



UNNAMALAI INSTITUTE OF TECHNOLOGY

Suba Nagar, Kovilpatti - 628502

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Project Viva-Voce Examination

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at

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BONAFIDE CERTIFICATE

Certified that this project report “**GARAGE MANAGEMENT SYSTEM**”
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We express our heartfelt thanks to all the staff members who involved directly or indirectly to make this project more purposeful

Garage Management System

Abstraction

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. The **Garage Management System (GMS)** is a comprehensive software solution designed to streamline and optimize the operations of automotive repair facilities, service centers, and garages. It provides an array of features tailored to meet the needs of mechanics, service advisors, and business owners, ensuring smoother workflows and higher customer satisfaction.

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● Appointment Scheduling:

- Simplifies the booking process for customers.
- Enables staff to manage daily schedules efficiently, reducing downtime and improving resource allocation.

● Vehicle Management:

- Maintains detailed records of vehicles, including service history, repairs, and maintenance schedules.
- Tracks vehicle status during servicing for better communication with customers.

● Customer Relationship Management (CRM):

- Stores customer details and preferences.
- Sends service reminders, follow-ups, and promotional offers to build loyalty.

● **Inventory and Spare Parts Management:**

- Tracks spare parts stock levels, automates reorder processes, and prevents stockouts.
- Ensures that mechanics always have the necessary tools and parts on hand.

● **Billing and Invoicing:**

- Generates professional invoices quickly and accurately.
- Supports multiple payment methods, discounts, and tax calculations.

● **Work Order Management:**

- Creates detailed work orders with a list of tasks, estimated costs, and timelines.
- Helps staff prioritize jobs and ensures timely completion.

● **Reporting and Analytics:**

- Provides insights into key performance indicators like revenue, job completion rates, and customer feedback.
- Helps identify trends and areas for improvement.

Salesforce Introduction:

Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers.

Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud.

Creating Developer Account:

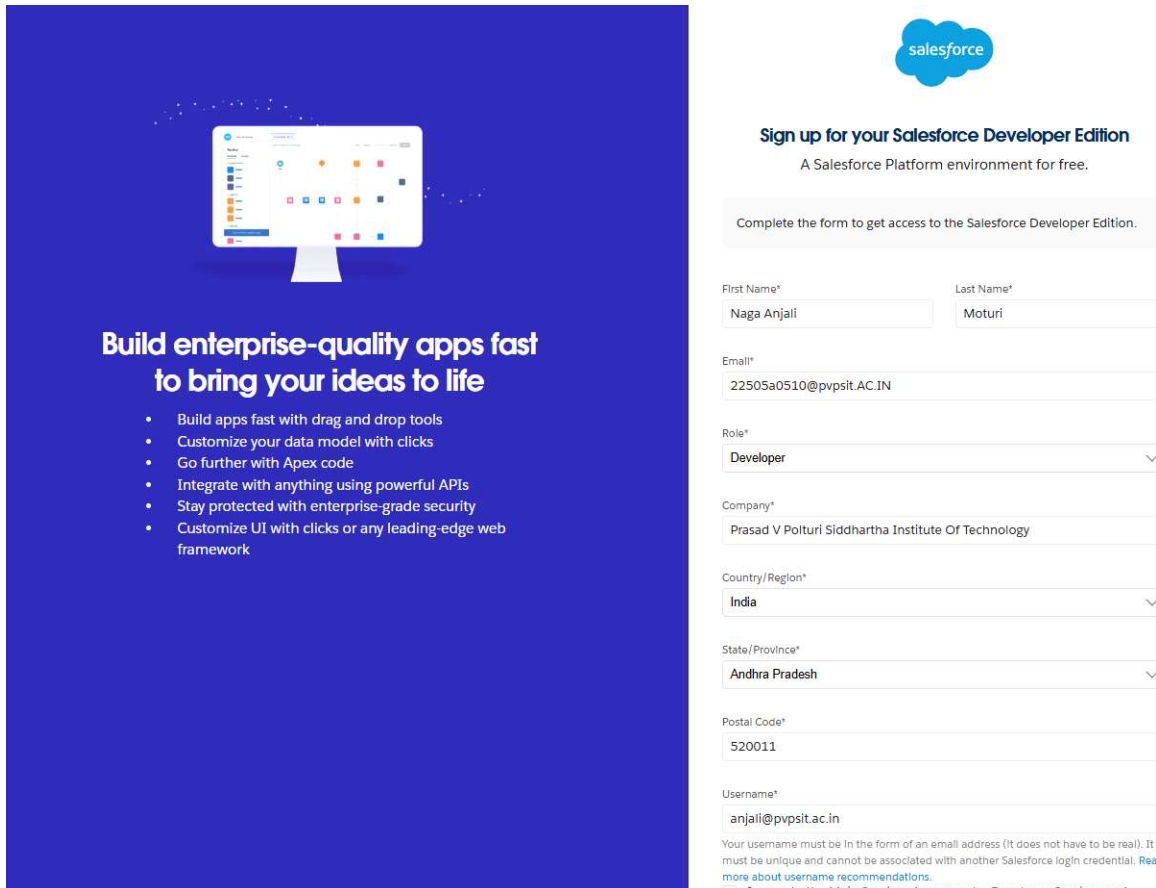
Creating a developer org in salesforce.

