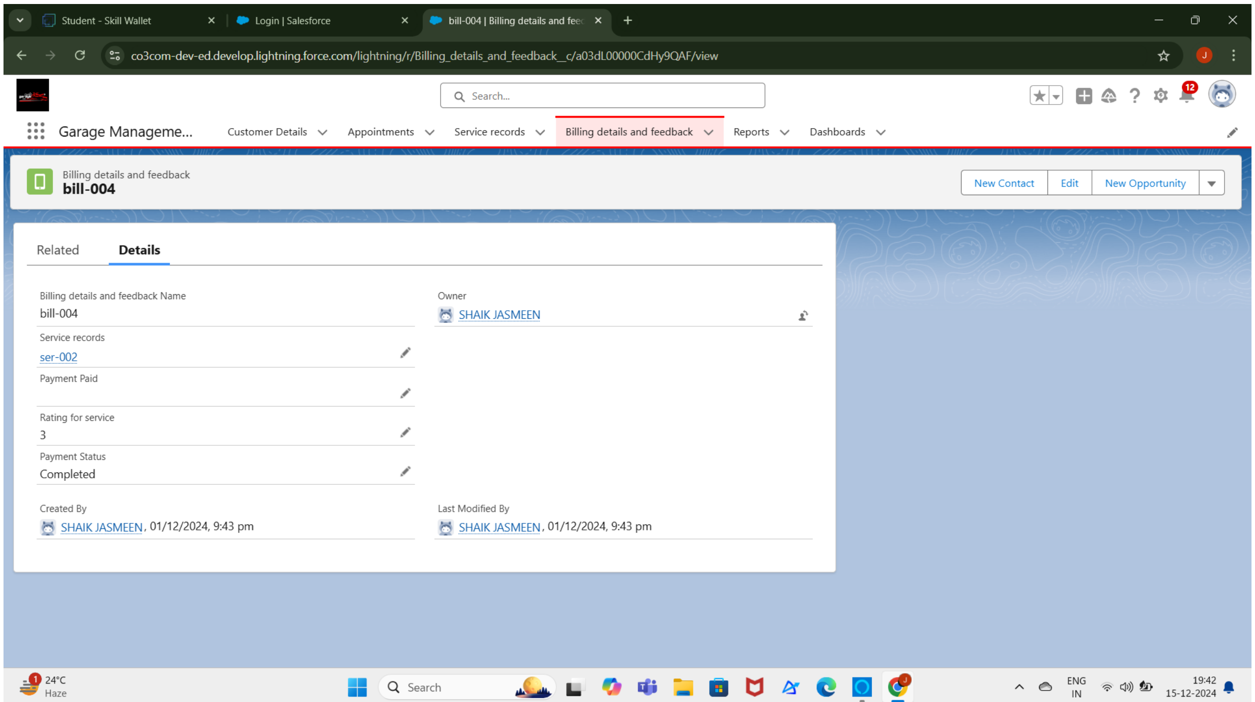
Step-5: Now, Create Billing details and feedback :

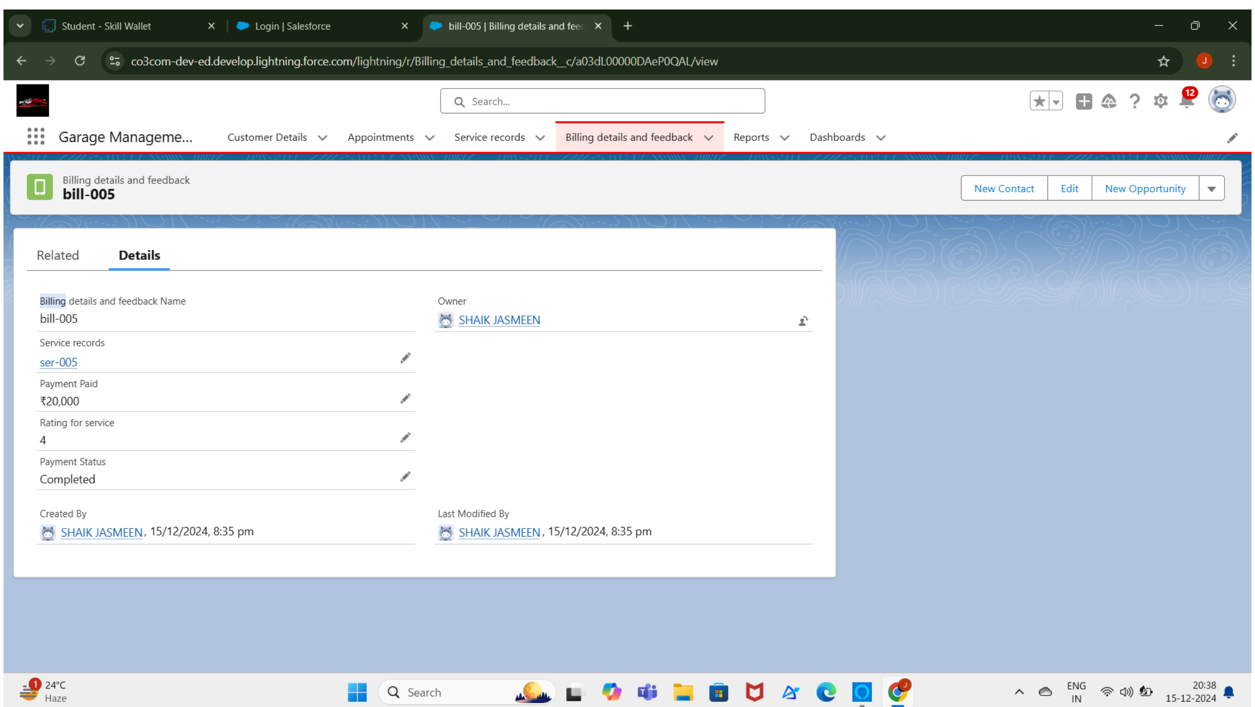
- Click on the "**Billing details and feedback** tab".
- Enter all the details and give rating for service.
- And click on Save, & New.




Student - Skill Wallet
Login | Salesforce
bill-001 | Billing details and fee
co3com-dev-ed.develop.lightning.force.com/lightning/r/Billing_details_and_feedback__c/a03dL00000Cd3gfQAB/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Billing details and feedback
bill-001
New Contact
Edit
New Opportunity
Related
Details
Billing details and feedback Name
bill-001
Owner
SHAIK JASMEEN
Service records
ser-001
Payment Paid
Rating for service
4
Payment Status
Completed
Created By
SHAIK JASMEEN, 01/12/2024, 7:00 pm
Last Modified By
SHAIK JASMEEN, 01/12/2024, 9:06 pm
24°C
Haze
Search
ENG
IN
19:34
15-12-2024

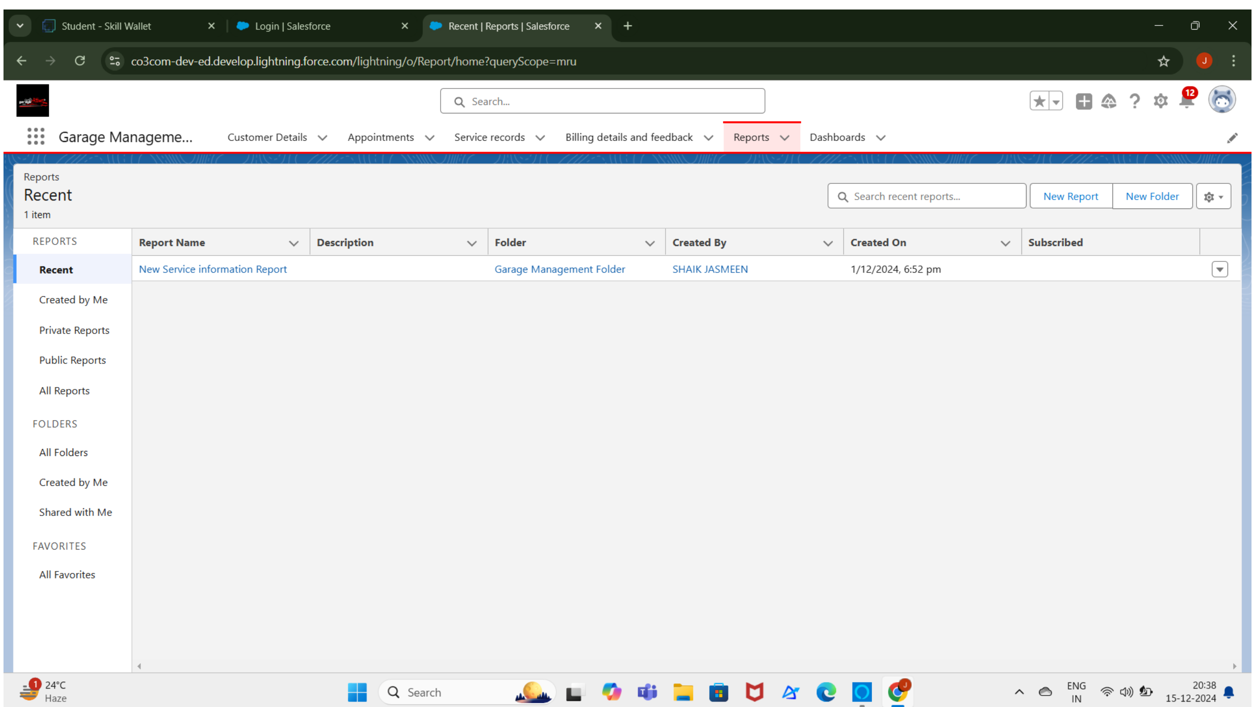

Student - Skill Wallet
Login | Salesforce
bill-002 | Billing details and fee
co3com-dev-ed.develop.lightning.force.com/lightning/r/Billing_details_and_feedback__c/a03dL00000CcdawQAB/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Billing details and feedback
bill-002
New Contact
Edit
New Opportunity
Related
Details
Billing details and feedback Name
bill-002
Owner
SHAIK JASMEEN
Service records
ser-002
Payment Paid
Rating for service
3
Payment Status
Completed
Created By
SHAIK JASMEEN, 01/12/2024, 9:03 pm
Last Modified By
SHAIK JASMEEN, 01/12/2024, 9:05 pm
24°C
Haze
Search
ENG
IN
19:34
15-12-2024

