

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:

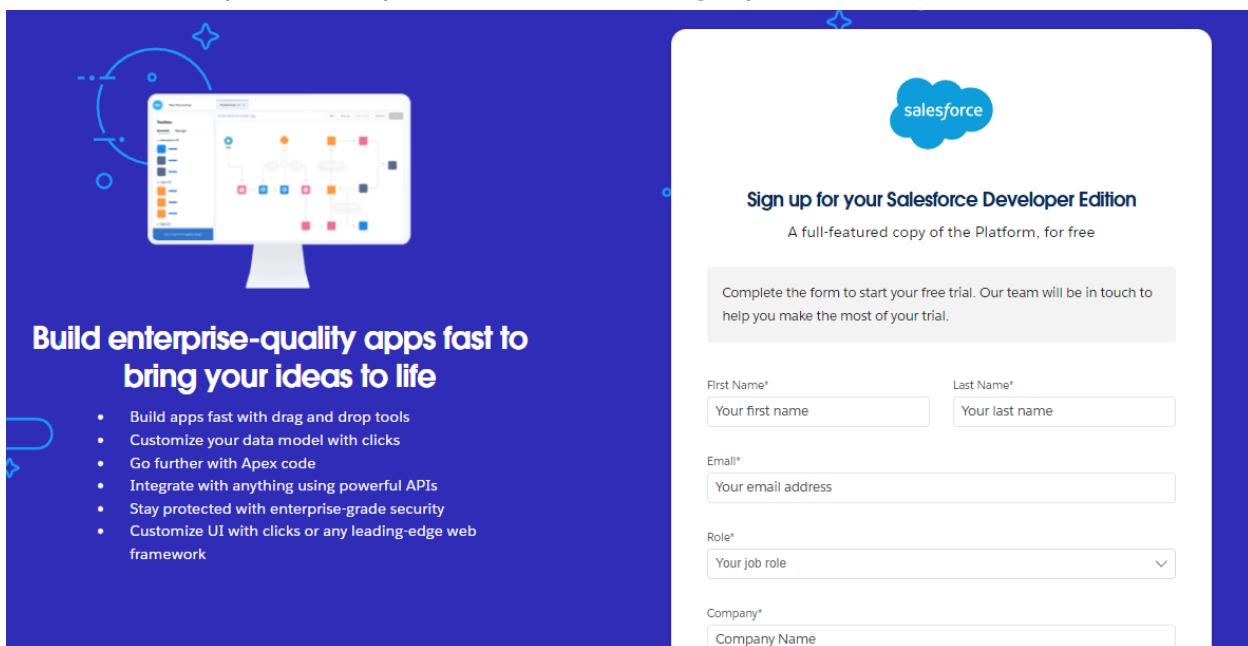
Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities. Before building, reading, and sharing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

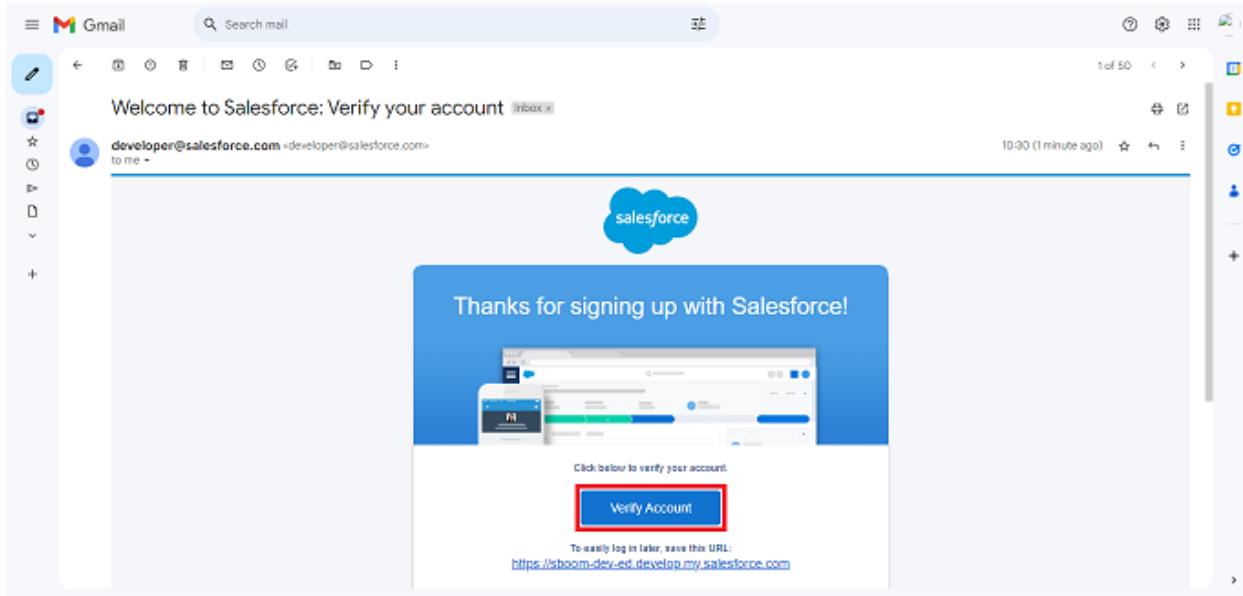
This need not be an actual email id, you can give anything in the format : username@organization.com

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.

The screenshot shows the "Change Your Password" page for a user named "lead@sb.com". The page has a blue header with the Salesforce logo. The main content area has a white background with a light gray border. At the top, it says "Enter a new password for lead@sb.com. Make sure to include at least:" followed by three requirements with green checkmarks:

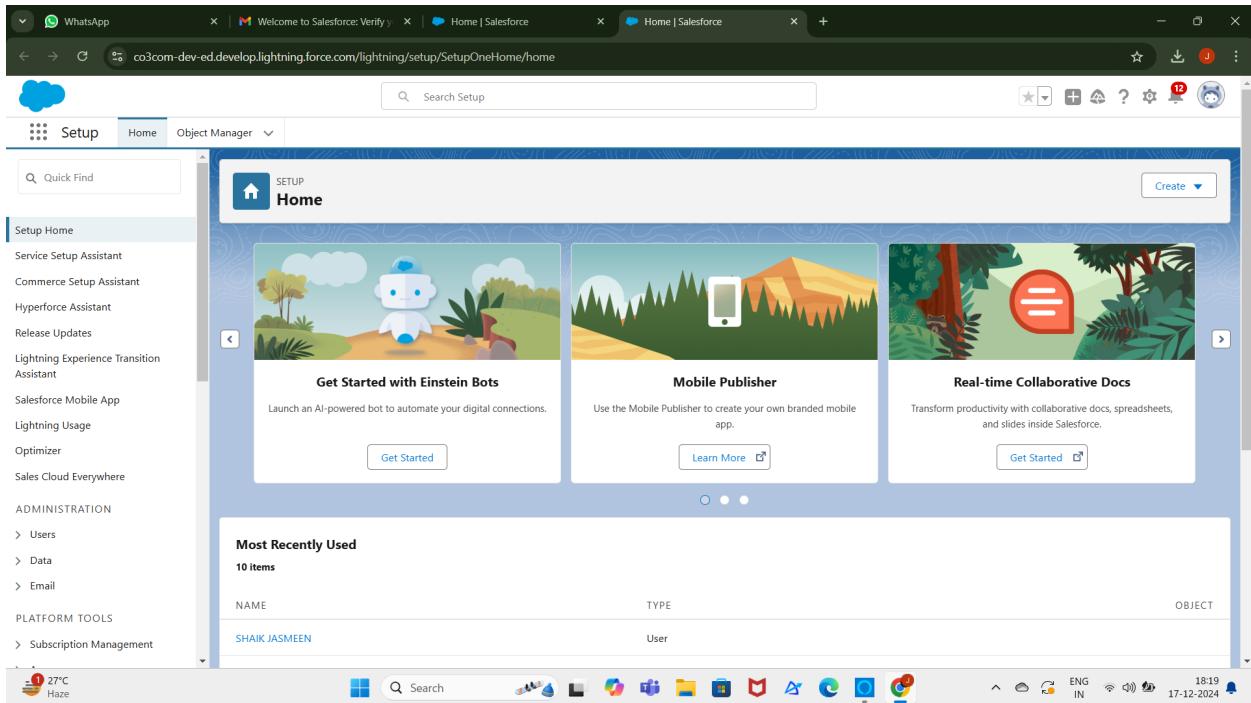
- 8 characters
- 1 letter
- 1 number

Below these requirements is a red-bordered form containing the following fields:

- * New Password: A text input field containing "*****" with the status "Good".
- * Confirm New Password: A text input field containing "*****" with the status "Match".
- Security Question: A dropdown menu set to "In what city were you born?".
- * Answer: A text input field containing "asdfghjkl".

At the bottom of the form is a large blue "Change Password" button, which is also highlighted with a red box.

- Then you will redirect to your salesforce setup page.



Step-3:

Create Customer Details Object:

To create an object:

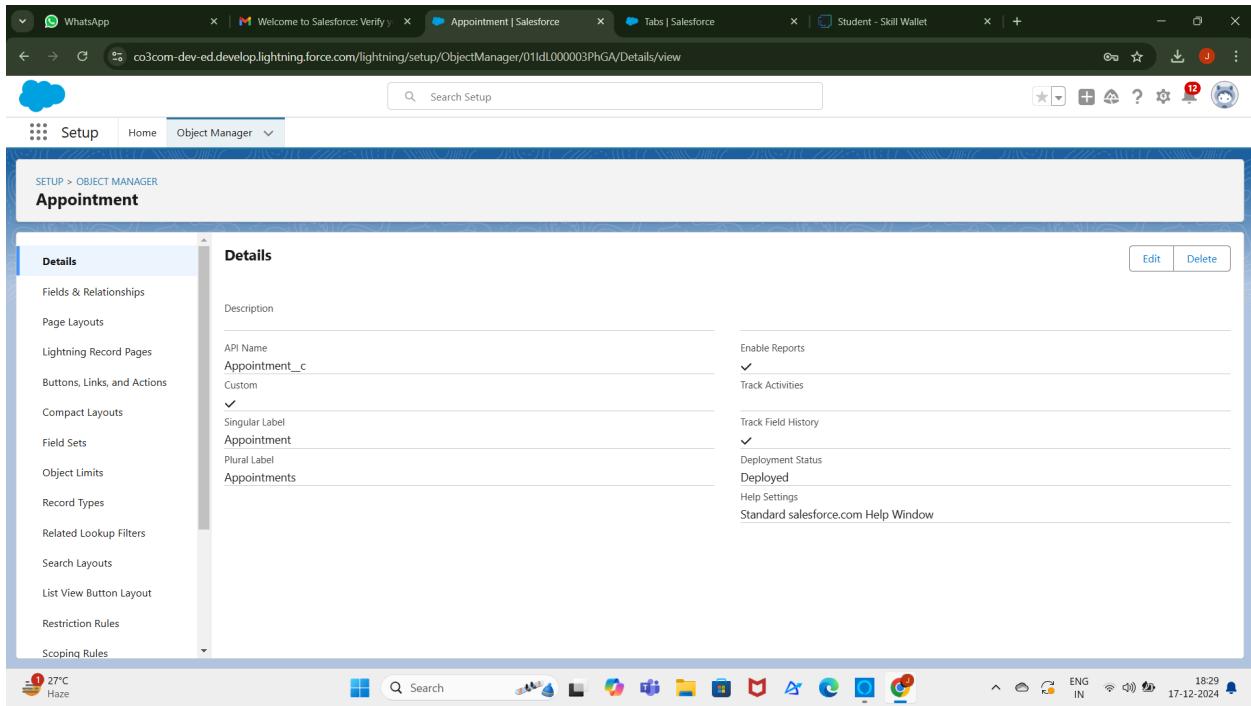
- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name >> Customer Details
- Plural label name >> Customer Details
- Enter Record Name Label and Format
- Record Name >> Customer Name
- Data Type >> Text
- Click on Allow reports and Track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

The screenshot shows the Salesforce Setup interface. The top navigation bar includes tabs for WhatsApp, Welcome to Salesforce: Verify, Customer Details | Salesforce, Tabs | Salesforce, Student - Skill Wallet, and several others. The main title is "Customer Details | Salesforce". The left sidebar under "SETUP > OBJECT MANAGER" lists various configuration options: Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, and Scoping Rules. The main content area is titled "Customer Details" and shows the "Details" tab. It contains fields for API Name (Customer_Details__c), Singular Label (Customer Details), Plural Label (Customer Details), and other settings like Enable Reports, Track Activities, Track Field History, Deployment Status (Deployed), and Help Settings (Standard salesforce.com Help Window). At the bottom right of the content area are "Edit" and "Delete" buttons. The status bar at the bottom shows system information: 27°C Haze, a weather icon, a search bar, and various system icons.