1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form, enter the following details :
 - First name & Last name
 - Email
 - Role : Developer

- Company : College Name
- County : India
- Postal Code : pin code
- 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

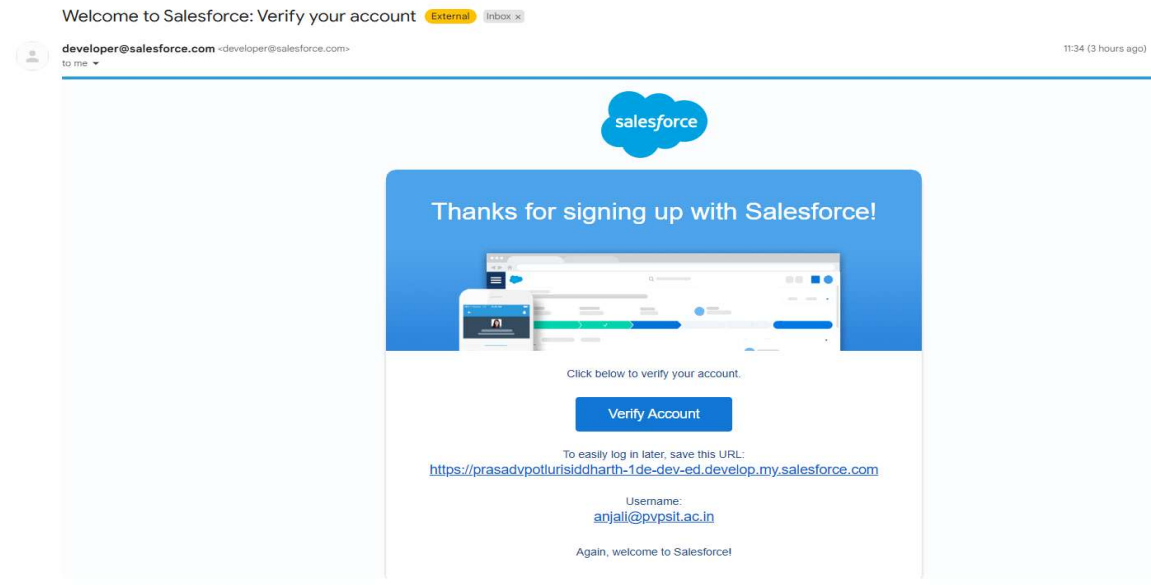
Click on sign me up after filling these.



The image shows a promotional banner for Salesforce Developer Edition on the left and a sign-up form on the right. The banner has a blue background with a white monitor icon displaying a Salesforce interface. The text on the banner reads: "Build enterprise-quality apps fast to bring your ideas to life". Below this, there is a list of bullet points: "Build apps fast with drag and drop tools", "Customize your data model with clicks", "Go further with Apex code", "Integrate with anything using powerful APIs", "Stay protected with enterprise-grade security", and "Customize UI with clicks or any leading-edge web framework". The sign-up form on the right has a white background with the Salesforce logo at the top. The heading is "Sign up for your Salesforce Developer Edition" with a subtext "A Salesforce Platform environment for free." Below this, it says "Complete the form to get access to the Salesforce Developer Edition." The form fields are: First Name* (Naga Anjali), Last Name* (Moturi), Email* (22505a0510@pvpsit.AC.IN), Role* (Developer), Company* (Prasad V Polturi Siddhartha Institute Of Technology), Country/Region* (India), State/Province* (Andhra Pradesh), Postal Code* (520011), and Username* (anjali@pvpsit.ac.in). At the bottom, there is a note: "Your username must be in the form of an email address (it does not have to be real). It must be unique and cannot be associated with another Salesforce login credential. [Read more about username recommendations.](#)" and a link: "[I agree to the Main Services Agreement - Developer Services and](#)".