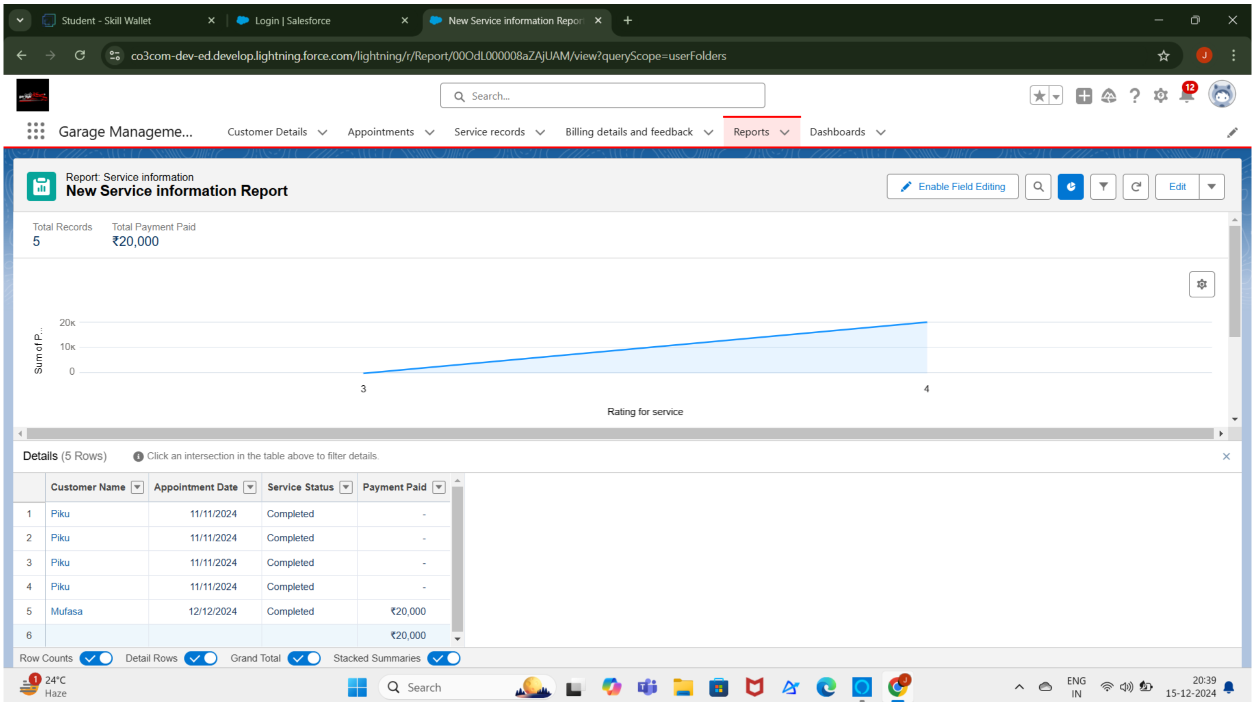

Student - Skill Wallet
Login | Salesforce
bill-004 | Billing details and fee
co3com-dev-ed.develop.lightning.force.com/lightning/r/Billing_details_and_feedback__c/a03dL00000CdHy9QAF/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Billing details and feedback
bill-004
New Contact
Edit
New Opportunity
Related
Details
Billing details and feedback Name
bill-004
Owner
SHAIK JASMEEN
Service records
ser-002
Payment Paid
Rating for service
3
Payment Status
Completed
Created By
SHAIK JASMEEN, 01/12/2024, 9:43 pm
Last Modified By
SHAIK JASMEEN, 01/12/2024, 9:43 pm
24°C
Haze
Search
ENG
IN
19:42
15-12-2024

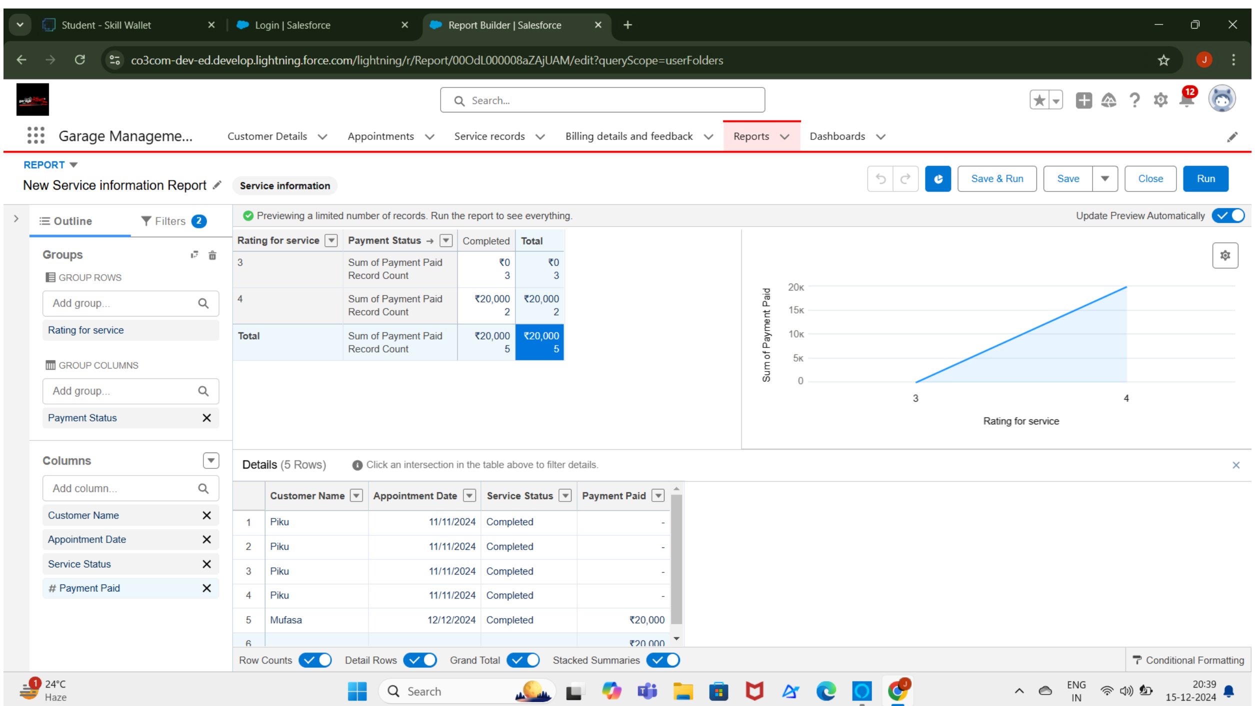

Student - Skill Wallet
Login | Salesforce
bill-005 | Billing details and fee
co3com-dev-ed.develop.lightning.force.com/lightning/r/Billing_details_and_feedback__c/a03dL00000DAeP0QAL/view
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Billing details and feedback
bill-005
New Contact
Edit
New Opportunity
Related
Details
Billing details and feedback Name
bill-005
Owner
SHAIK JASMEEN
Service records
ser-005
Payment Paid
₹20,000
Rating for service
4
Payment Status
Completed
Created By
SHAIK JASMEEN, 15/12/2024, 8:35 pm
Last Modified By
SHAIK JASMEEN, 15/12/2024, 8:35 pm
24°C
Haze
Search
ENG
IN
20:38
15-12-2024

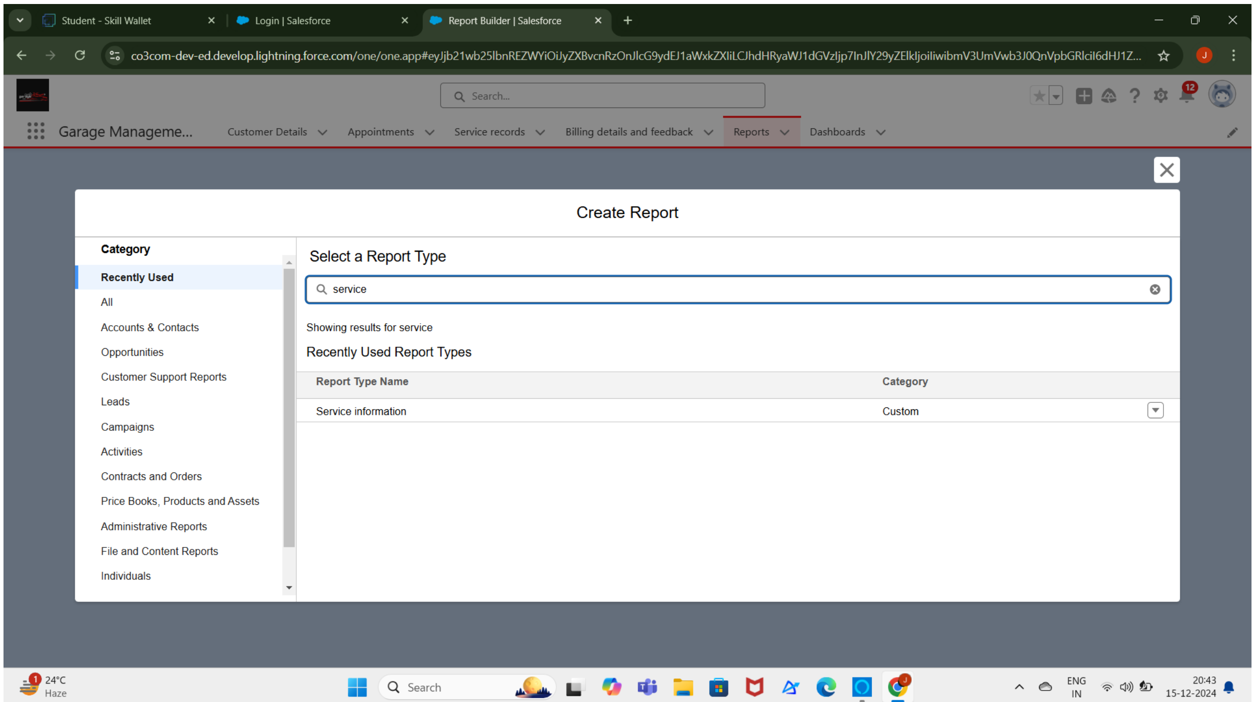
Step-6: Now, Create Reports ;