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:

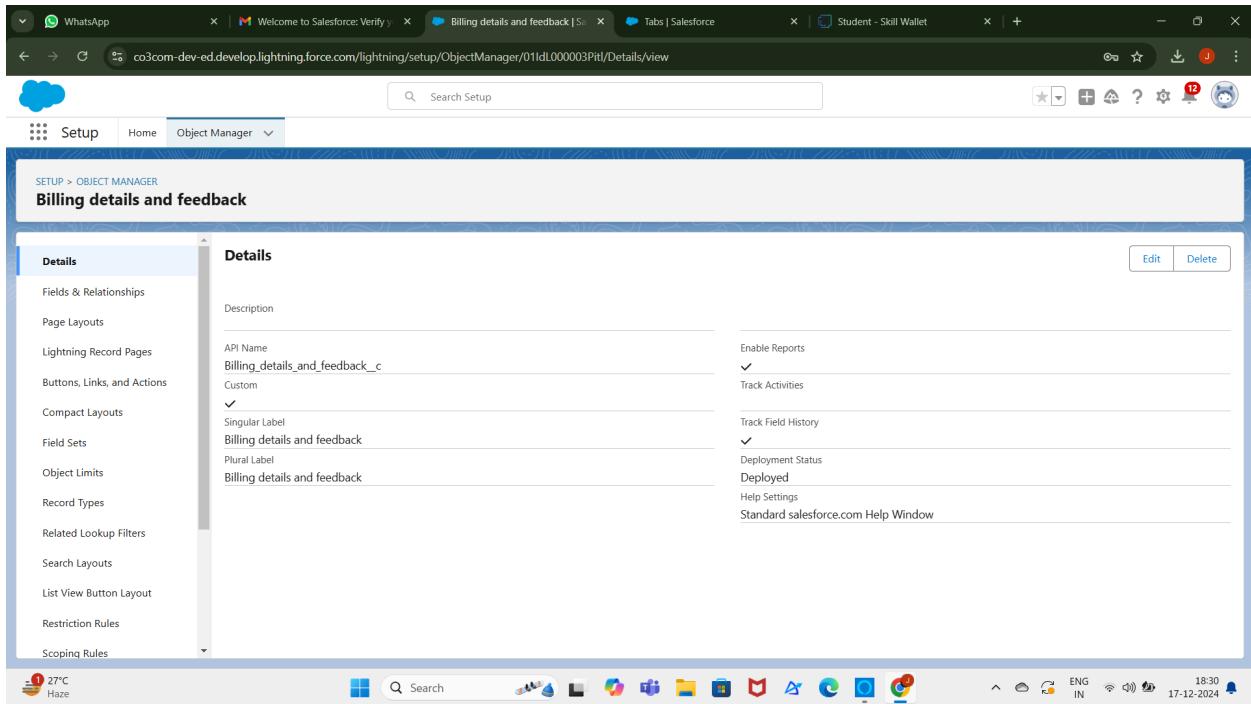
- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name >> Service records
- Plural label name >> Service records
- Enter Record Name Label and Format
- Record Name >>Service records Name
- Data Type >> Auto Number
- Display Format >> ser-{000}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

The screenshot shows the Salesforce Setup interface. The top navigation bar includes tabs for WhatsApp, Welcome to Salesforce: Verify, Service records | Salesforce, Tabs | Salesforce, Student - Skill Wallet, and a new tab. The main content area is titled "SETUP > OBJECT MANAGER" and "Service records". On the left, a sidebar lists various object configuration options like Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main right panel is titled "Details" and contains fields for API Name (Service_records__c), Singular Label (Service records), Plural Label (Service records), and other settings such as Enable Reports, Track Activities, Track Field History, Deployment Status (Deployed), and Help Settings (Standard salesforce.com Help Window). At the bottom, there are "Edit" and "Delete" buttons. The status bar at the bottom shows the URL https://co3com-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01dL000003PinJ/Details/view, the date 17-12-2024, and the time 18:30.

Create Billing details and Feedbacks Object:

To create an object:

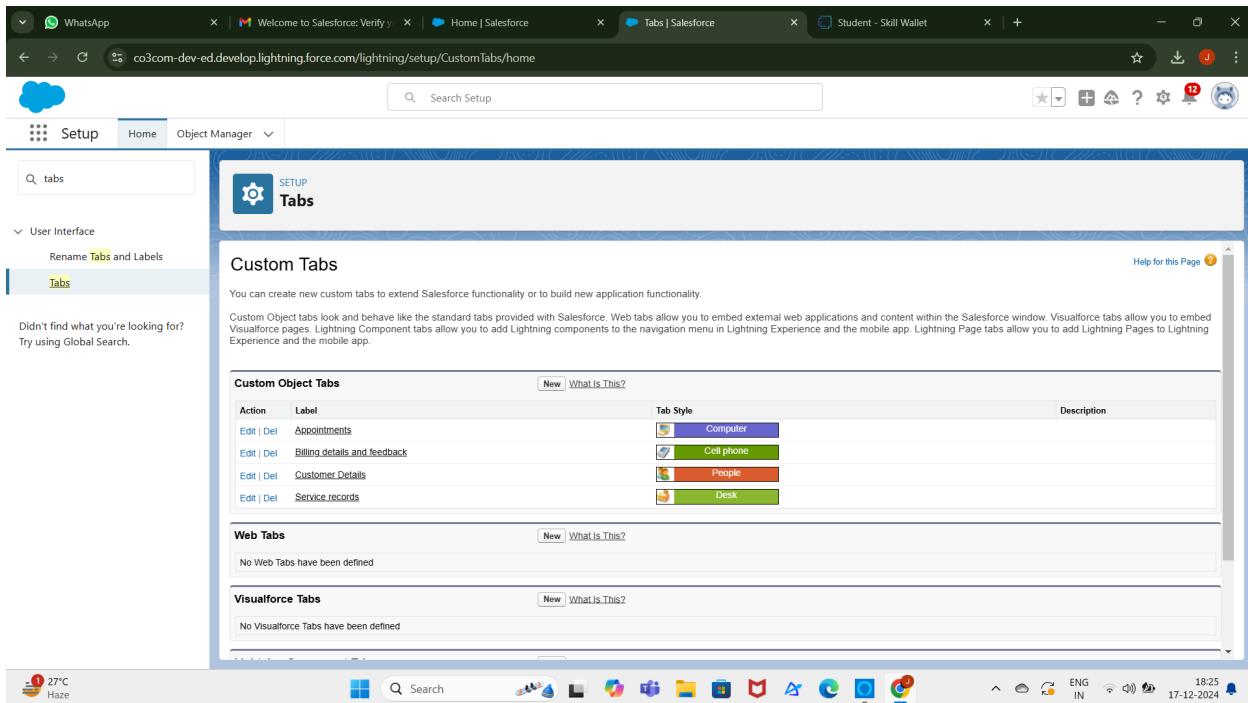
- From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
- Enter the label name >> Billing details and feedback
- Plural label name >> Billing details and feedback
- Enter Record Name Label and Format
- Record Name >> Billing details and feedback Name
- Data Type >> 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".

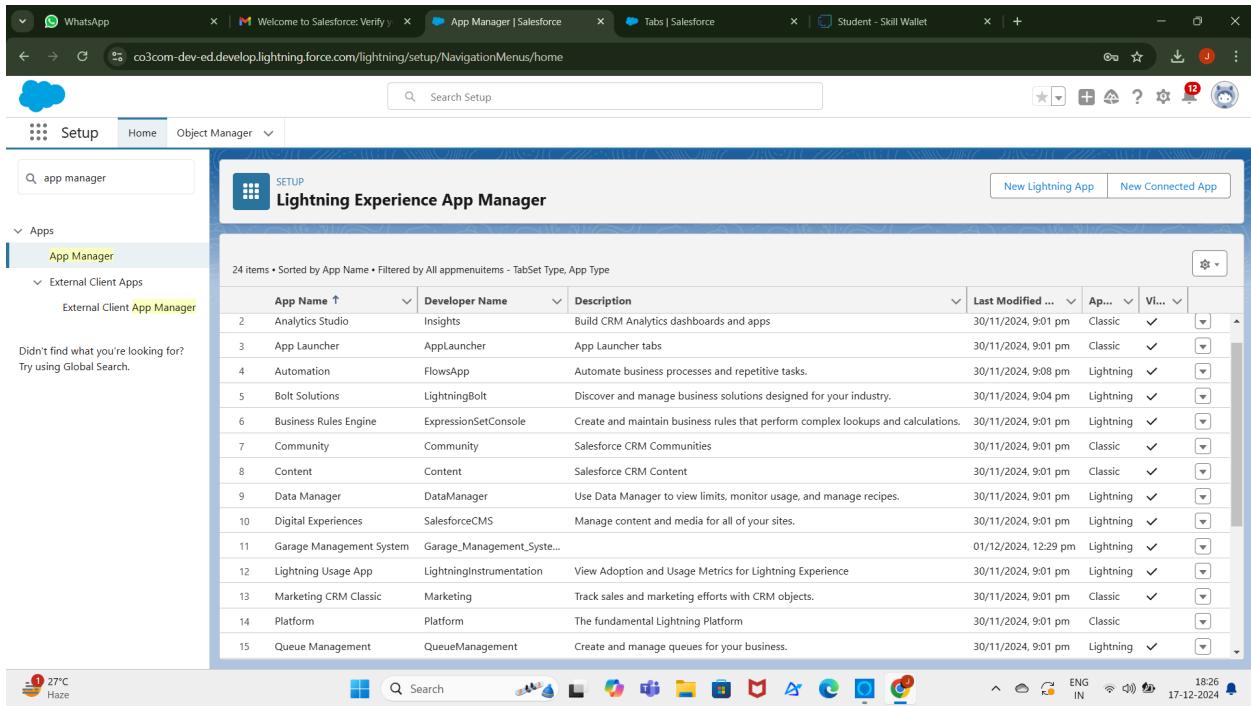


Step-5:

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.

The screenshot shows the Salesforce Object Manager interface. The left sidebar is collapsed, and the main area displays the 'Fields & Relationships' section for the 'Billing details and feedback' object. The table lists eight fields, each with its Field Label, Field Name, Data Type, Controlling Field, and Index status. The fields listed are: Billing details and feedback Name (Name, Auto Number), Created By (CreatedBy, Lookup(User)), Last Modified By (LastModifiedBy, Lookup(User)), Owner (OwnerId, Lookup(User,Group)), Payment Paid (Payment_Paid__c, Currency(18, 0)), Payment Status (Payment_Status__c, Picklist), Rating for service (Rating_for_service__c, Text(1)), and Service records (Service_records__c, Lookup(Service records)). The 'INDEXED' column shows checkmarks for most fields except 'Rating for service'.