Account Activation

Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account.



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.

Create Customer Details Object

To create an object: From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

- Enter the label name >> Customer Details
- Plural label name >> Customer Details

- Enter Record Name Label and Format
 - Record Name >> Customer Name
 - Data Type >> Text
- Click on Allow reports and Track Field History,
- Allow search >> Save.

Create Appointment Object

To create an object:

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

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

Appointment Field
Appointment Name
[Back to Appointment](#)

Set Field-Level Security View Field Accessibility

Field Information

Field Label	Appointment Name	Field Name
Data Type	Auto Number	
Description		
Data Owner		
Field Usage		
Data Sensitivity Level		
Compliance Categorization		
Display Format	app-{000}	

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.

Service records Field

Service records Name

[Back to Service records](#)

[Set Field-Level Security](#) [View Field Accessibility](#)

Field Information

Field Label	Service records Name	Field Name	N
Data Type	Auto Number		
Description			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Display Format	ser-{000}		

Create Billing details and feedback 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.

Billing details and feedback Name[Back to Billing details and feedback](#)[Set Field-Level Security](#)[View Field Accessibility](#)**Field Information**

Field Label	Billing details and feedback Name	Field Name
Data Type	Auto Number	
Description		
Data Owner		
Field Usage		
Data Sensitivity Level		
Compliance Categorization		
Display Format	bill-{000}	

Tabs

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


Creating a Custom Tab

To create a Tab:(Customer Details)

- 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 proles 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.

Creating Remaining Tabs

- Now create the Tabs for the remaining Objects, they are “ Appointments, Service records,Billing details and feedback”.
- Follow the same steps as mentioned in Activity -1 .



SETUP

Tabs

Custom Tabs





Help for

You can create new custom tabs to extend Salesforce functionality or to build new application functionality.

Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external web applications and content within the Salesforce window. Visualforce tabs allow you Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app. Lightning Page tabs allow you to add Lightning Pages to Experience and the mobile app.

Custom Object Tabs

New What Is This?

Action	Label	Tab Style	Description
Edit Del	Appointments	 Balls	
Edit Del	Billing details and feedback	 Bell	
Edit Del	Customer Details	 Apple	
Edit Del	Service records	 Jewel	

Web Tabs

New What Is This?

No Web Tabs have been defined

Visualforce Tabs

New What Is This?

No Visualforce Tabs have been defined

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.

Create 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.
- To Add Navigation Items:
- 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 Proles: Search proles (System administrator) in the search bar >> click on the arrow button >> save & Finish.

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

App Name ↑	Developer Name	Description	Last Modified ...	Ap...
1	App Launcher	App Launcher tabs	19/11/2024, 2:27 pm	Classic
2	Automation	Automate business processes and repetitive tasks.	19/11/2024, 2:34 pm	Lightning
3	Bolt Solutions	Discover and manage business solutions designed...	19/11/2024, 2:31 pm	Lightning
4	Business Rules Engine	Create and maintain business rules that perform c...	19/11/2024, 2:27 pm	Lightning
5	Community	Salesforce CRM Communities	19/11/2024, 2:27 pm	Classic
6	Content	Salesforce CRM Content	19/11/2024, 2:27 pm	Classic
7	Data Manager	Use Data Manager to view limits, monitor usage, a...	19/11/2024, 2:27 pm	Lightning
8	Digital Experiences	Manage content and media for all of your sites.	19/11/2024, 2:27 pm	Lightning
9	Garage Management Application	Garage_Management_Applicati...	19/11/2024, 3:46 pm	Lightning
10	Lightning Usage App	View Adoption and Usage Metrics for Lightning Ex...	19/11/2024, 2:27 pm	Lightning
11	Marketing CRM Classic	Track sales and marketing efforts with CRM objects.	19/11/2024, 2:27 pm	Classic

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 specic object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.

Creation of elds for the Customer Details object

- To create elds 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 “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.

Note: Follow the above steps for the remaining eld for the same object.

- To create another elds 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.

Setup > OBJECT MANAGER
Customer Details

Details

Fields & Relationships
6 Items, Sorted by Field Label

Q, Quick Find

New Deleted Fields Field Dependencies Set H

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Customer Name	Name	Text(80)		✓
Gmail	Gmail__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone number	Phone_number__c	Phone		

Creation of Lookup Fields

Creation of Lookup Field on Appointment Object :

- Go to setup >> click on Object Manager >> type object name(Appointment) in the search bar >> click on the object.
- Now click on “Fields & Relationships” >> New
- Select “Look-up relationship” as data type and click Next. 4. Select the related object “ Customer Details” and click next.