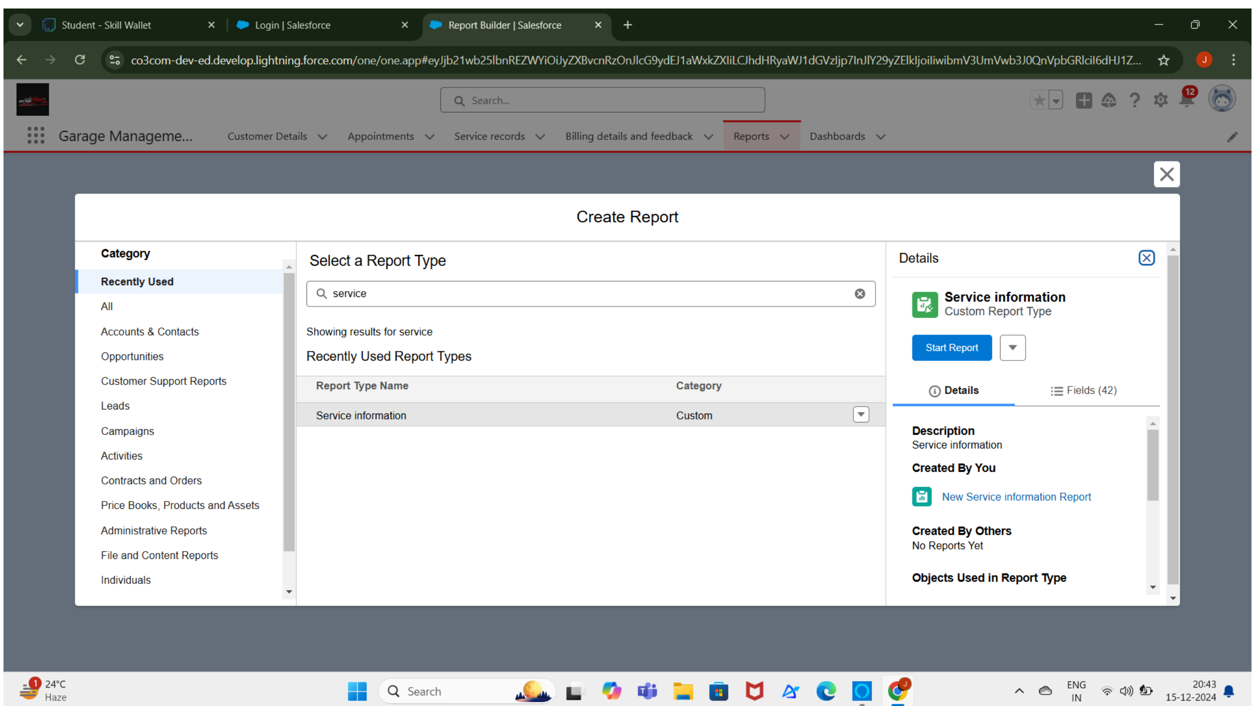
- click on the reports tab
- Click New Report.
- Select the Category as other reports, search for Service Information, select that report, click on it. And click on start report.
- Their outline pane is opened alredy, select the fields that mentioned below in column section.
    - ➤ Customer name
    - ➤ Appointment Date
    - ➤ Service Status
    - ➤ Payment paid
- Remove the unnecessary fields.
- Select the fields that mentioned below in GROUP ROWS section.
    - ➤ Rating for Service
- Select the fields that mentioned below in GROUP ROWS section.
    - ➤ Payment Status
- Click on Add Chart , Select the Line Chart.
- Click on save, Give the report Name : New Service information Report
- Report unique Name is auto populated.
- Select the folder the created and Click on save.