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|-----------------------------------|-----------------------|-------------------------|-------------------|---------|
| Billing details and feedback Name | Name | Auto Number | | ✓ |
| Created By | CreatedBy | Lookup(User) | | |
| Last Modified By | LastModifiedBy | Lookup(User) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |
| Payment Paid | Payment_Paid__c | Currency(18, 0) | | |
| Payment Status | Payment_Status__c | Picklist | | |
| Rating for service | Rating_for_service__c | Text(1) | | |
| Service records | Service_records__c | Lookup(Service records) | | ✓ |

- 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.

The screenshot shows the Salesforce Setup interface for the Appointment object. On the left, a sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area is titled 'Validation Rules' and shows one item: 'Vehicle' with rule name 'Vehicle', error location 'Vehicle number plate', message 'Please enter valid number', active status checked, and modified by 'SHAIK JASMEEN' on 01/12/2024 at 2:27 pm.

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.

The screenshot shows the Salesforce Setup interface for the Billing details and feedback object. The sidebar and main content area are identical to the previous screenshot, displaying the 'Validation Rules' section with one item: 'rating_should_be_less_than_5' with rule name 'rating_should_be_less_than_5', error location 'Rating for service', message 'rating should be from 1 to 5', active status checked, and modified by 'SHAIK JASMEEN' on 01/12/2024 at 2:40 pm.

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.

The screenshot shows the Salesforce Matching Rules page. The left sidebar has 'Data' expanded, with 'Matching Rules' selected. A search bar at the top left contains 'matching'. The main area title is 'Matching Rules' with a subtitle 'All Matching Rules'. Below it is a section titled 'What Are Matching Rules?'. A table lists four matching rules:

| Action | Rule Name | Object | Status | Description | Last Modified Date | Last Modified By |
|------------|--------------------------------|------------------|--------|--|--------------------|------------------|
| Deactivate | Matching_customer_details | Customer Details | Active | Matching rule for account records. More info | 01/12/2024 | SJASM |
| Deactivate | Standard Account Matching Rule | Account | Active | Matching rule for account records. More info | 30/11/2024 | SJASM |
| Deactivate | Standard Contact Matching Rule | Contact | Active | Matching rule for contact records. More info | 30/11/2024 | SJASM |
| Deactivate | Standard Lead Matching Rule | Lead | Active | Matching rule for lead records. More info | 30/11/2024 | SJASM |

At the bottom right of the table, there are navigation links: A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other | All.

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

The screenshot shows the Salesforce Duplicate Rules page. The left sidebar has 'Data' expanded, with 'Duplicate Rules' selected. A search bar at the top left contains 'duplicate'. The main area title is 'Duplicate Rules' with a subtitle 'All Duplicate Rules'. Below it is a section titled 'What Are Duplicate Rules?'. A table lists five duplicate rules:

| Rule Name | Description | Object | Matching Rule | Active | Last Modified By | Last Modified Date |
|---------------------------------|--|------------------|--------------------------------|--------|------------------|--------------------|
| Customer_Detail_duplicate | Identify accounts that duplicate other accounts. | Customer Details | Matching_customer_details | ✓ | SJASM | 01/12/2024 |
| Standard Account Duplicate Rule | Identify contacts that duplicate other contacts and leads. | Account | Standard Account Matching Rule | ✓ | SJASM | 30/11/2024 |
| Standard Contact Duplicate Rule | Identify leads that duplicate other leads and contacts. | Contact | Standard Contact Matching Rule | ✓ | SJASM | 30/11/2024 |
| Standard Lead Duplicate Rule | Identify leads that duplicate other leads and contacts. | Lead | Standard Lead Matching Rule | ✓ | SJASM | 30/11/2024 |

At the bottom right of the table, there are navigation links: A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other | All.

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.

The screenshot shows the Salesforce Setup interface with the 'Profiles' tab selected. The left sidebar shows 'Users' and 'Profiles'. The main area displays a table of profiles with columns for Action, Profile Name, User License, and Custom. The table lists various profiles like Analytics Cloud Integration User, Authenticated Website, Chatter External User, etc. A search bar at the top right says 'Help for this Page'.

| Action | Profile Name | User License | Custom |
|---|-------------------------------------|----------------------------------|-------------------------------------|
| <input type="checkbox"/> Edit Clone | Analytics Cloud Integration User | Analytics Cloud Integration User | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Analytics Cloud Security User | Analytics Cloud Integration User | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Authenticated Website | Authenticated Website | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Authenticated Website | Authenticated Website | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Del ... | B2B Reordering Portal Buyer Profile | External Apps Login | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Chatter External User | Chatter External | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Chatter Free User | Chatter Free | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Chatter Moderator User | Chatter Free | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Contract Manager | Salesforce | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Cross Org Data Proxy User | XOrg Proxy User | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Del ... | Custom Marketing Profile | Salesforce | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Edit Del ... | Custom Sales Profile | Salesforce | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Edit Del ... | Custom Support Profile | Salesforce | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Customer Community Login User | Customer Community Login | <input type="checkbox"/> |

The screenshot shows the Salesforce Setup interface with the 'Profiles' tab selected. The left sidebar shows 'Users' and 'Profiles'. The main area displays a table of profiles with columns for Action, Profile Name, User License, and Custom. The table lists various profiles like sales.person, Salesforce API Only System Integrations, Silver Partner User, Solution Manager, Standard Platform User, Standard User, and System Administrator. A search bar at the top right says 'Help for this Page'.

| Action | Profile Name | User License | Custom |
|---|---|------------------------|-------------------------------------|
| <input type="checkbox"/> Edit Del ... | sales.person | Salesforce Platform | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Edit Del ... | Salesforce API Only System Integrations | Salesforce Integration | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Silver Partner User | Silver Partner | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Solution Manager | Salesforce | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Standard Platform User | Salesforce Platform | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | Standard User | Salesforce | <input type="checkbox"/> |
| <input type="checkbox"/> Edit Clone | System Administrator | Salesforce | <input type="checkbox"/> |

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.

The screenshot shows the Salesforce Setup - Roles page. On the left, there's a sidebar with 'Users' and 'Roles' selected. The main area displays a 'Sample Role Hierarchy' diagram under 'Territory-based Sample'. The hierarchy starts with 'Executive Staff' at the top, which includes 'CEO', 'President', 'CFO', and 'VP, Sales'. Arrows point from these to 'Western Sales Director' and 'Eastern Sales Director'. These directors have arrows pointing to 'Western Sales Rep' and 'Eastern Sales Rep' respectively. At the bottom of the hierarchy is 'International Sales Director', which has arrows pointing to 'International Sales Rep' and 'Asian Sales Rep'. A note on the right says 'View & edit data, roll up forecasts, & generate reports for all users below this level'. A 'Set Up Roles' button is at the bottom right of the diagram.

The screenshot shows the 'Creating the Role Hierarchy' section of the Salesforce Setup - Roles page. It displays 'Your Organization's Role Hierarchy' with a tree view. The root node is 'Salesforce', which branches into 'CEO', 'CFO', 'COO', 'Manager', and 'Salesforce'. Each node has 'Edit | Del | Assign' and 'Add Role' options. A note at the top says 'You can build on the existing role hierarchy shown on this page. To insert a new role, click Add Role.' A 'Show in tree view' button is located at the top right of the hierarchy tree.

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.

| Action | Full Name | Alias | Username | Role | Active | Profile |
|--------------------------|------------------|---------|---|--------------|-------------------------------------|----------------------------------|
| <input type="checkbox"/> | Chatter Expert | Chatter | chatty.00dd00000gpo7uat.rckdnivinj@chatter.salesforce.com | | <input checked="" type="checkbox"/> | Chatter Free User |
| <input type="checkbox"/> | JASMEEN SHAIK | SJASME | jaspro@co3.com | | <input checked="" type="checkbox"/> | System Administrator |
| <input type="checkbox"/> | Jassu Shak | Sjas | jassu@co3.com | Manager | <input checked="" type="checkbox"/> | Manager |
| <input type="checkbox"/> | Mutasa Shakil | smufa | mutufu@gmail.com | sales person | <input checked="" type="checkbox"/> | sales person |
| <input type="checkbox"/> | Pikuho Shakil | spiku | pikuhog@mail.com | sales person | <input checked="" type="checkbox"/> | sales person |
| <input type="checkbox"/> | Simba Shakil | Siba | simba@gmail.com | sales person | <input checked="" type="checkbox"/> | sales person |
| <input type="checkbox"/> | User_Integration | integ | integration@00dd00000gpo7uat.com | | <input checked="" type="checkbox"/> | Analytics Cloud Integration User |
| <input type="checkbox"/> | User_Security | sec | insightssecurity@00dd00000gpo7uat.com | | <input checked="" type="checkbox"/> | Analytics Cloud Security User |

Step-12: Creating New Public Groups

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

The screenshot shows the Salesforce Setup interface. The left sidebar is open with 'Users' selected under 'Public Groups'. The main content area is titled 'Public Groups' and contains a table with one row:

| Action | Label | Group Name | Created By | Created Date |
|------------|------------|------------|---------------|---------------------|
| Edit Del | sales team | sales_team | JASMEEN_SHAIK | 01/12/2024, 3:59 pm |

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.

The screenshot shows the Salesforce Setup interface. The left sidebar is open with 'Sharing Settings' selected under 'Security'. The main content area is titled 'Sharing Settings' and contains a table with rows for various objects:

| Object | Default Internal Access | Default External Access | Grant Access Using Hierarchies |
|----------------------|----------------------------|-------------------------|--------------------------------|
| Lead | Public Read/Write/Transfer | Private | ✓ |
| Account and Contract | Public Read/Write | Private | ✓ |
| Contact | Controlled by Parent | Controlled by Parent | ✓ |
| Order | Controlled by Parent | Controlled by Parent | ✓ |
| Asset | Controlled by Parent | Controlled by Parent | ✓ |
| Opportunity | Public Read/Write | Private | ✓ |
| Case | Public Read/Write/Transfer | Private | ✓ |
| Campaign | Public Full Access | Private | ✓ |
| Campaign Member | Controlled by Campaign | Controlled by Campaign | ✓ |
| User | Public Read Only | 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.

The screenshot shows the Salesforce Flows page. At the top, there are tabs for WhatsApp, Welcome to Salesforce: Verify, Flows | Salesforce, Tabs | Salesforce, Student - Skill Wallet, and a new tab. Below the tabs, there's a search bar and a 'Flow Trigger Explorer' button. On the left, a sidebar shows 'Process Automation' with 'Flows' selected, and 'Identity' with 'Login Flows'. A message says 'Didn't find what you're looking for? Try using Global Search.' The main area is titled 'Flows' and contains a section for 'Try the Automation Lightning App!' with a cartoon character. Below this is a table titled 'Flow Definitions' with a 'All Flows' dropdown. The table has columns for 'Flow Label', 'Process Type', 'Actions...', 'Trigger...', 'Package State', 'Pac...', 'Last Modified...', and 'Last Modified Date...'. There are 44 items listed, including 'Add or Modify Service Appointment Attendees', 'Basic Approval Request', 'Billing Amount Flow', 'Book Appointment from Invitation', 'Cancel Item Flow', and 'Change Case Owner to Incident Owner'. The status for most flows is 'Managed-Installed'.

The screenshot shows the Flow Builder interface for the 'Billing Amount Flow - V1'. The top navigation bar includes tabs for WhatsApp, Project Template, Student - Skill Wallet, SI-8091-1734443403, All Folders | Dashboard, Flows | Salesforce, and the current flow. The toolbar includes 'Select Elements', 'Run', 'Debug', 'View Tests', 'Save As New Version', 'Save', and 'Deactivate'. The main workspace shows a flow diagram starting with a 'Start' step (Record-Triggered Flow) triggered by 'A record is created or updated' on the object 'Billing details and feedback'. This leads to an 'Amount Update' step (Update Records) and then an 'Email Alert' step (Action). The flow ends at an 'End' step. There are buttons for 'Run Immediately', 'Add Scheduled Paths (Optional)', and 'Open Flow Trigger Explorer for Billing details...'. The bottom of the screen shows a taskbar with various application icons and system status indicators.