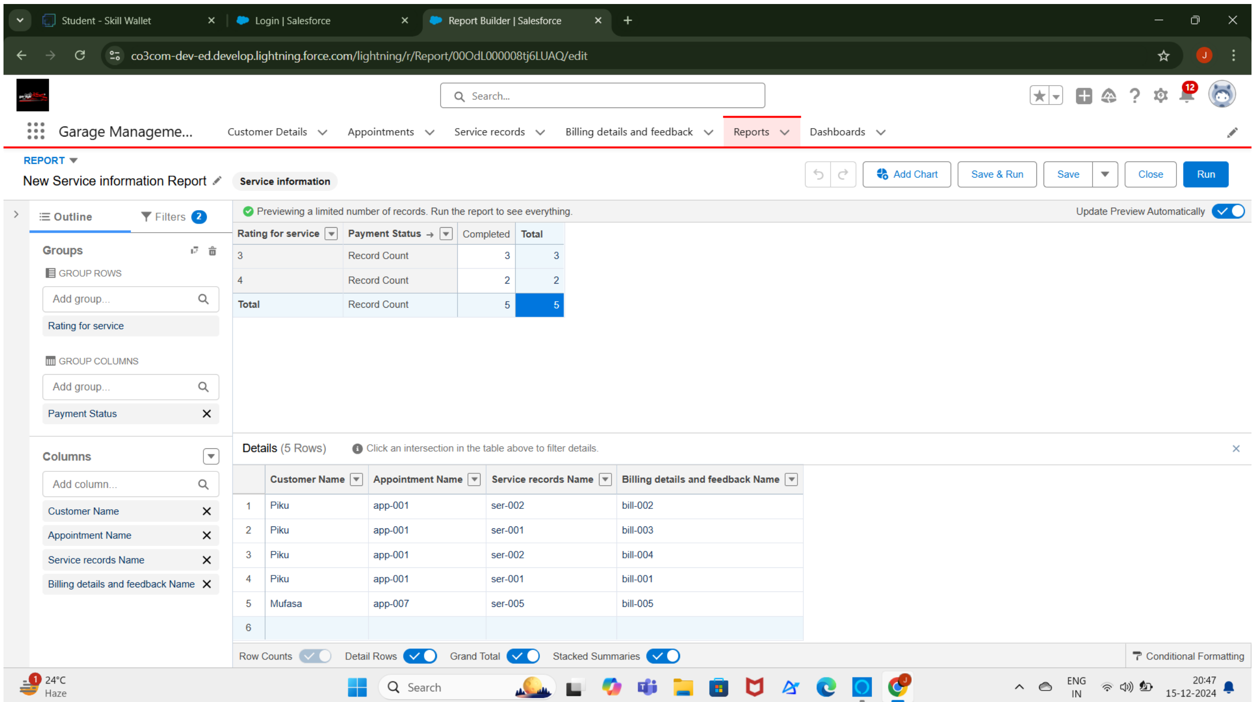


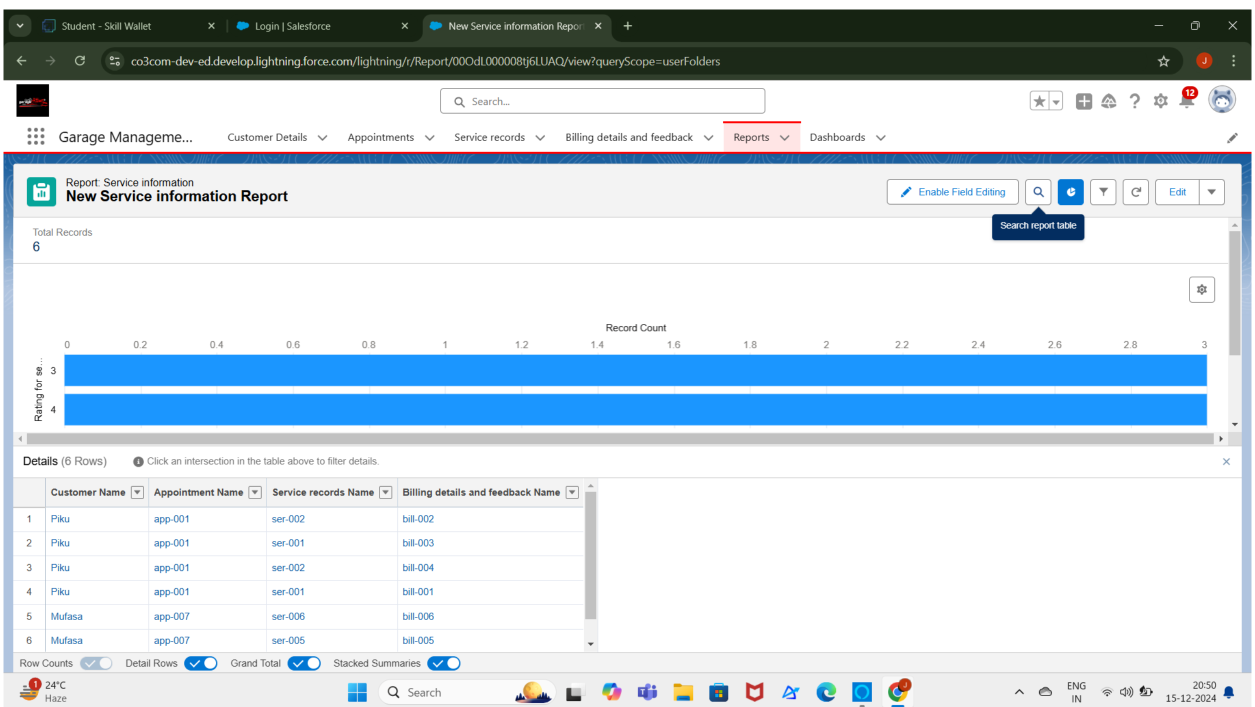

Student - Skill Wallet
Login | Salesforce
New Service information Report
co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008aZAjUAM/view?queryScope=userFolders
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Report: Service information
New Service information Report
Enable Field Editing
Edit
Total Records
5
Total Payment Paid
₹20,000
20K
10K
0
Sum of P...
3
4
Rating for service
Details (5 Rows)
Click an intersection in the table above to filter details.
Customer Name
Appointment Date
Service Status
Payment Paid
1 Piku 11/11/2024 Completed -
2 Piku 11/11/2024 Completed -
3 Piku 11/11/2024 Completed -
4 Piku 11/11/2024 Completed -
5 Mufasa 12/12/2024 Completed ₹20,000
6 ₹20,000
Row Counts
Detail Rows
Grand Total
Stacked Summaries
24°C
Haze
Search
ENG
IN
20:39
15-12-2024

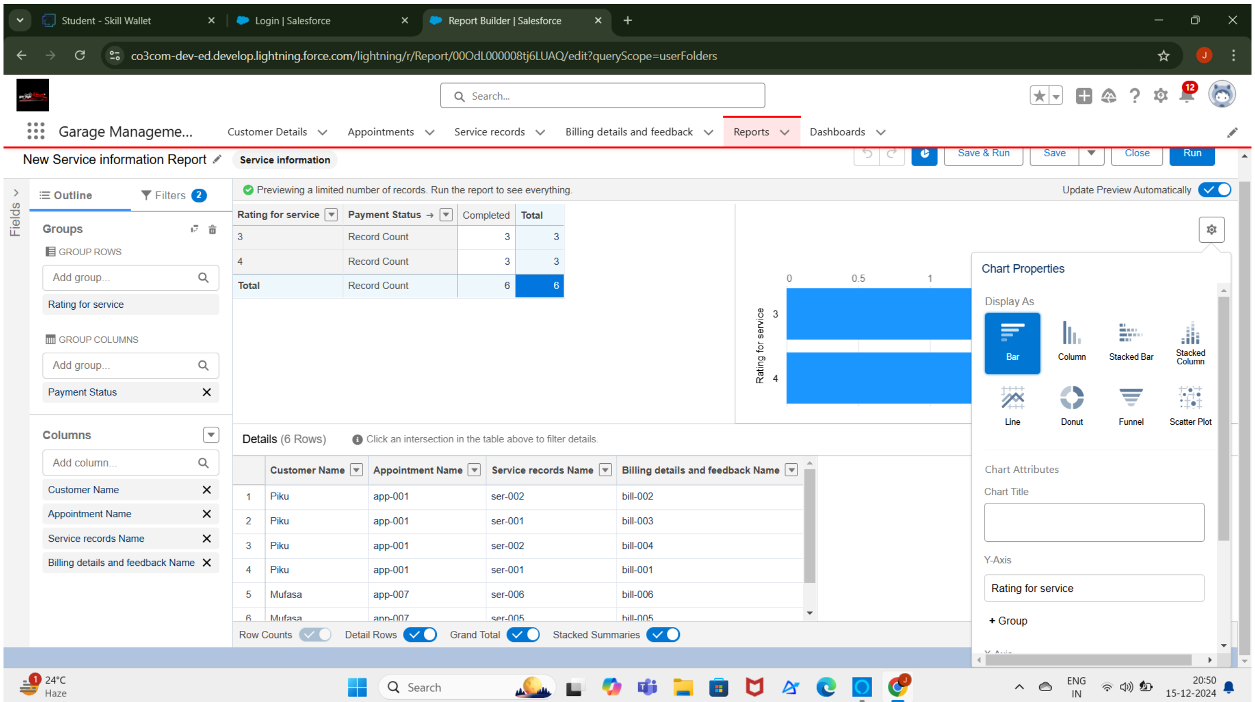

Student - Skill Wallet
Login | Salesforce
Report Builder | Salesforce
co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008aZAjUAM/edit?queryScope=userFolders
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
REPORT
New Service information Report
Service information
Save & Run
Save
Close
Run
Outline
Filters 2
Previewing a limited number of records. Run the report to see everything.
Update Preview Automatically
Groups
GROUP ROWS
Add group...
Rating for service
GROUP COLUMNS
Add group...
Payment Status
Columns
Add column...
Customer Name
Appointment Date
Service Status
Payment Paid
Rating for service
Payment Status →
Completed
Total
3 Sum of Payment Paid Record Count ₹0 3 ₹0 3
4 Sum of Payment Paid Record Count ₹20,000 2 ₹20,000 2
Total Sum of Payment Paid Record Count ₹20,000 5 ₹20,000 5
20K
15K
10K
5K
0
Sum of Payment Paid
3
4
Rating for service
Details (5 Rows)
Click an intersection in the table above to filter details.
Customer Name
Appointment Date
Service Status
Payment Paid
1 Piku 11/11/2024 Completed -
2 Piku 11/11/2024 Completed -
3 Piku 11/11/2024 Completed -
4 Piku 11/11/2024 Completed -
5 Mufasa 12/12/2024 Completed ₹20,000
Row Counts
Detail Rows
Grand Total
Stacked Summaries
Conditional Formatting
24°C
Haze
Search
ENG
IN
20:39
15-12-2024

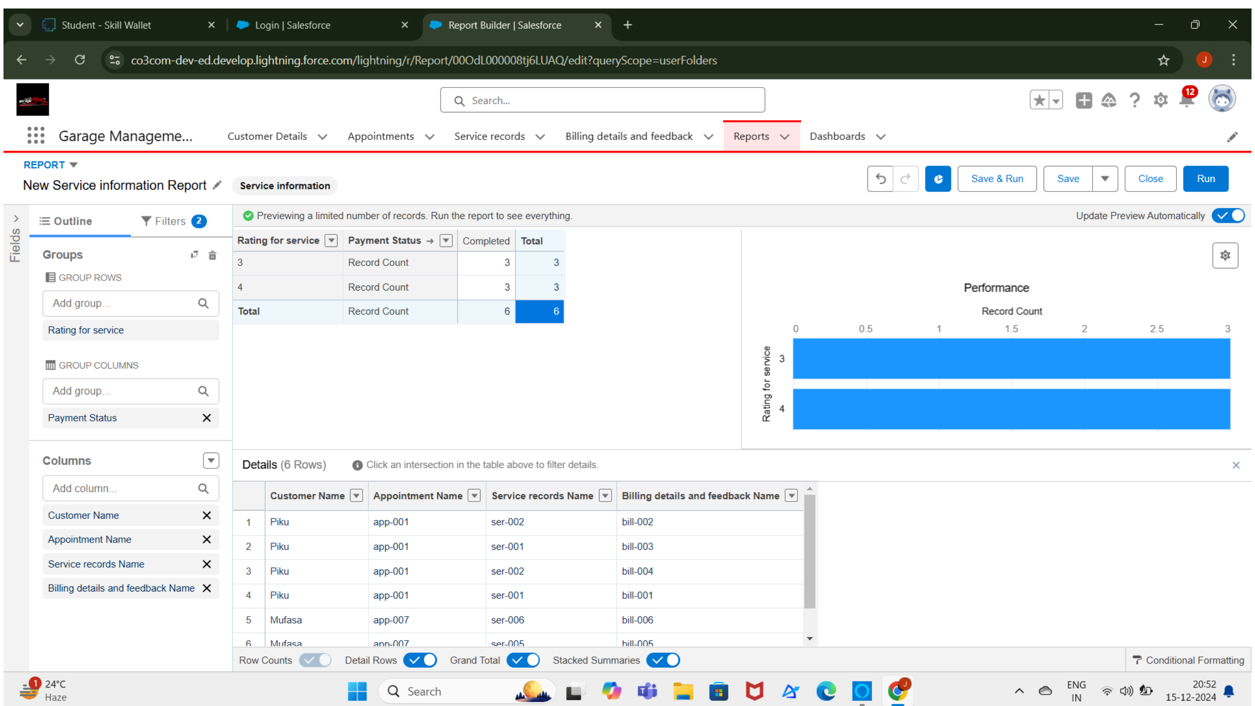

Student - Skill Wallet
Login | Salesforce
Report Builder | Salesforce
co3com-dev-ed.develop.lightning.force.com/one/one.app#eyJjb21wb25lbnREZWYiOiJyZXBvcnRzOnJlcG9ydEJ1aWxkZXIiLCJhdHRyaWJ1dGVzIjp7InJlY29yZElkIjoiliwibmV3UmVwb3J0QnVpbGRlcil6dHJ1Z...
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
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
Individuals
Select a Report Type
service
Showing results for service
Recently Used Report Types
Report Type Name
Category
Service information
Custom
24°C
Haze
Search
ENG
IN
20:43
15-12-2024