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

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

AmountDistributionHandler.apxc * AmountDistribution.apxt *

Code Coverage: None • API Version: 62 Go To

```
1 * trigger AmountDistribution on Appointment__c (before insert, before update) {  
2  
3  
4  
5     if(trigger.isbefore && trigger.isinsert || trigger.isupdate){  
6         AmountDistributionHandler.amountDist(trigger.new);  
7     }  
8  
9  
10 }  
11  
12  
13 }  
14 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

| User | Application | Operation | Time | Status | Read | Size |
|--|-------------|-----------|------|--------|------|------|
| Filter Click here to filter the log list | | | | | | |

27°C Haze 18:43 17-12-2024

ident - Skill Wallet

Flow Trigger Explorer New Flow

Settings.

| State | Pac... | Last Modifi... | Last Modified D... |
|-----------|---------------|---------------------|--------------------|
| installed | | | |
| installed | | | |
| installed | SHAIK JASMEEN | 01/12/2024, 6:00 pm | |
| installed | | | |
| installed | | | |
| installed | | | |

18:43 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

```
1 * public class AmountDistributionHandler {  
2     public static void amountDist(list<Appointment__c> listApp){  
3  
4         list<Service_records__c> serList = new list <Service_records__c>();  
5  
6  
7         for(Appointment__c app : listApp){  
8             if(app.Maintenance_service__c == true && app.Repairs__c == true && app.Replacement_P...  
9                 app.Service_Amount__c = 10000;  
10            }  
11            else if(app.Maintenance_service__c == true && app.Repairs__c == true){  
12                app.Service_Amount__c = 5000;  
13            }  
14        }  
15    }  
16    else if(app.Maintenance_service__c == true && app.Repairs__c == true){  
17        app.Service_Amount__c = 5000;  
18    }  
19 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

| User | Application | Operation | Time | Status | Read | Size |
|--|-------------|-----------|------|--------|------|------|
| Filter Click here to filter the log list | | | | | | |

27°C Haze 18:44 17-12-2024

ident - Skill Wallet

Flow Trigger Explorer New Flow

Settings.

| State | Pac... | Last Modifi... | Last Modified D... |
|-----------|---------------|---------------------|--------------------|
| installed | | | |
| installed | | | |
| installed | SHAIK JASMEEN | 01/12/2024, 6:00 pm | |
| installed | | | |
| installed | | | |
| installed | | | |

18:44 17-12-2024

Developer Console - Google Chrome
co3com-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

```
AmountDistributionHandler.apex * AmountDistribution.apxt *
```

Code Coverage: None API Version: 62 Go To

```
17
18     app.Service_Amount__c = 5000;
19
20 }
21
22 else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
23
24     app.Service_Amount__c = 8000;
25
26 }
27
28 else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
29
30     app.Service_Amount__c = 7000;
31
32 }
33
34 else if(app.Maintenance_service__c == true){
35
36     app.Service_Amount__c = 2000;
37
38 }
39
40 else if(app.Repairs__c == true){
41
42     app.Service_Amount__c = 3000;
43
44 }
45
46 else if(app.Replacement_Parts__c == true){
47
48     app.Service_Amount__c = 5000;
49
50 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

| User | Application | Operation | Time | Status | Read | Size |
|--------------|--------------------|--------------------|---------------------|---------|------|------|
| SAIKAJASMEEN | AmountDistribution | AmountDistribution | 17-12-2024, 6:00 pm | Success | | 0 B |

Filter Click here to filter the log list

27°C Haze 18:44 17-12-2024

ident - Skill Wallet

Flow Trigger Explorer New Flow

Developer Console - Google Chrome
co3com-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

```
AmountDistributionHandler.apex * AmountDistribution.apxt *
```

Code Coverage: None API Version: 62 Go To

```
35
36     app.Service_Amount__c = 2000;
37
38 }
39
40 else if(app.Repairs__c == true){
41
42     app.Service_Amount__c = 3000;
43
44 }
45
46 else if(app.Replacement_Parts__c == true){
47
48     app.Service_Amount__c = 5000;
49
50 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

| User | Application | Operation | Time | Status | Read | Size |
|--------------|--------------------|--------------------|---------------------|---------|------|------|
| SAIKAJASMEEN | AmountDistribution | AmountDistribution | 17-12-2024, 6:00 pm | Success | | 0 B |

Filter Click here to filter the log list

27°C Haze 18:44 17-12-2024

ident - Skill Wallet

Flow Trigger Explorer New Flow

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.

The screenshot shows the Garage Management system's Reports section. The left sidebar lists categories: REPORTS, FOLDERS, and FAVORITES. Under REPORTS, there are links for Recent, Created by Me, Private Reports, Public Reports, All Reports, and a folder named 'Garage Management Folder'. The main content area displays a table titled 'All Folders' with 8 items. The columns are: Name, Created By, Created On, Last Modified By, and Last Modified Date. The table data is as follows:

| | Name | Created By | Created On | Last Modified By | Last Modified Date |
|-----------------|---|-------------------|---------------------|-------------------|---------------------|
| Recent | Einstein Bot Reports | Automated Process | 30/11/2024, 9:01 pm | Automated Process | 30/11/2024, 9:01 pm |
| Created by Me | Einstein Bot Reports Spring '23 | Automated Process | 30/11/2024, 9:01 pm | Automated Process | 30/11/2024, 9:01 pm |
| Private Reports | Einstein Bot Reports Summer '23 | Automated Process | 30/11/2024, 9:01 pm | Automated Process | 30/11/2024, 9:01 pm |
| Public Reports | Einstein Bot Reports Summer '22 | Automated Process | 30/11/2024, 9:01 pm | Automated Process | 30/11/2024, 9:01 pm |
| All Reports | Einstein Bot Reports Winter '23 | Automated Process | 30/11/2024, 9:01 pm | Automated Process | 30/11/2024, 9:01 pm |
| FOLDERS | Enablement Dashboard Reports Spring '24 | Automated Process | 30/11/2024, 9:01 pm | Automated Process | 30/11/2024, 9:01 pm |
| All Folders | Enablement Dashboard Reports Summer '24 | Automated Process | 30/11/2024, 9:01 pm | Automated Process | 30/11/2024, 9:01 pm |
| | Garage Management Folder | SHAIK JASMEEN | 1/12/2024, 6:29 pm | SHAIK JASMEEN | 1/12/2024, 6:29 pm |

The status bar at the bottom shows: 25°C Haze, ENG IN, 23:55, 17-12-2024.

This screenshot is identical to the one above, showing the 'All Folders' list. However, a context menu is open over the 'Garage Management Folder' row. The menu options are: Favorite, Share (which is highlighted in blue), Rename, and Delete.

The status bar at the bottom shows: 25°C Haze, ENG IN, 23:56, 17-12-2024.

Screenshot of the Salesforce Setup interface showing the 'Report Types' page.

The left sidebar shows the navigation path: Feature Settings > Analytics > Reports & Dashboards > Report Types.

The main content area is titled 'Custom Report Types' and includes the following sections:

- What is a Custom Report Type?**: A brief description stating that custom report types allow users to build a framework in the report wizard, from which users can create and customize reports. It highlights that users can build custom report types off 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
- Diagram**: An illustration showing three objects (A, B, C) and their relationships, followed by a screenshot of the 'Create New Report' wizard.
- Note**: A note stating that the visibility of custom report types in the report wizard is controlled by users' access to the objects in the report type.
- Buttons**: 'Don't show me this page again' and 'Continue'.

The browser address bar shows the URL: <https://co3com-dev-ed.lightning.force.com/lightning/setup/CustomReportTypes/home>.

Screenshot of the Salesforce Lightning interface showing a report titled 'New Service information Report'.

The top navigation bar includes links for Customer Details, Appointments, Service records, Billing details and feedback, Reports (selected), and Dashboards.

The report summary section shows 'Total Records' as 6.

A chart titled 'Performance' displays 'Record Count' across categories 3, 4, and 5.

The 'Details' section contains a table with 6 rows, each with columns for Customer Name, Appointment Name, Service records Name, and Billing details and feedback Name.

| | 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 |

Report settings at the bottom include Row Counts, Detail Rows, Grand Total, and 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.

The screenshot shows the Salesforce All Folders page. On the left, there's a sidebar with categories like Dashboards, All Folders (which is selected), Folders, and Favorites. The main area displays a table of dashboards and folders. The table has columns for Name, Created By, Created On, Last Modified By, and Last Modified Date. The 'All Folders' section contains three items: 'Enablement Dashboard Spring '24', 'Enablement Dashboard Summer '24', and 'Service Rating dashboard'. The 'Service Rating dashboard' was created by SHAIK JASMEEN on 1/12/2024 at 7:06 pm.

Create New Dashboard:

The screenshot shows the Customer Review1 dashboard. At the top, there's a green banner stating "You started a dashboard subscription." Below it, a line chart titled "New Service information Report" shows the relationship between "Rating for service" (X-axis, values 3, 4, 5) and "Record Count" (Y-axis, values 0, 1, 2, 3). The data points show a downward trend from approximately (3, 3) to (5, 1). The chart includes a legend for "Payment Status" with "Completed" marked. The dashboard also features a "View Report (New Service information Report)" button.

Testing and Validation:

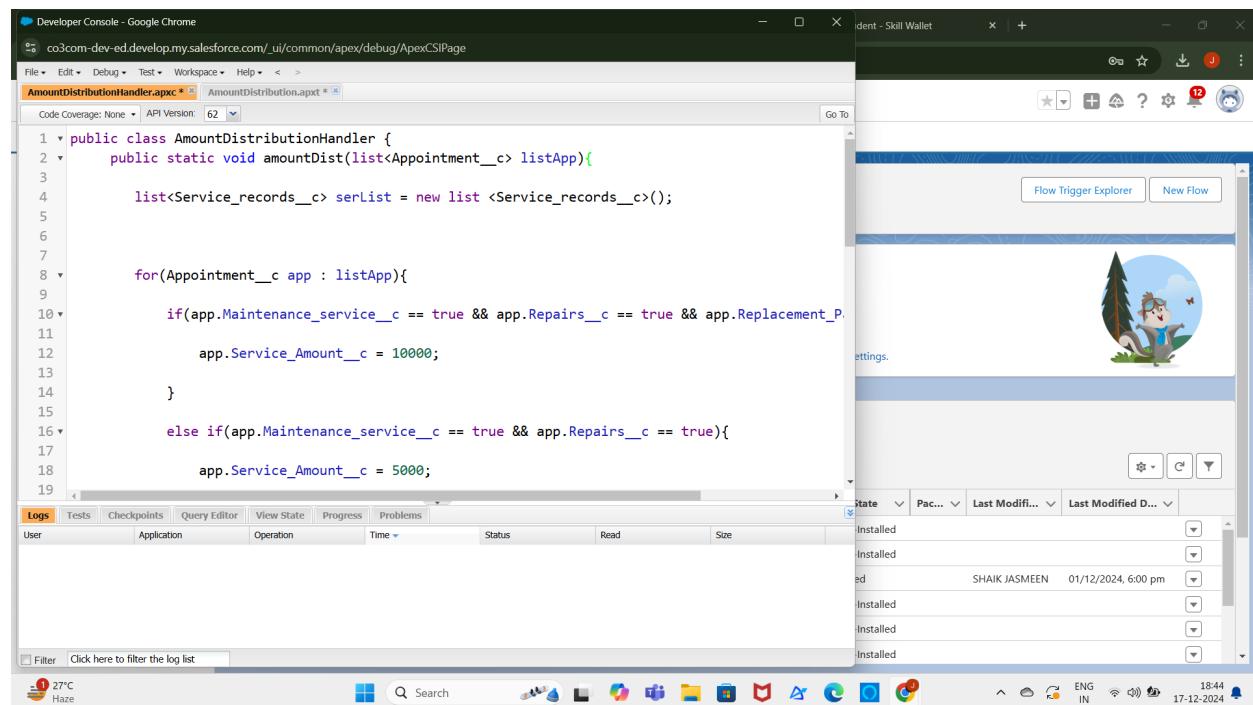
Testing and Validation Approach for Garage Management System in Salesforce