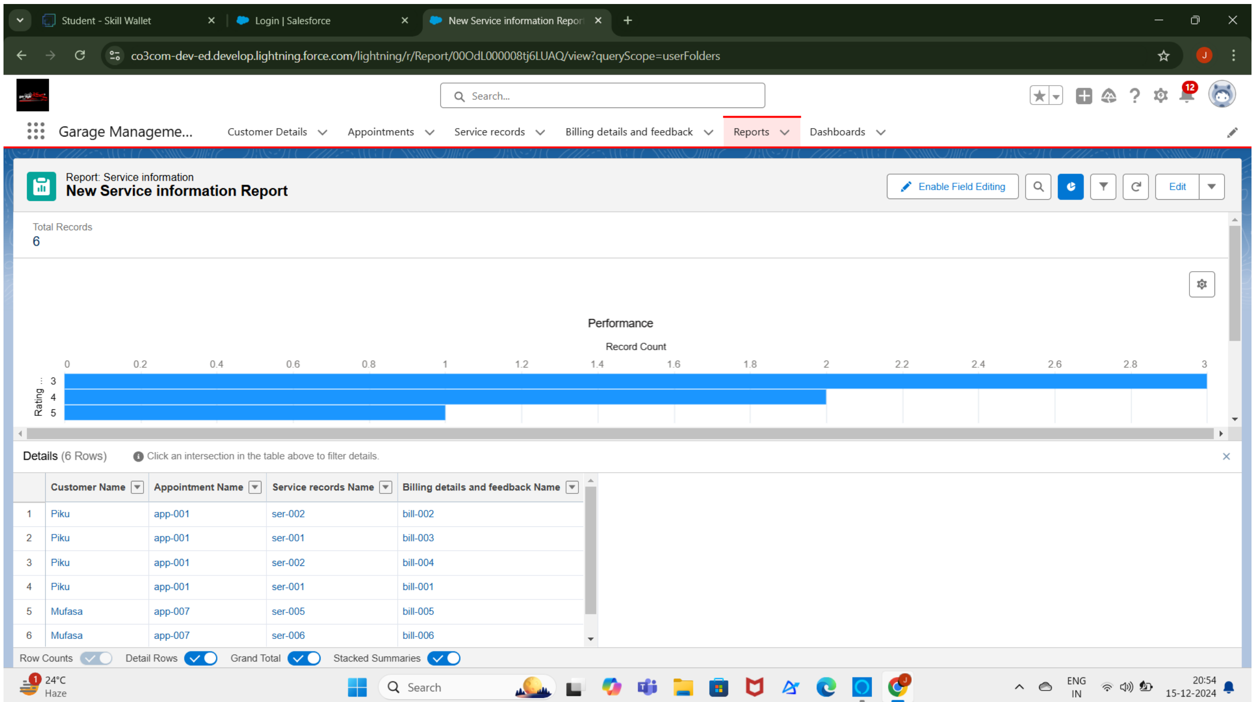

Student - Skill Wallet
Login | Salesforce
Report Builder | Salesforce
co3com-dev-ed.develop.lightning.force.com/one/one.app#eyJjb21wb25lbnREZWYiOiJyZXBvcnRzOnJlcG9ydEJ1aWxkZXIiLCJhdHRyaWJ1dGVzIjp7InJlY29yZElkIjoiliwibmV3UmVwb3J0QnVpbGRlcil6dHJ1Z...
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
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
Individuals
Select a Report Type
service
Showing results for service
Recently Used Report Types
Report Type Name
Category
Service information
Custom
Details
Service information
Custom Report Type
Start Report
Details
Fields (42)
Description
Service information
Created By You
New Service information Report
Created By Others
No Reports Yet
Objects Used in Report Type
24°C
Haze
Search
ENG
IN
20:43
15-12-2024

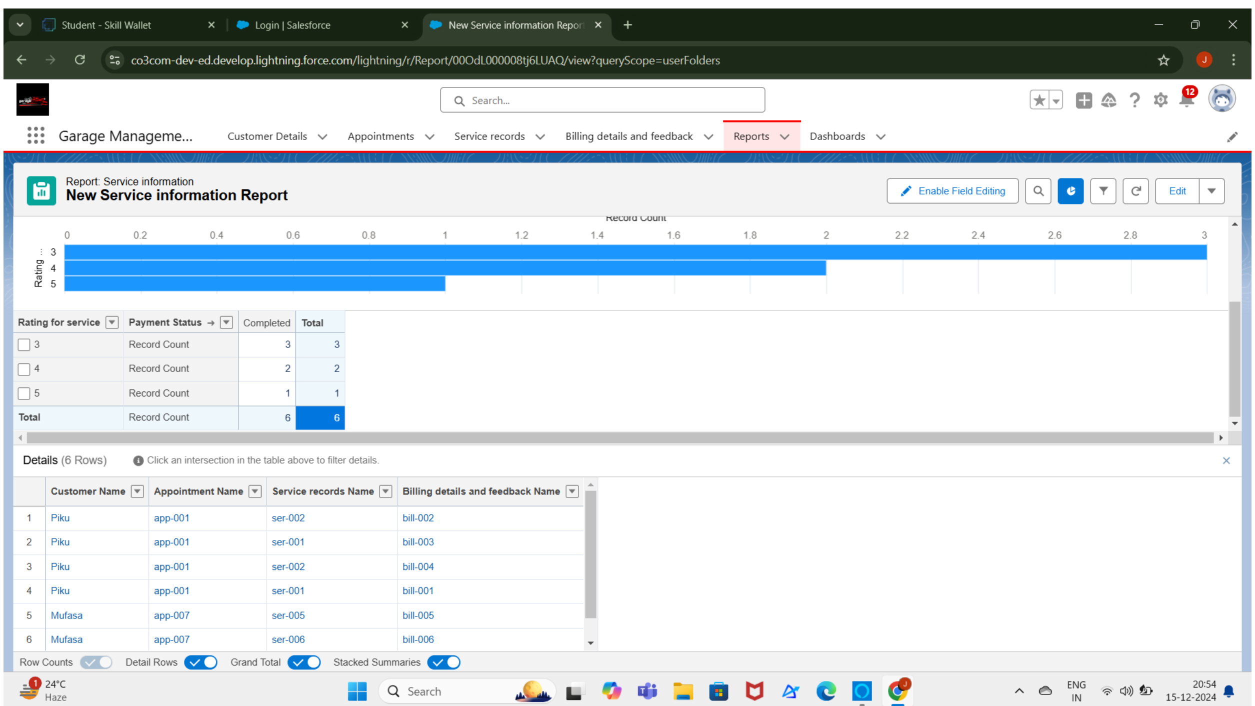

Student - Skill Wallet
Login | Salesforce
Report Builder | Salesforce
co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/edit
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
REPORT
New Service information Report
Service information
Add Chart
Save & Run
Save
Close
Run
Outline
Filters 2
Groups
GROUP ROWS
Add group...
Rating for service
GROUP COLUMNS
Add group...
Payment Status
Columns
Add column...
Customer Name
Appointment Name
Service records Name
Billing details and feedback Name
Previewing a limited number of records. Run the report to see everything.
Update Preview Automatically
Rating for service | Payment Status | Completed | Total
3 | Record Count | 3 | 3
4 | Record Count | 2 | 2
Total | Record Count | 5 | 5
Details (5 Rows)
Click an intersection in the table above to filter details.
Customer Name | Appointment Name | Service records Name | Billing details and feedback Name
1 | Piku | app-001 | ser-002 | bill-002
2 | Piku | app-001 | ser-001 | bill-003
3 | Piku | app-001 | ser-002 | bill-004
4 | Piku | app-001 | ser-001 | bill-001
5 | Mufasa | app-007 | ser-005 | bill-005
6
Row Counts
Detail Rows
Grand Total
Stacked Summaries
Conditional Formatting
24°C
Haze
Search
ENG
IN
20:47
15-12-2024


Student - Skill Wallet
Login | Salesforce
New Service information Report
co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/view?queryScope=userFolders
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Report: Service information
New Service information Report
Enable Field Editing
Edit
Search report table
Total Records
6
Record Count
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
Rating for se...
3
4
Details (6 Rows)
Click an intersection in the table above to filter details.
Customer Name | Appointment Name | Service records Name | Billing details and feedback Name
1 | Piku | app-001 | ser-002 | bill-002
2 | Piku | app-001 | ser-001 | bill-003
3 | Piku | app-001 | ser-002 | bill-004
4 | Piku | app-001 | ser-001 | bill-001
5 | Mufasa | app-007 | ser-006 | bill-006
6 | Mufasa | app-007 | ser-005 | bill-005
Row Counts
Detail Rows
Grand Total
Stacked Summaries
24°C
Haze
Search
ENG
IN
20:50
15-12-2024


Student - Skill Wallet
Login | Salesforce
Report Builder | Salesforce
co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/edit?queryScope=userFolders
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
New Service information Report
Service information
Save & Run
Save
Close
Run
Outline
Filters 2
Groups
GROUP ROWS
Add group...
Rating for service
GROUP COLUMNS
Add group...
Payment Status
Columns
Add column...
Customer Name
Appointment Name
Service records Name
Billing details and feedback Name
Previewing a limited number of records. Run the report to see everything.
Update Preview Automatically
Rating for service
Payment Status
Completed
Total
3 Record Count 3 3
4 Record Count 3 3
Total Record Count 6 6
Rating for service
Chart Properties
Display As
Bar
Column
Stacked Bar
Stacked Column
Line
Donut
Funnel
Scatter Plot
Chart Attributes
Chart Title
Y-Axis
Rating for service
+ Group
Details (6 Rows)
Click an intersection in the table above to filter details.
Customer Name
Appointment Name
Service records Name
Billing details and feedback Name
1 Piku app-001 ser-002 bill-002
2 Piku app-001 ser-001 bill-003
3 Piku app-001 ser-002 bill-004
4 Piku app-001 ser-001 bill-001
5 Mufasa app-007 ser-006 bill-006
Row Counts
Detail Rows
Grand Total
Stacked Summaries
24°C
Haze
Search
ENG
IN
20:50
15-12-2024

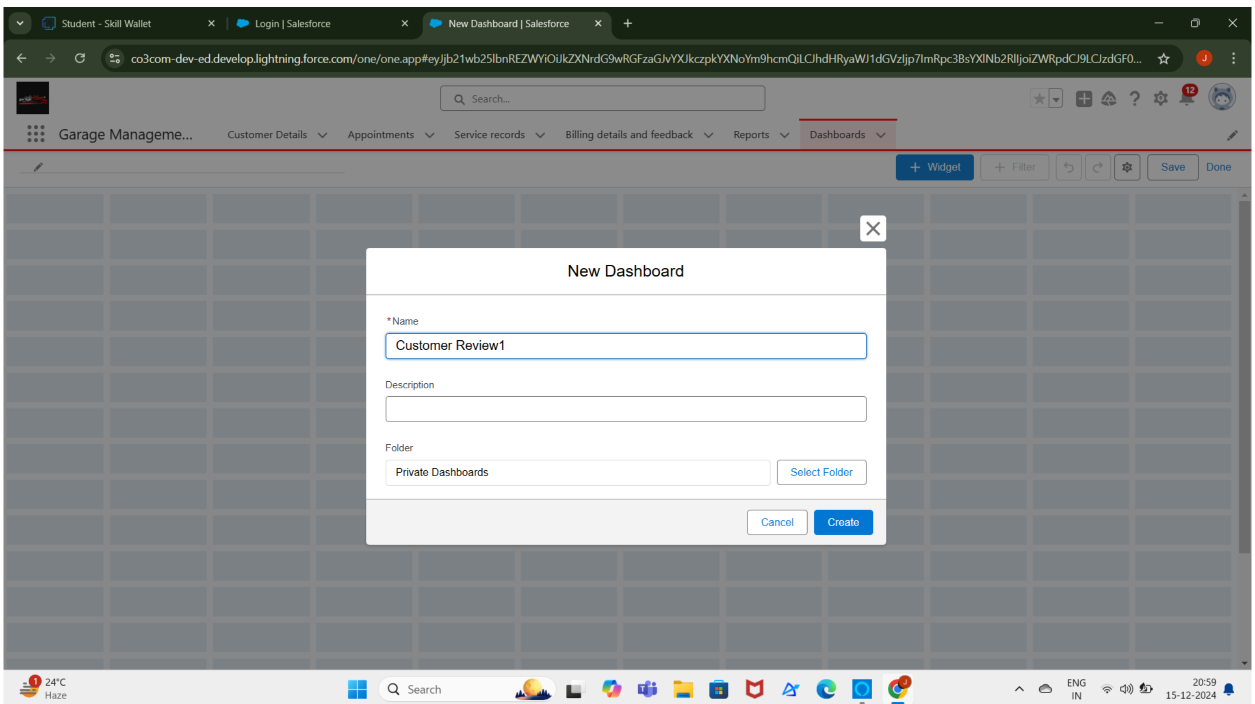

Student - Skill Wallet
Login | Salesforce
Report Builder | Salesforce
co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/edit?queryScope=userFolders
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
REPORT
New Service information Report
Service information
Save & Run
Save
Close
Run
Outline
Filters 2
Groups
GROUP ROWS
Add group...
Rating for service
GROUP COLUMNS
Add group...
Payment Status
Columns
Add column...
Customer Name
Appointment Name
Service records Name
Billing details and feedback Name
Previewing a limited number of records. Run the report to see everything.
Update Preview Automatically
Rating for service
Payment Status
Completed
Total
3 Record Count 3 3
4 Record Count 3 3
Total Record Count 6 6
Performance
Record Count
0 0.5 1 1.5 2 2.5 3
Rating for service
Details (6 Rows)
Click an intersection in the table above to filter details.
Customer Name
Appointment Name
Service records Name
Billing details and feedback Name
1 Piku app-001 ser-002 bill-002
2 Piku app-001 ser-001 bill-003
3 Piku app-001 ser-002 bill-004
4 Piku app-001 ser-001 bill-001
5 Mufasa app-007 ser-006 bill-006
Row Counts
Detail Rows
Grand Total
Stacked Summaries
Conditional Formatting
24°C
Haze
Search
ENG
IN
20:52
15-12-2024

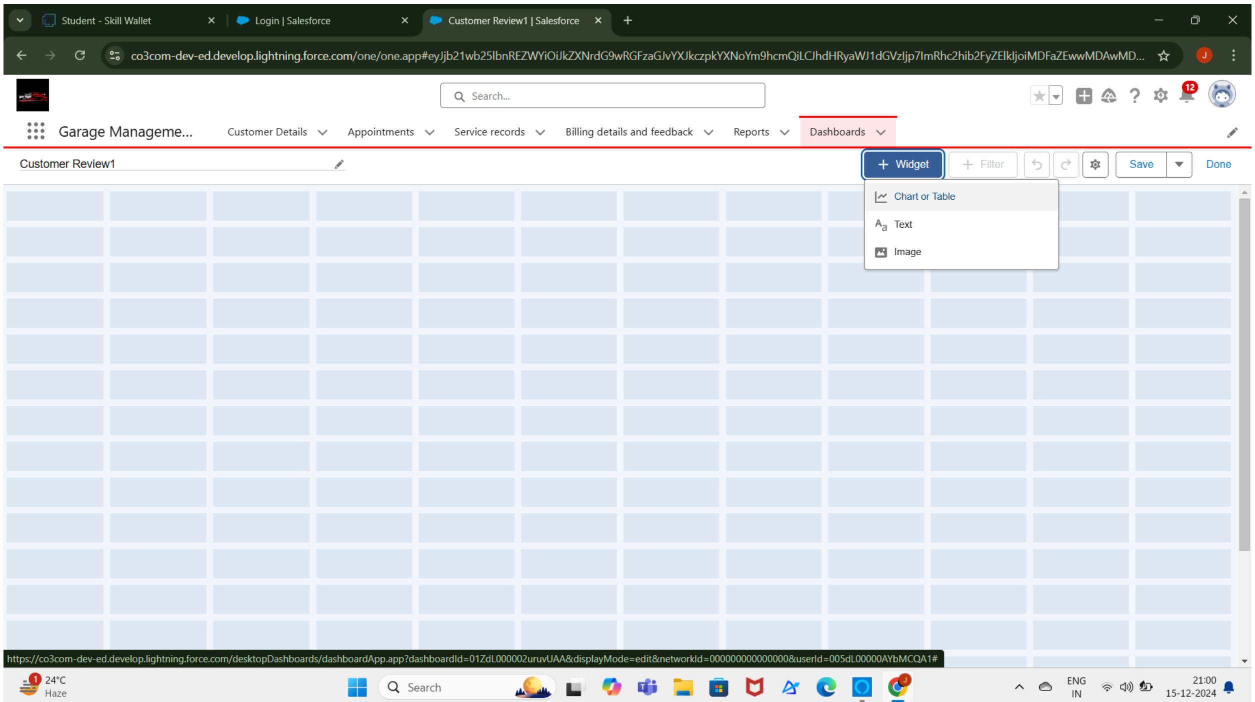

Student - Skill Wallet
Login | Salesforce
New Service information Repor
co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/view?queryScope=userFolders
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Report: Service information
New Service information Report
Enable Field Editing
Edit
Total Records
6
Performance
Record Count
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3
Rating
3
4
5
Details (6 Rows)
Click an intersection in the table above to filter details.
	Customer Name	Appointment Name	Service records Name	Billing details and feedback Name
1	Piku	app-001	ser-002	bill-002
2	Piku	app-001	ser-001	bill-003
3	Piku	app-001	ser-002	bill-004
4	Piku	app-001	ser-001	bill-001
5	Mufasa	app-007	ser-005	bill-005
6	Mufasa	app-007	ser-006	bill-006
Row Counts
Detail Rows
Grand Total
Stacked Summaries
24°C
Haze
Search
ENG
IN
20:54
15-12-2024