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

```
AmountDistributionHandler.apex * AmountDistribution.apxt *
```

Code Coverage: None API Version: 62 Go To

```
17
18     app.Service_Amount__c = 5000;
19
20 }
21
22 else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
23
24     app.Service_Amount__c = 8000;
25
26 }
27
28 else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
29
30     app.Service_Amount__c = 7000;
31
32 }
33
34 else if(app.Maintenance_service__c == true){
35 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

| User | Application | Operation | Time | Status | Read | Size |
|---------------|-------------|-----------|---------------------|--------|------|------|
| SHAIK JASMEEN | | | 01/12/2024, 6:00 pm | | | |

Filter Click here to filter the log list

27°C Haze 18:44 17-12-2024

ident - Skill Wallet

Flow Trigger Explorer New Flow

Settings.

State Pac... Last Modifi... Last Modified D...

| State | Pac... | Last Modifi... | Last Modified D... |
|-----------|---------------|---------------------|--------------------|
| Installed | | | |
| Installed | | | |
| Installed | SHAIK JASMEEN | 01/12/2024, 6:00 pm | |
| Installed | | | |
| Installed | | | |

Developer Console - Google Chrome
co3com-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

```
AmountDistributionHandler.apex * AmountDistribution.apxt *
```

Code Coverage: None API Version: 62 Go To

```
35
36     app.Service_Amount__c = 2000;
37
38 }
39
40 else if(app.Repairs__c == true){
41
42     app.Service_Amount__c = 3000;
43
44 }
45
46 else if(app.Replacement_Parts__c == true){
47
48     app.Service_Amount__c = 5000;
49
50 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

| User | Application | Operation | Time | Status | Read | Size |
|---------------|-------------|-----------|---------------------|--------|------|------|
| SHAIK JASMEEN | | | 01/12/2024, 6:00 pm | | | |

Filter Click here to filter the log list

27°C Haze 18:44 17-12-2024

ident - Skill Wallet

Flow Trigger Explorer New Flow

Settings.

State Pac... Last Modifi... Last Modified D...

| State | Pac... | Last Modifi... | Last Modified D... |
|-----------|---------------|---------------------|--------------------|
| Installed | | | |
| Installed | | | |
| Installed | SHAIK JASMEEN | 01/12/2024, 6:00 pm | |
| Installed | | | |
| Installed | | | |

Snipping Tool Screenshot copied to clipboard Automatically saved to screenshots folder. Mark-up and share

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

The screenshot shows a dual-pane interface. On the left, the Developer Console displays the Apex trigger code for 'AmountDistributionHandler.apxt'. The code defines a trigger on 'Appointment__c' for 'before insert' and 'before update' events, calling the 'amountDist' method from 'AmountDistributionHandler'. On the right, the 'Flow Trigger Explorer' interface is visible, showing a flow diagram with a circular icon featuring a character in a forest setting.

```
trigger AmountDistribution on Appointment__c (before insert, before update) {
    if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
        AmountDistributionHandler.amountDist(trigger.new);
    }
}
```

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.

This screenshot shows the Salesforce Lightning Experience interface. The user is viewing the 'Recently Viewed' list under the 'Customer Details' tab. The list contains three items: Sunhoo, Piku, and Mufasa. The interface includes a top navigation bar with tabs like Customer Details, Appointments, Service records, Billing details and feedback, Reports, and Dashboards. A sidebar on the right displays the user's profile (SHAIK JASMEEN) and various settings, including 'DISPLAY DENSITY' set to 'Comfy'. The bottom of the screen shows a Windows taskbar with icons for various applications.

Customer Details

Recently Viewed

Customer Name

1 Sunhoo

2 Piku

3 Mufasa

SEARCH

DISPLAY DENSITY

Comfy

Compact

OPTIONS

Switch to Salesforce Classic

Add Username

Air: Moderate Now

ENG IN 15-12-2024 19:26

This screenshot shows the Salesforce Classic Experience interface. The user is viewing the 'Recently Viewed' list under the 'Customer Details' tab. The list contains three items: Mufasa, Piku, and Sunhoo. The interface includes a top navigation bar with tabs like Customer Details, Appointments, Service records, Billing details and feedback, Reports, and Dashboards. A toolbar at the top right provides options for New, Import, Change Owner, and Assign Label. The bottom of the screen shows a Windows taskbar with icons for various applications.

Customer Details

Recently Viewed

Customer Name

1 Mufasa

2 Piku

3 Sunhoo

SEARCH

New Import Change Owner Assign Label

24°C Haze

ENG IN 15-12-2024 20:36

This screenshot shows a Salesforce Customer Details page for a contact named 'Mufasa'. The page includes fields for Customer Name, Phone number, Gmail, Owner, Created By, and Last Modified By. The owner is listed as 'SHAIK JASMEEN'. The contact was created by 'SHAIK JASMEEN' on 15/12/2024 at 8:33 pm and last modified by the same user at 8:33 pm on the same day. The page also features a 'Related' section and navigation links for Appointments, Service records, Billing details and feedback, Reports, and Dashboards.

Customer Name: Mufasa

Phone number: 7731069803

Gmail: jasmeenshaik33@gmail.com

Owner: SHAIK JASMEEN

Created By: SHAIK JASMEEN, 15/12/2024, 8:33 pm

Last Modified By: SHAIK JASMEEN, 15/12/2024, 8:33 pm

This screenshot shows a Salesforce Customer Details page for a contact named 'Sunhoo'. The page includes fields for Customer Name, Phone number, Gmail, Owner, Created By, and Last Modified By. The owner is listed as 'SHAIK JASMEEN'. The contact was created by 'SHAIK JASMEEN' on 01/12/2024 at 9:01 pm and last modified by the same user at 9:01 pm on the same day. The page also features a 'Related' section and navigation links for Appointments, Service records, Billing details and feedback, Reports, and Dashboards.

Customer Name: Sunhoo

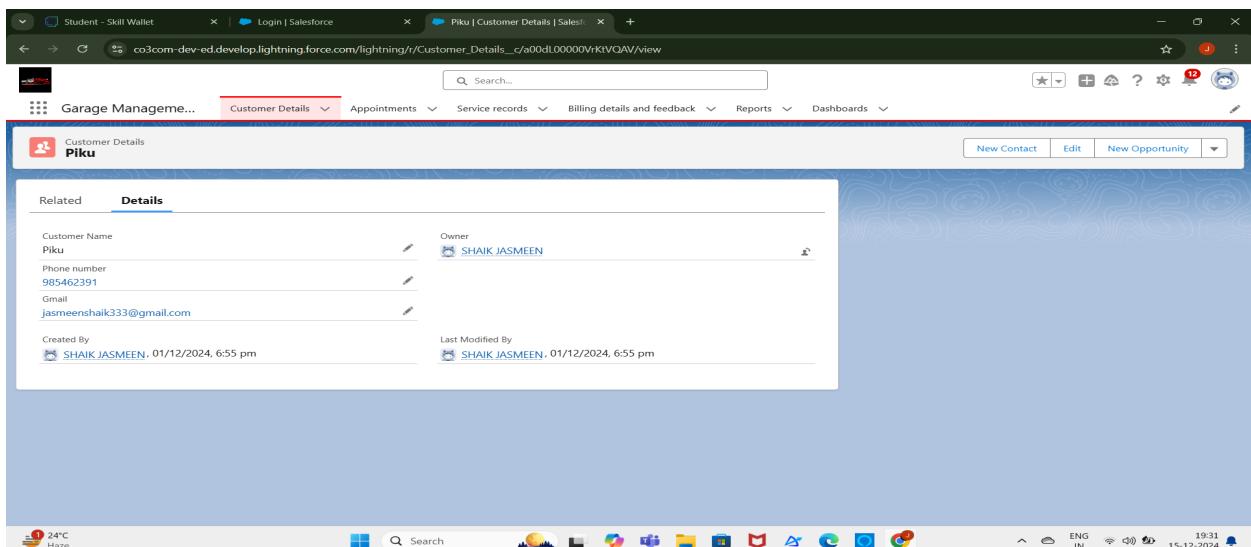
Phone number: 985462394

Gmail: jasmeenshaik33@gmail.com

Owner: SHAIK JASMEEN

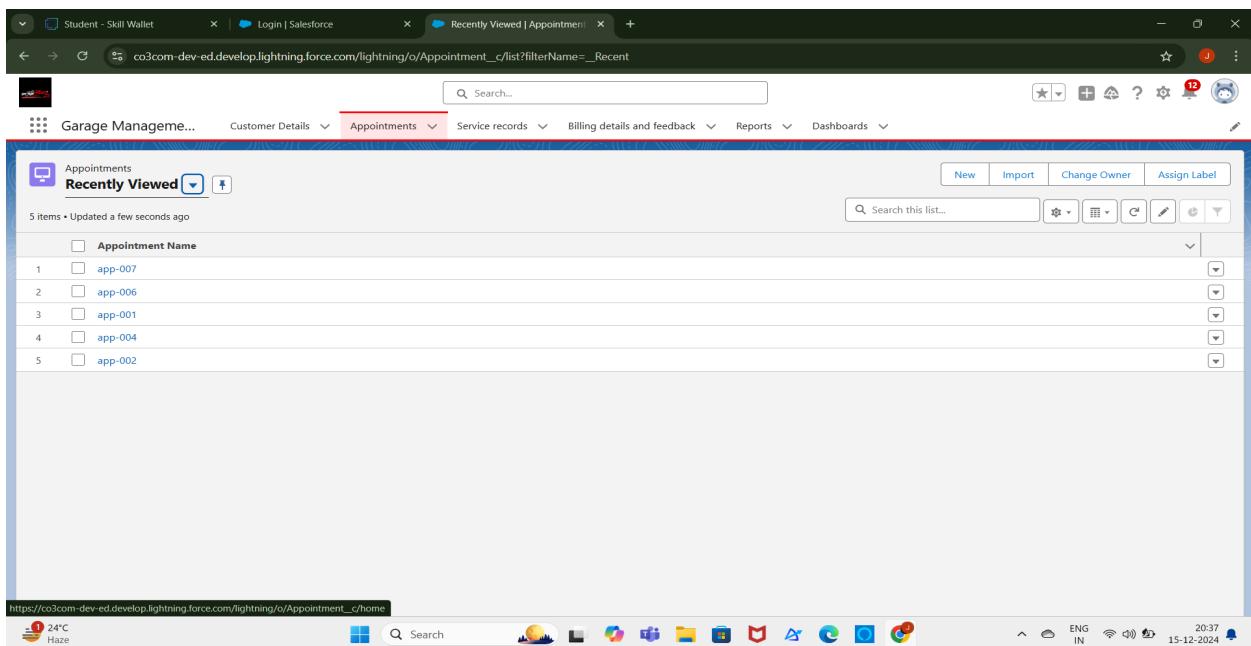
Created By: SHAIK JASMEEN, 01/12/2024, 9:01 pm

Last Modified By: SHAIK JASMEEN, 01/12/2024, 9:01 pm



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 | Sales| +

co3com-dev-ed.develop.lightning.force.com/lightning/r/Appointment_c/a01dL00000f5XGfQAM/view

Garage Management System

Customer Details Appointments Service records Billing details and feedback Reports Dashboards

Appointment app-001

Related Details

Appointment Name: app-001
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 Haze

Search

19:32 15-12-2024

Student - Skill Wallet | Login | Salesforce | app-006 | Appointment | Sales| +

co3com-dev-ed.develop.lightning.force.com/lightning/r/Appointment_c/a01dL00000f6lsHQAU/view

Garage Management System

Customer Details Appointments Service records Billing details and feedback Reports Dashboards

Appointment app-006

Related Details

Appointment Name: app-006
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

19:32 15-12-2024

The screenshot shows a Salesforce Lightning interface for a service appointment. The top navigation bar includes tabs for 'Customer Details', 'Appointments', 'Service records', 'Billing details and feedback', 'Reports', and 'Dashboards'. The main content area displays the details of an appointment named 'app-007' for customer 'Mufasa'. The 'Details' tab is active, showing fields such as Appointment Name, Customer Details, Maintenance service, Repairs, Replacement Parts, Service Amount, and Vehicle number plate. The record was created by 'SHAIK JASMEEN' on 15/12/2024 at 8:34 pm. The interface also includes a search bar, a toolbar with icons for New Contact, Edit, and New Opportunity, and a system status bar at the bottom.

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.

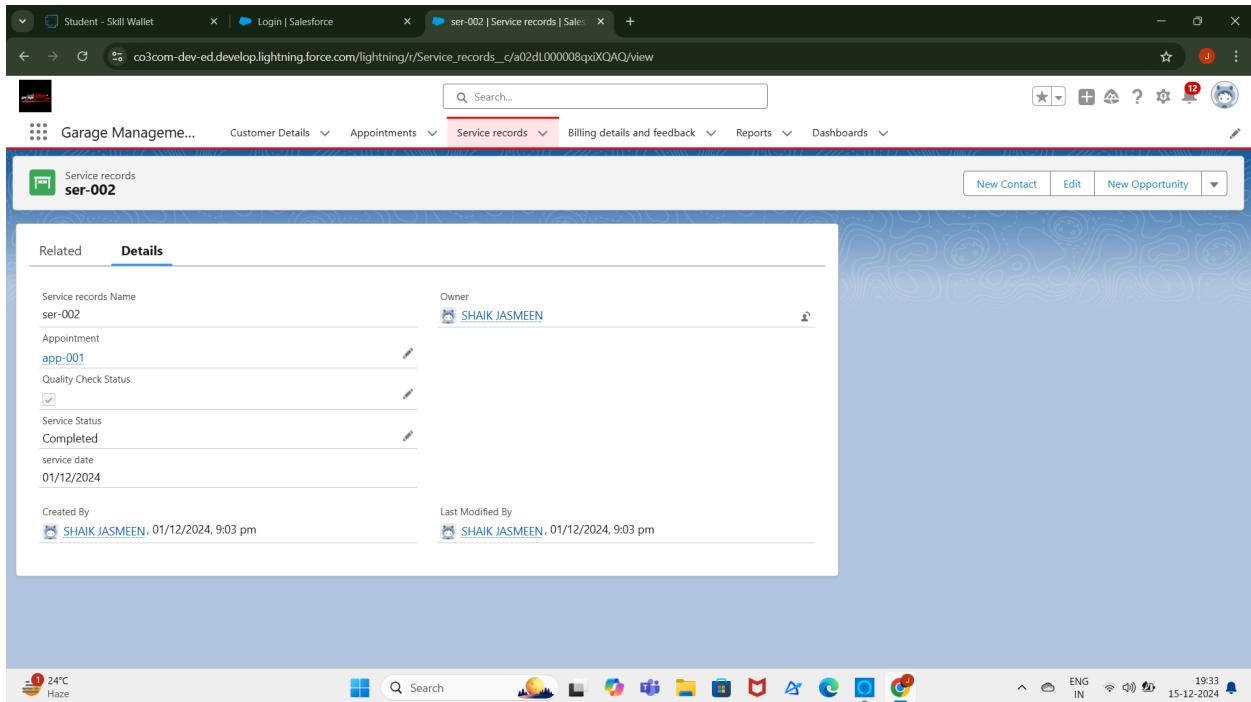
The screenshot shows a Salesforce Lightning interface for managing service records. The top navigation bar includes tabs for 'Customer Details', 'Appointments', 'Service records', 'Billing details and feedback', 'Reports', and 'Dashboards'. The main content area displays a 'Recently Viewed' list of service records. The list shows four items: 'ser-005', 'ser-002', 'ser-004', and 'ser-001'. The interface includes a search bar, a toolbar with icons for New, Import, Change Owner, and Assign Label, and a system status bar at the bottom.

This screenshot shows the details of a Service Record named 'ser-004' in the Garage Management system. The record was created by Shaik Jasmeen on 01/12/2024 at 9:39 pm and last modified by her at 9:39 pm on the same day. It includes fields for Service records Name (ser-004), Appointment (app-001), Quality Check Status (checked), Service Status (Completed), and service date (01/12/2024). The record is owned by Shaik Jasmeen.

| Field | Value |
|----------------------|------------------------------------|
| Service records Name | ser-004 |
| 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 |

This screenshot shows the details of a Service Record named 'ser-005' in the Garage Management system. The record was created by Shaik Jasmeen on 15/12/2024 at 8:34 pm and last modified by her at 8:34 pm on the same day. It includes fields for Service records Name (ser-005), Appointment (app-007), Quality Check Status (checked), Service Status (Completed), and service date (15/12/2024). The record is owned by Shaik Jasmeen.

| Field | Value |
|----------------------|------------------------------------|
| Service records Name | ser-005 |
| 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 |



Student - Skill Wallet | Login | Salesforce | ser-002 | Service records | Sales

co3com-dev-ed.develop.lightning.force.com/lightning/r/Service_records_c/a02dL000008qxiXQAQ/view

Garage Management... Customer Details Appointments Service records Billing details and feedback Reports Dashboards

Service records ser-002

Related Details

Service records Name: ser-002 Owner: SHAIK JASMEEN

Appointment: app-001

Quality Check Status:

Service Status: Completed

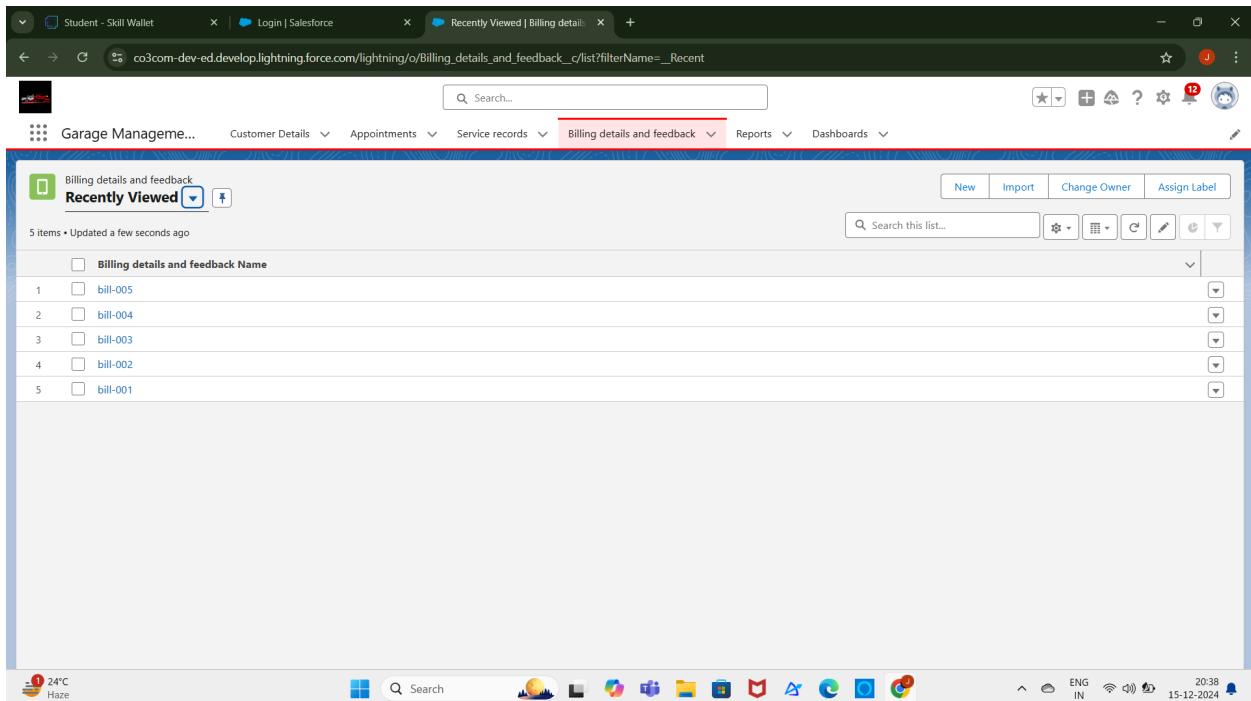
Service date: 01/12/2024

Created By: SHAIK JASMEEN, 01/12/2024, 9:03 pm Last Modified By: SHAIK JASMEEN, 01/12/2024, 9:03 pm

24°C Haze

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 | Recently Viewed | Billing details and feedback

co3com-dev-ed.develop.lightning.force.com/lightning/o/Billing_details_and_feedback_c/list?filterName=_Recent

Garage Management... Customer Details Appointments Service records Billing details and feedback Reports Dashboards

Billing details and feedback Recently Viewed

5 items • Updated a few seconds ago

| | Billing details and feedback Name |
|---|-----------------------------------|
| 1 | <input type="checkbox"/> bill-005 |
| 2 | <input type="checkbox"/> bill-004 |
| 3 | <input type="checkbox"/> bill-003 |
| 4 | <input type="checkbox"/> bill-002 |
| 5 | <input type="checkbox"/> bill-001 |

New Import Change Owner Assign Label

Search this list...

24°C Haze

Student - Skill Wallet | Login | Salesforce | bill-001 | Billing details and fees

co3com-dev-ed.develop.lightning.force.com/lightning/r/Billing_details_and_feedback_c/a03dl00000C3gfQAB/view

Garage Management System

Billing details and feedback

bill-001

Related Details

Billing details and feedback Name: bill-001

Service records: ser-001

Payment Paid

Rating for service: 4

Payment Status: Completed

Created By: SHAIK JASMEEN, 01/12/2024, 7:00 pm

Owner: SHAIK JASMEEN

Last Modified By: SHAIK JASMEEN, 01/12/2024, 9:06 pm

24°C Haze

Search

New Contact | Edit | New Opportunity

19:34 15-12-2024

Student - Skill Wallet | Login | Salesforce | bill-002 | Billing details and fees

co3com-dev-ed.develop.lightning.force.com/lightning/r/Billing_details_and_feedback_c/a03dl00000CdawOAB/view

Garage Management System

Billing details and feedback

bill-002

Related Details

Billing details and feedback Name: bill-002

Service records: ser-002

Payment Paid

Rating for service: 3

Payment Status: Completed

Created By: SHAIK JASMEEN, 01/12/2024, 9:03 pm

Owner: SHAIK JASMEEN

Last Modified By: SHAIK JASMEEN, 01/12/2024, 9:05 pm

24°C Haze

Search

New Contact | Edit | New Opportunity

19:34 15-12-2024

Student - Skill Wallet | Login | Salesforce | bill-004 | Billing details and fees

co3com-dev-ed.develop.lightning.force.com/lightning/r/Billing_details_and_feedback_c/a03d00000Cdh9QAF/view

Garage Management System

Billing details and feedback

bill-004

Customer Details Appointments Service records Billing details and feedback Reports Dashboards

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

Windows Taskbar: Weather, Search, File Explorer, Microsoft Edge, Google Chrome, etc.