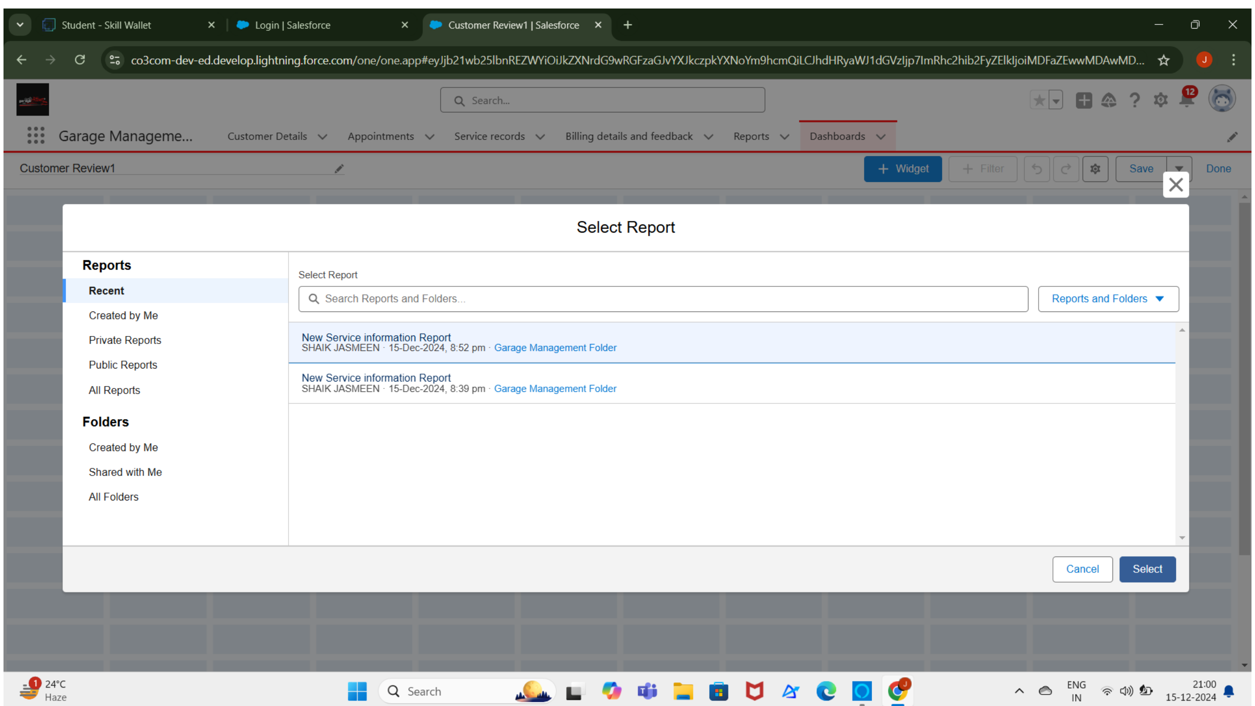

Student - Skill Wallet
Login | Salesforce
New Service information Repor
co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/view?queryScope=userFolders
Search...
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Report: Service information
New Service information Report
Enable Field Editing
Edit
Record Count
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3
Rating
3
4
5
Rating for service	Payment Status	Completed	Total
3	Record Count	3	3
4	Record Count	2	2
5	Record Count	1	1
Total	Record Count	6	6
Details (6 Rows)
Click an intersection in the table above to filter details.
	Customer Name	Appointment Name	Service records Name	Billing details and feedback Name
1	Piku	app-001	ser-002	bill-002
2	Piku	app-001	ser-001	bill-003
3	Piku	app-001	ser-002	bill-004
4	Piku	app-001	ser-001	bill-001
5	Mufasa	app-007	ser-005	bill-005
6	Mufasa	app-007	ser-006	bill-006
Row Counts
Detail Rows
Grand Total
Stacked Summaries
24°C
Haze
Search
ENG
IN
20:54
15-12-2024

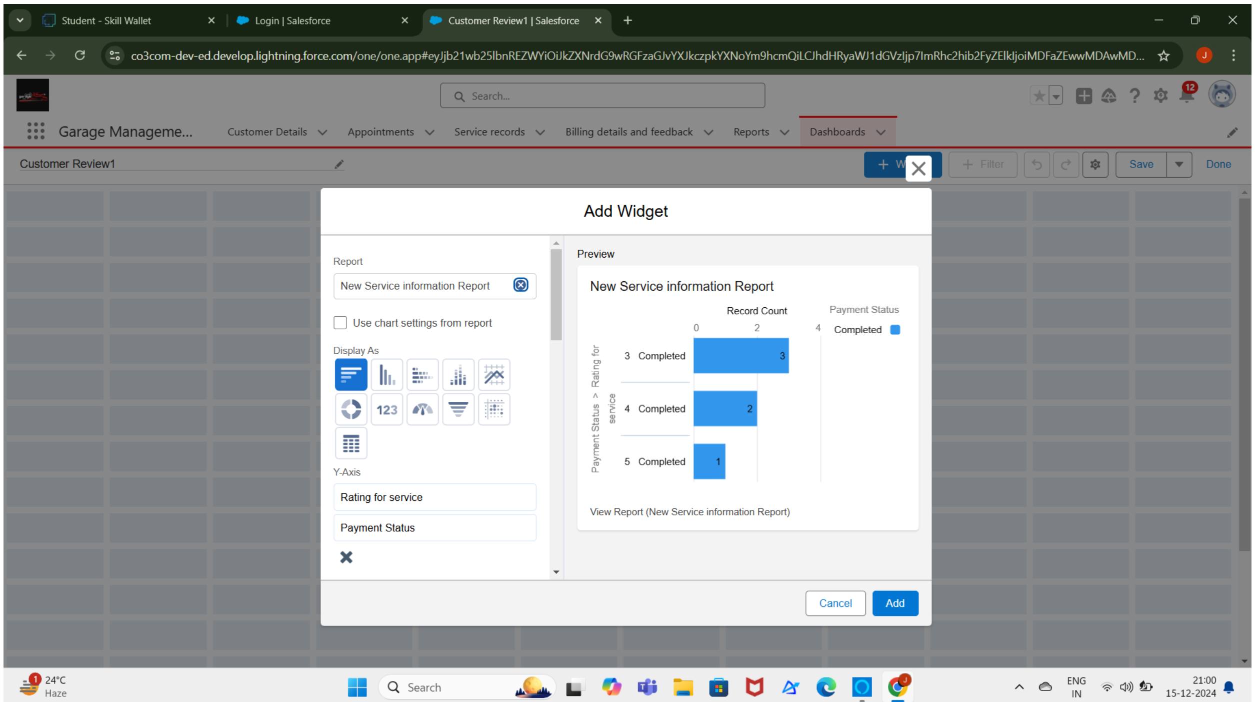
Step-7: Now, Create a Dashboard;

- click on the Dashboards tabs.
- Give a Name and select the folder that created, and click on create.
- Select add component.
- Select a Report and click on select.
- Select the Line Chart. Change the theme.
- Click Add then click on Save and then click on Done.
- Preview is shown below.
- After that Click on Subcribe on top right.
- Set the Frequency as “ weekly ”.
- Set a day as monday.
- And Click on save.

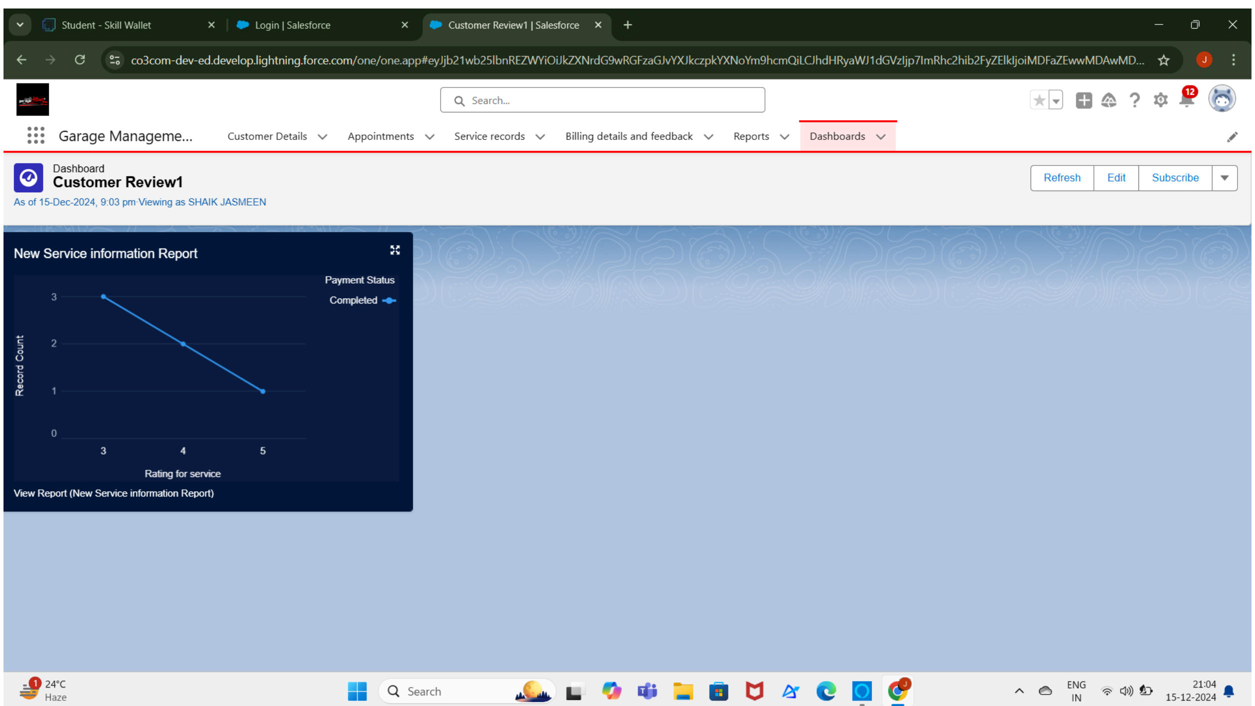



Student - Skill Wallet
Login | Salesforce
Customer Review1 | Salesforce
Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Customer Review1
Widget
Filter
Save
Done
Chart or Table
Text
Image