System tray: ENG IN, 19:42, 15-12-2024, Notifications

Student - Skill Wallet | Login | Salesforce | bill-005 | Billing details and fees

co3com-dev-ed.develop.lightning.force.com/lightning/r/Billing_details_and_feedback_c/a03d00000DAeP0OAI/view

Garage Management System

Billing details and feedback

bill-005

Customer Details Appointments Service records Billing details and feedback Reports Dashboards

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

Windows Taskbar: Weather, Search, File Explorer, Microsoft Edge, Google Chrome, etc.

System tray: ENG IN, 20:38, 15-12-2024, Notifications

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 already, 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.

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

- Header:** The top navigation bar includes tabs for "Student - Skill Wallet", "Login | Salesforce", and "Recent | Reports | Salesforce".
- Breadcrumbs:** The path "co3com-dev-ed.develop.lightning.force.com/lightning/o/Report/home?queryScope=mru" is displayed.
- Page Title:** "Garage Management" is the active page in the navigation bar.
- Reports Tab:** The "Reports" tab is selected in the navigation bar.
- Search Bar:** A search bar at the top right allows searching for recent reports.
- Report List:** The main area displays a table of reports. One report is listed:

| REPORTS | Report Name | Description | Folder | Created By | Created On | Subscribed |
|---------|--------------------------------|-------------|--------------------------|---------------|--------------------|------------|
| Recent | New Service information Report | | Garage Management Folder | SHAIK JASMEEN | 1/12/2024, 6:52 pm | |
- Side Navigation:** A sidebar on the left provides links to "Recent", "Created by Me", "Private Reports", "Public Reports", "All Reports", "Folders", "All Folders", "Created by Me", "Shared with Me", and "Favorites".
- System Status:** At the bottom, there's a status bar showing weather (24°C Haze), system icons, and the date/time (15-12-2024).

Student - Skill Wallet | Login | Salesforce | New Service information Report

co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008aZAjUAM/view?queryScope=userFolders

Garage Management System Customer Details Appointments Service records Billing details and feedback Reports Dashboards

New Service information Report

Total Records: 5 Total Payment Paid: ₹20,000

Sum of Payment Paid vs Rating for service

Details (5 Rows)

| | 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

Garage Management System Customer Details Appointments Service records Billing details and feedback Reports Dashboards

REPORT

New Service information Report

Service information

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

Rating for service → Payment Status → Completed Total

| | Sum of Payment Paid | Record Count | ₹0 | ₹0 |
|-------|---------------------|--------------|---------|---------|
| 3 | Sum of Payment Paid | 3 | ₹0 | ₹0 |
| 4 | Record Count | 3 | 3 | 3 |
| Total | Sum of Payment Paid | 2 | ₹20,000 | ₹20,000 |
| | Record Count | 2 | 2 | 2 |

Update Preview Automatically: ✓

Sum of Payment Paid vs Rating for service

Details (5 Rows)

| | 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: Conditional Formatting:

24°C Haze Search ENG IN 20:39 15-12-2024

Screenshot of the Salesforce Report Builder interface showing the 'Create Report' screen.

The left sidebar shows categories: 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).

The main area shows a search bar with 'service' typed in, and a table titled 'Recently Used Report Types' with one entry:

| Report Type Name | Category |
|---------------------|----------|
| Service information | Custom |

At the bottom right of the main area, there is a 'Details' section for the selected report type:

Service information | Custom Report Type

Start Report

Fields (42)

Description: Service information

Created By You: New Service information Report

Created By Others: No Reports Yet

Objects Used in Report Type

Screenshot of the Salesforce Report Builder interface showing the 'Create Report' screen with a more detailed view of the 'Details' section.

The left sidebar shows categories: 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).

The main area shows a search bar with 'service' typed in, and a table titled 'Recently Used Report Types' with one entry:

| Report Type Name | Category |
|---------------------|----------|
| Service information | Custom |

At the bottom right of the main area, there is a expanded 'Details' section for the selected report type:

Service information | Custom Report Type

Start Report

Fields (42)

Description: Service information

Created By You: New Service information Report

Created By Others: No Reports Yet

Objects Used in Report Type

Student - Skill Wallet | Login | Salesforce | Report Builder | Salesforce

co3com-dev-ed.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/edit

Garage Management System

Customer Details | Appointments | Service records | Billing details and feedback | Reports | Dashboards

REPORT ▾

New Service information Report

Service information

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

Rating for service ▾ Payment Status ▾ Completed Total

| | Record Count | Completed | Total |
|-------|--------------|-----------|-------|
| 3 | 3 | 3 | 3 |
| 4 | 2 | 2 | 2 |
| Total | 5 | 5 | 5 |

Update Preview Automatically

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

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 |

Row Counts Detail Rows Grand Total Stacked Summaries

Conditional Formatting

24°C Haze

Search

ENG IN 15-12-2024 20:47

Student - Skill Wallet | Login | Salesforce | New Service information Report | co3com-dev-ed.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/view?queryScope=userFolders

Garage Management System

Customer Details | Appointments | Service records | Billing details and feedback | Reports | Dashboards

Report: Service information

New Service information Report

Total Records 6

Enable Field Editing

Search report table

Rating for service

Record Count

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 |

Row Counts Detail Rows Grand Total Stacked Summaries

24°C Haze

Search

ENG IN 15-12-2024 20:50

Student - Skill Wallet | Login | Salesforce | Report Builder | Salesforce

co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008j6LUAQ/edit?queryScope=userFolders

Garage Management... Customer Details Appointments Service records Billing details and feedback Reports Dashboards

New Service information Report Service information

Fields > Groups 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: 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 |
| 6 | Mufasa | ann-007 | ser-005 | bill-005 |

Row Counts Detail Rows Grand Total Stacked Summaries

24°C Haze

Save & Run Save Close Run

Update Preview Automatically

2050 15-12-2024

Student - Skill Wallet | Login | Salesforce | Report Builder | Salesforce

co3com-dev-ed.develop.lightning.force.com/lightning/r/Report/00OdL000008j6LUAQ/edit?queryScope=userFolders

Garage Management... Customer Details Appointments Service records Billing details and feedback Reports Dashboards

New Service information Report Service information

Fields > Groups 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

Performance Record Count

Conditional Formatting

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 | ann-007 | ser-005 | bill-005 |

Row Counts Detail Rows Grand Total Stacked Summaries

24°C Haze

Save & Run Save Close Run

Update Preview Automatically

2052 15-12-2024

Student - Skill Wallet | Login | Salesforce | New Service information Report

co3com-dev-ed.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/view?queryScope=userFolders

Garage Management System

Report: Service information
New Service information Report

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 |
|---|---------------|------------------|----------------------|-----------------------------------|
| 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

ENG IN 15-12-2024 20:54

The screenshot shows a Salesforce report titled "New Service information Report". The report displays a table of 6 rows with columns for Customer Name, Appointment Name, Service records Name, and Billing details and feedback Name. Below the table is a horizontal bar chart titled "Performance" showing record counts for ratings 3, 4, and 5. The bar for rating 5 is the longest, indicating the highest count. The report interface includes standard Salesforce navigation and search tools at the top.

Student - Skill Wallet | Login | Salesforce | New Service information Report

co3com-dev-ed.lightning.force.com/lightning/r/Report/00OdL000008tj6LUAQ/view?queryScope=userFolders