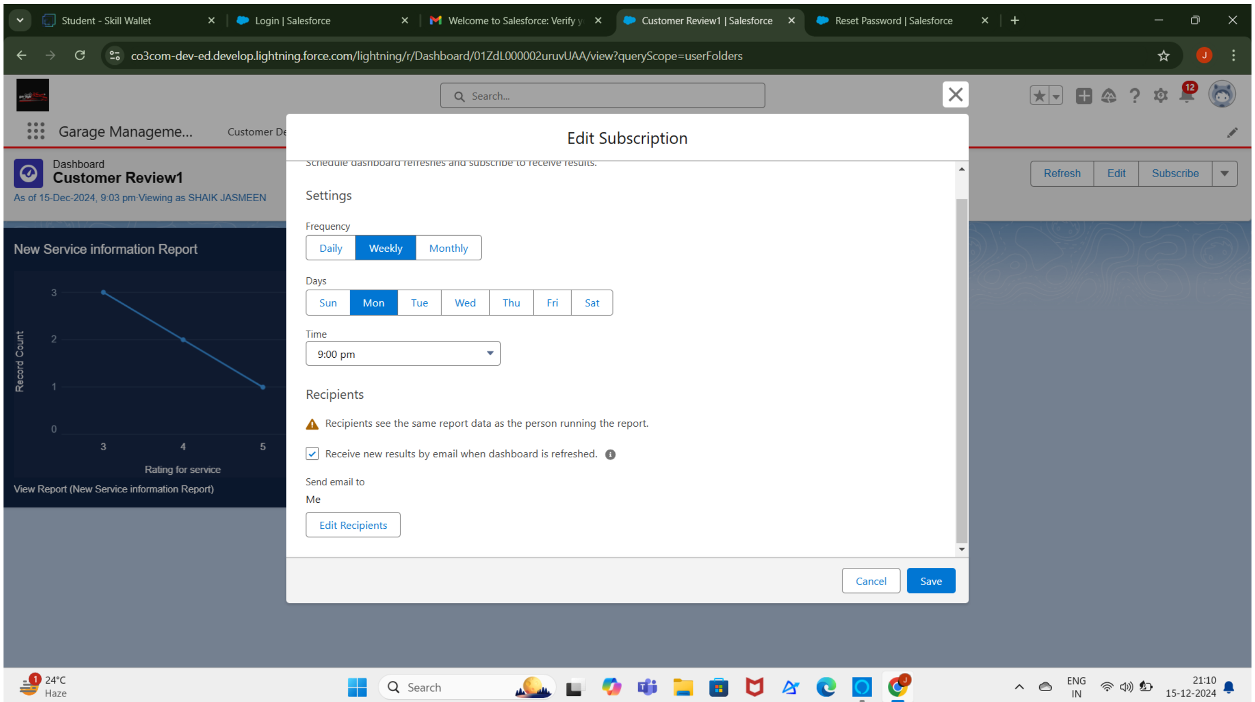

Select Report
Reports
Recent
Created by Me
Private Reports
Public Reports
All Reports
Folders
Created by Me
Shared with Me
All Folders
Select Report
Search Reports and Folders...
Reports and Folders
New Service information Report
SHAIK JASMEEN · 15-Dec-2024, 8:52 pm · Garage Management Folder
New Service information Report
SHAIK JASMEEN · 15-Dec-2024, 8:39 pm · Garage Management Folder
Cancel
Select

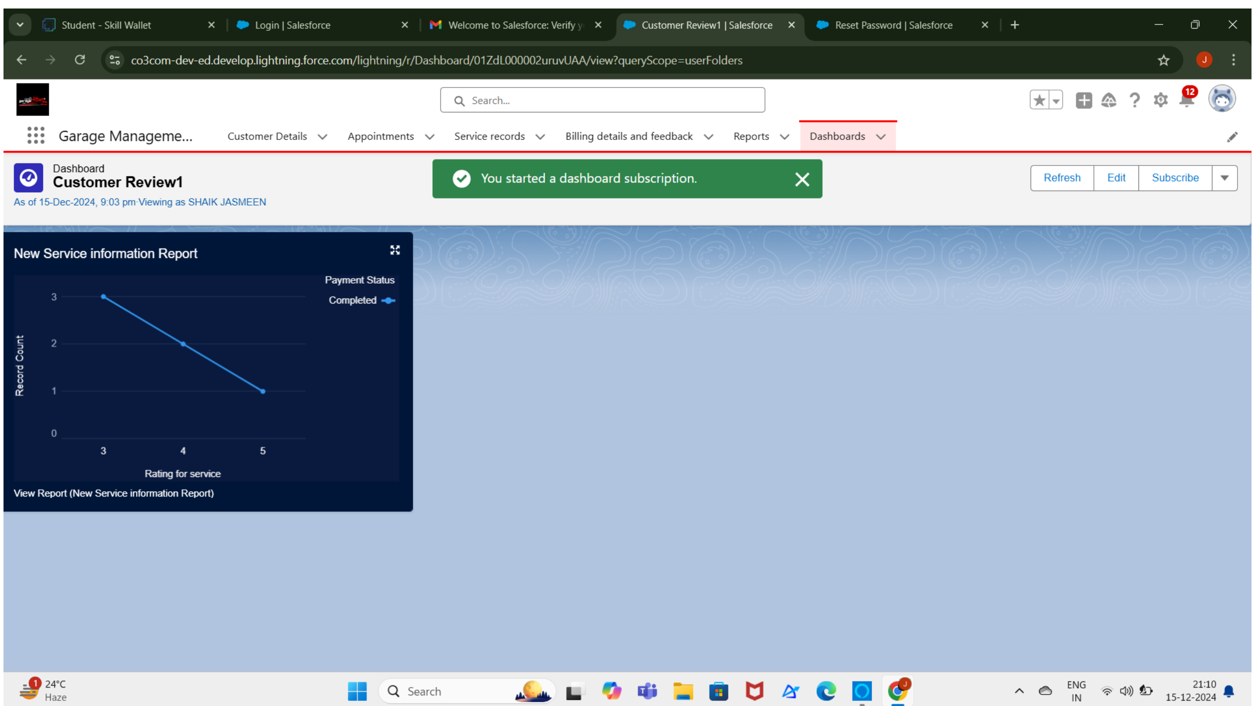


Add Widget
Report
New Service information Report
Use chart settings from report
Display As
Y-Axis
Rating for service
Payment Status
Preview
New Service information Report
Record Count
Payment Status
Completed
View Report (New Service information Report)
Cancel
Add



Dashboard
Customer Review1
As of 15-Dec-2024, 9:03 pm Viewing as SHAIK JASMEEN
Refresh
Edit
Subscribe
New Service information Report
Payment Status
Completed
Record Count
Rating for service
View Report (New Service information Report)


Edit Subscription
Schedule dashboard refreshes and subscribe to receive results.
Settings
Frequency
Daily
Weekly
Monthly
Days
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Time
9:00 pm
Recipients
Recipients see the same report data as the person running the report.
Receive new results by email when dashboard is refreshed.
Send email to
Me
Edit Recipients
Cancel
Save


Garage Manageme...
Customer Details
Appointments
Service records
Billing details and feedback
Reports
Dashboards
Dashboard
Customer Review1
As of 15-Dec-2024, 9:03 pm Viewing as SHAIK JASMEEN
You started a dashboard subscription.
Refresh
Edit
Subscribe
New Service information Report
Payment Status
Completed
Record Count
Rating for service
View Report (New Service information Report)

Key Scenarios Addressed by Salesforce in the Implementation of the Project:

A Garage Management System (GMS) implemented using the Salesforce platform can address key scenarios to streamline and optimize garage operations. These scenarios often align with the project's objectives, focusing on customer engagement, process automation, and data management. Here are some key scenarios typically addressed:

1. Customer Details:

- It includes gathering of customer detail as below;
  Customer Name
  Phone Number
  Gmail
  Owner

2. Appointment Scheduling:

- Customers can book service appointments online.
- Integration of a calendar to track available time slots and assign mechanics.
- Automated notifications for booking confirmation, reminders, or changes.
- It includes;
  Appointment name
  Customer details
  Appointment date
  Maintenance service
  Repairs
  Replacement Parts
  Service Amount
  Vehicle number plate

3. Service Records Management:

- Recording vehicle details during check-in using a custom Salesforce form.
- Assigning service tasks to technicians and tracking progress in real time.
- Status updates shared with customers (e.g., "completed," "pending").
- It includes;
  Service Record Name

Appointment

Quality Check Status

Service Status

4. Billing details and feedback:

- Supporting multiple payment methods with Salesforce-integrated payment gateways.
- Tracking pending payments and sending reminders to customers.
- Collecting customer feedback as rating for service.
- It includes;

  Billing details and feedback name

  Service record

  Payment Paid

  Rating for service

  Payment status

5. Analytics and Reporting :

- 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.Types of Reports in Salesforce

  Tabular
  Summary
  Matrix
  Joined Reports

6. Dashboards:

- 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. Before building, reading, and sharing dashboards, review these dashboard basics.

Conclusion:

The Garage Management System in Salesforce has successfully digitized and automated the key operations of a garage, including customer details management, appointment scheduling, service records tracking & Reports analysis, billing details and feedbacks and Dashboards Subscription. The integration of custom objects, automated workflows, and powerful reporting has significantly enhanced the efficiency and accuracy of garage operations. Additionally, the system's ability to provide real-time insights, improve customer communication, and ensure compliance with industry regulations has positioned the garage to offer superior service to its customers.

The Garage Management System developed on the Salesforce platform effectively automates and optimizes core business operations such as service scheduling, inventory management, and customer relationship management (CRM). Utilizing Salesforce Lightning Components, Apex classes, and Visualforce pages, the system offers a seamless user experience and ensures efficient handling of service workflows.

Key functionalities, including automated appointment scheduling, real-time service status tracking, and customized email notifications, are achieved through Salesforce Flow, Process Builder, and Apex Triggers. The integration of Salesforce Objects for vehicles, customers, and services allows for efficient data management and ensures data integrity. Additionally, Reports and Dashboards provide comprehensive analytics and performance insights, facilitating data-driven decision-making.

The system’s cloud-native architecture ensures scalability and accessibility, leveraging Salesforce's multi-tenant infrastructure and role-based security model to maintain data confidentiality and integrity. Future enhancements could include Einstein AI for predictive maintenance, RESTful API integrations for third-party services, and mobile application development via Salesforce Mobile SDK to further extend system capabilities and enhance user engagement.

This project highlights the power of Salesforce as a platform for developing customized enterprise solutions that can significantly improve the efficiency and effectiveness of garage operations.

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