Garage Management System

Report: Service information
New Service information Report

Record Count

Rating for service Payment Status → Completed Total

| 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

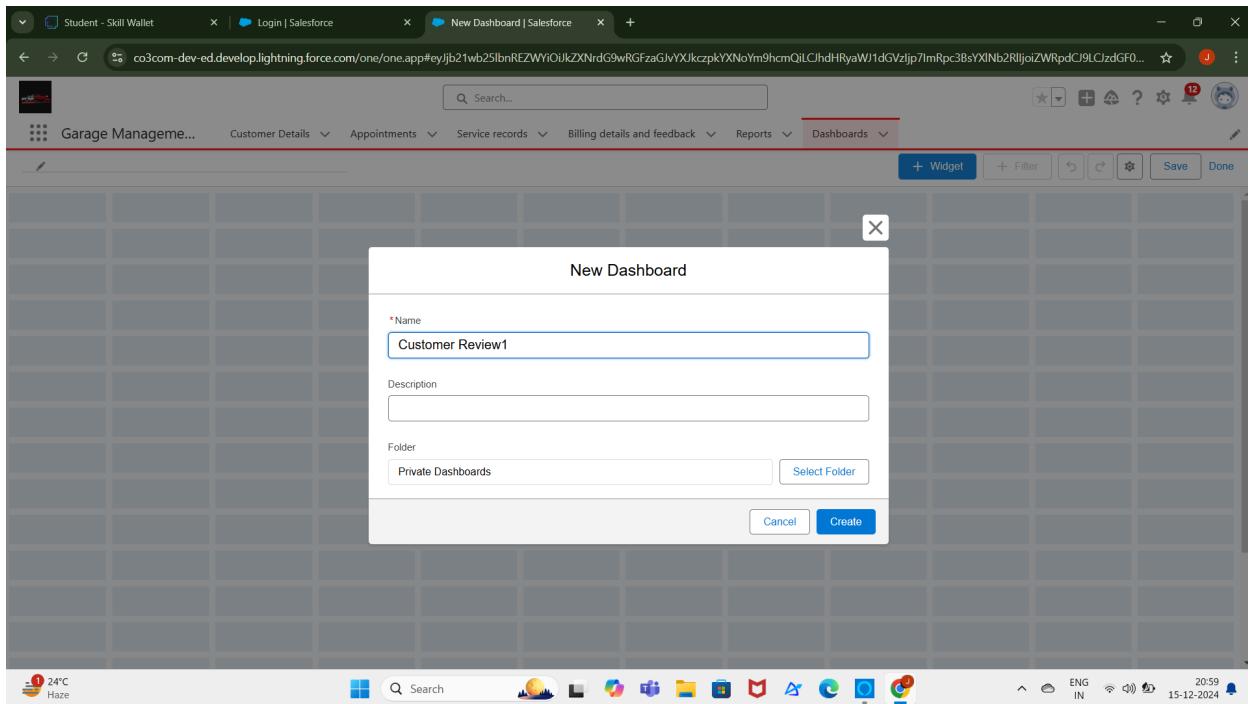
24°C Haze

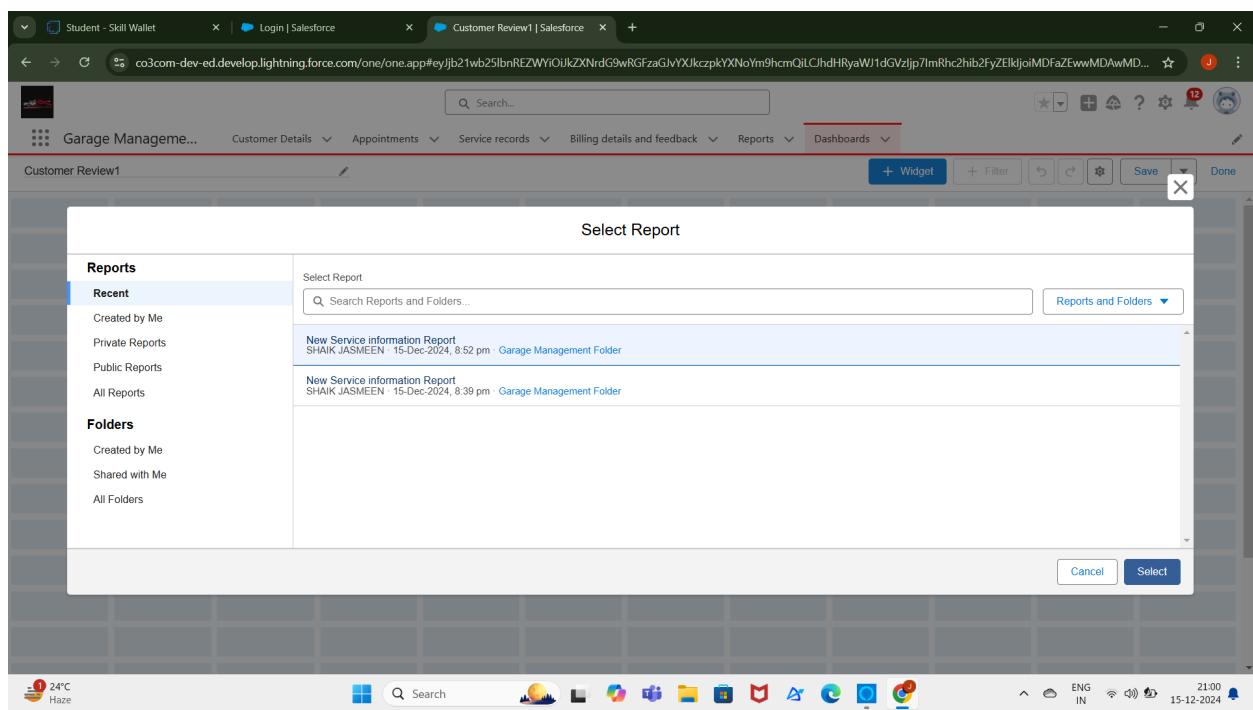
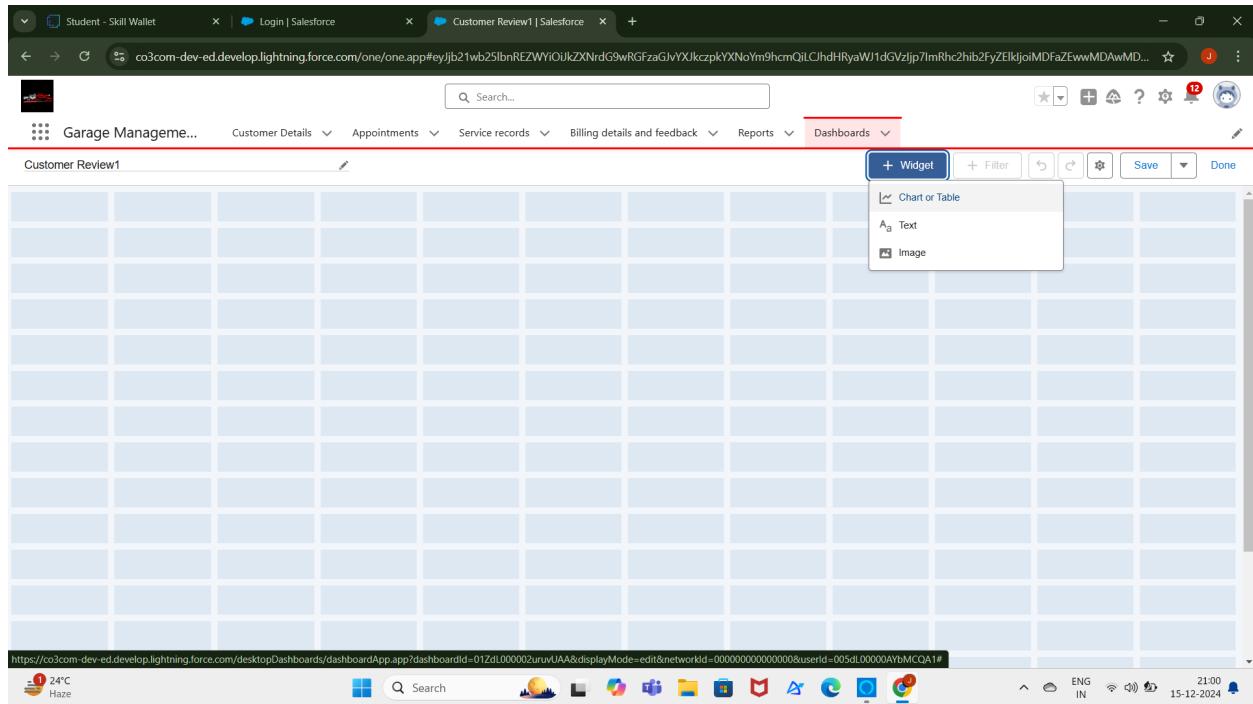
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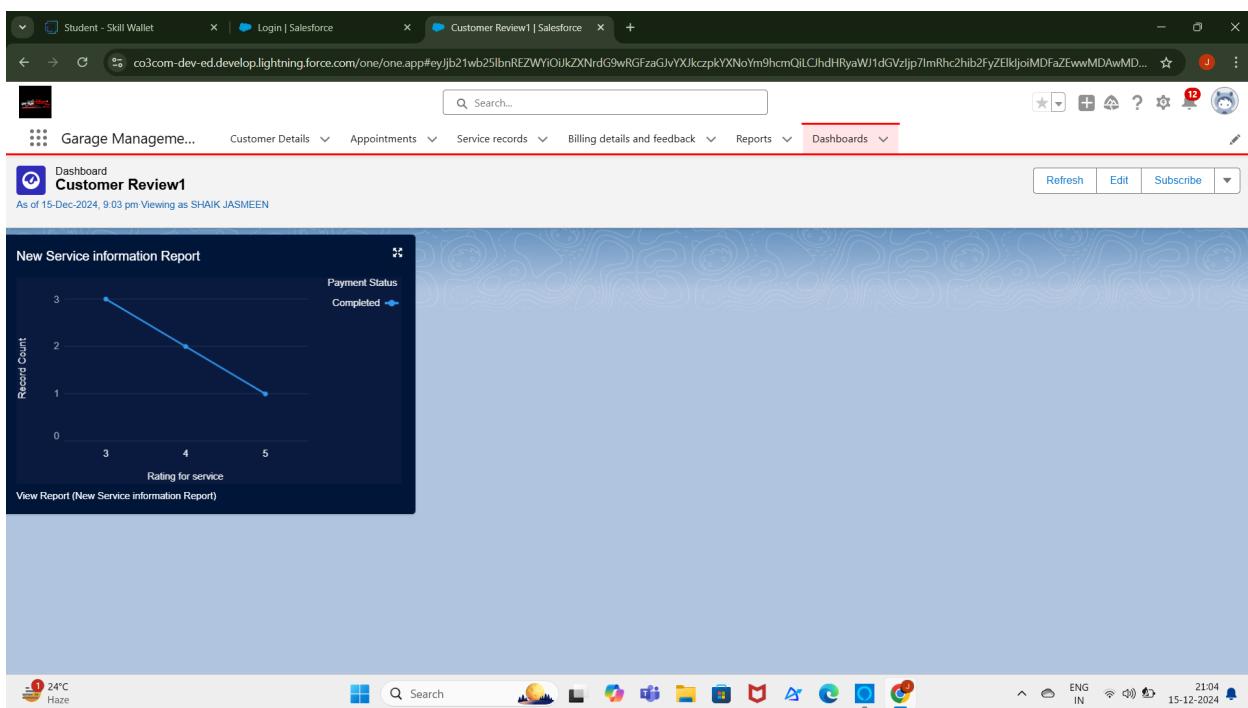
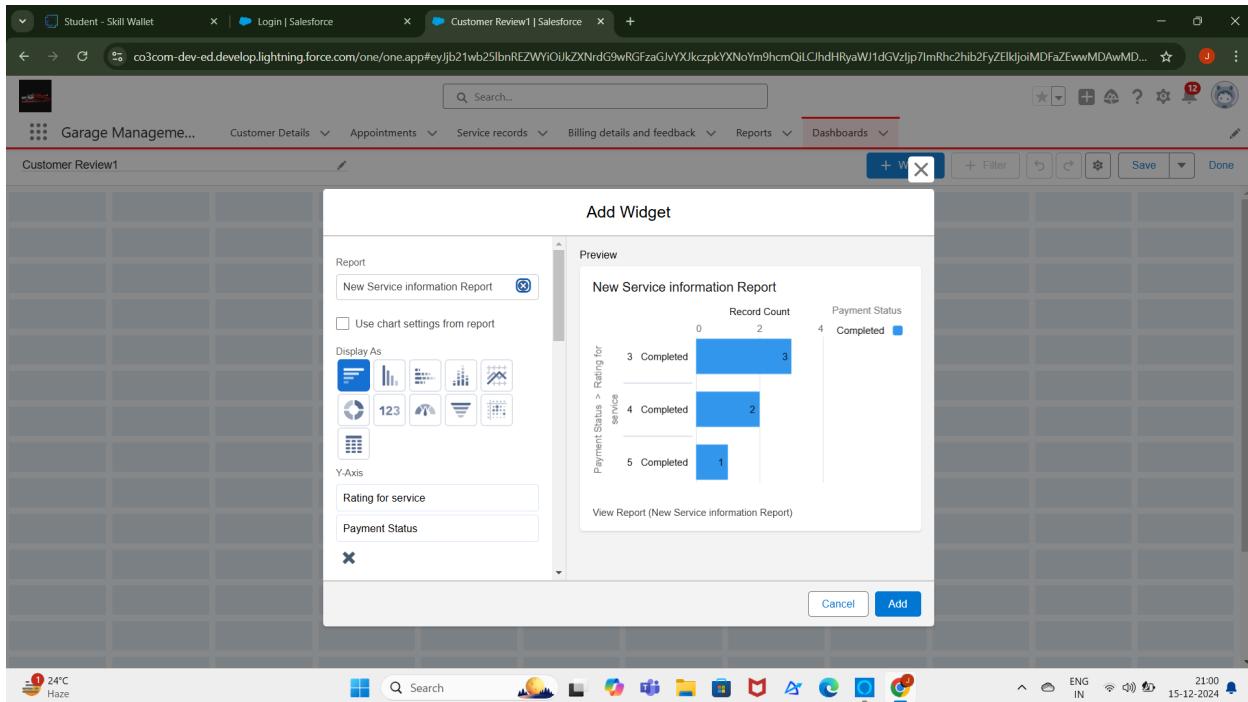
This screenshot shows the same Salesforce report as the previous one, but with a different configuration. The "Rating for service" column is now the primary focus, displaying a summary table with counts for each rating level (3, 4, 5) and a total row. The "Completed" column is listed under "Total". The rest of the interface, including the table of service details and the performance chart, remains identical to the first screenshot.

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 Subscribe on top right.
- Set the Frequency as “ weekly ”.
- Set a day as monday.
- And Click on save.







The screenshot shows a Salesforce Lightning interface with multiple tabs open at the top: "Student - Skill Wallet", "Login | Salesforce", "Welcome to Salesforce: Verify", "Customer Review1 | Salesforce", and "Reset Password | Salesforce". The main content area displays a dashboard titled "Customer Review1" for "Garage Management". The dashboard includes a chart titled "New Service information Report" showing a downward trend from a rating of 3 to 5 with a record count of 3. Below the chart is a link "View Report (New Service information Report)". A modal window titled "Edit Subscription" is overlaid on the dashboard. The modal has sections for "Settings", "Frequency" (Daily selected), "Days" (Sunday selected), "Time" (9:00 pm), and "Recipients" (Me selected). At the bottom of the modal are "Cancel" and "Save" buttons.

The screenshot shows the same Salesforce Lightning interface as the previous one. The dashboard "Customer Review1" is visible. A green success message box in the center of the screen says "You started a dashboard subscription." with a checkmark icon. The rest of the interface is identical to the first screenshot, including the tabs at the top and the "Edit Subscription" dialog box.

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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