- Next >> Next >> Save.

Note: Make sure you complete Activity 4 Before continuing.

Creation of Lookup Field on Service records Object :

- Go to setup >> click on Object Manager >> type object name(Service records) in search bar >> click on the object.
- Now click on “Fields & Relationships” >> New
- Select “Look-up relationship” as data type and click Next.
- Select the related object “ Appointment ” and click next.
- Make it a required eld so click on Required.
- Scroll down for Lookup Filter and click on Show lter settings.
- Now add the lter criteria.
- Field : Appointment: Appointment Date >> Operator : less than >> select eld >> Appointment: Created Date
- Filter type should be Required.
- Error Message : Value does not match the criteria.
- Enable the lter by click on Active.
- Next >> Next >> Save.

SETUP > OBJECT MANAGER

Service records

Details

Fields & Relationships
8 Items, Sorted by Field Label

Quick Find: New Deleted Fields Field Depen

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD
Appointment	Appointment__c	Lookup(Appointment)	
Created By	CreatedById	Lookup(User)	
Last Modified By	LastModifiedById	Lookup(User)	
Owner	OwnerId	Lookup(User,Group)	
Quality Check Status	Quality_Check_Status__c	Checkbox	
service date	service_date__c	Formula (Date)	
Service records Name	Name	Auto Number	
Service Status	Service_Status__c	Picklist	

Left sidebar menu items: Details, 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, Scoping Rules.

Creation of Lookup Field on Billing details and feedback Object :

- Go to setup >> click on Object Manager >> type object name(Billing details and feedback) in search bar >> click on the object.
- Now click on “Fields & Relationships” >> New.
- Select “Look-up relationship” as data type and click Next.
- Select the related object “ Service records” and click next.
- Next >> Next >> Save & new.

SETUP > OBJECT MANAGER

Billing details and feedback

Details

Fields & Relationships
8 Items, Sorted by Field Label

Quick Find

New Deleted Fields Field Dependencies

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEX
Billing details and feedback Name	Name	Auto Number		✓
Created By	CreatedBy	Lookup(User)		
Last Modified By	LastModifiedById	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) (Unique Case Insensitive)		✓
Service records	Service_records__c	Lookup(Service records)		✓

Creation of Checkbox Fields

Creation of CheckboxField on Appointment Object :

- Go to setup >>click on Object Manager >>type object name(Appointment) in search bar >> click on the object.
- Now click on “Fields & Relationships” >>New.
- Select “Check box” as data type and click Next.
- Give the Field Label: Maintenance service
- Field Name : is auto populated
- Default value : unchecked
- Click on next >>next >> save.

Creation of AnotherCheckbox Field on Appointment Object:

- Repeat the steps form 1 to 3.
- Give the Field Label : Repairs
- Field Nme : is auto populated
- Default value : unchecked

- Click on next >>next >> save.
- Follow the same and create another checkbox with given names
- Give the Field Label : Replacement Parts
- Field Nme : is auto populated
- Default value : unchecked
- Click on next >> next >> save.

Creation of CheckboxField on Servicerecords Object :

- Go to setup >>click on Object Manager >>type object name(Service records) in search bar >>click on the object.
- Now click on “Fields & Relationships” >>New.
- Select “Check box” as data type and click Next.
- Give the Field Label : QualityCheck Status
- Field Nme : is auto populated
- Default value : unchecked
- Click on next >>next >> save

Creation of date Fields

Creation of Date Field on Appointment Object:

- Go to setup >>click on Object Manager >>type object name(Appointment) in the search bar >> click on the object.
- Now click on “Fields & Relationships” >>New.
- Select “Date” as data type and click Next.
- Give the Field Label : Appointment Date
- Field Nme : is auto populated
- Make it as a Requiredfield by click on the Required option.
- Click on next >>next >> save.

Creation of CurrencyFields

Creation of CurrencyField on Appointment Object :

- Go to setup >>click on Object Manager >>type object name(Appointment) in the search bar >>click on the object.
- Now click on “Fields& Relationships” >>New.
- Select “Currency” as data type and click Next.
- Give the Field Label: Service Amount
- Field Nme : is auto populated
- Click on next
- Give read only for all the profiles in field level security for profile.
- Click on next > > save.

Creation of CurrencyField on Billingdetails and feedbackObject :

- Follow the same steps as mentioned above in Billing details and feedback Object.
- Change the label name as mentioned.
- Give the Field Label : PaymentPaid
- Field Nme : is auto populated

Creation of Text Fields

- Go to setup >>click on Object Manager >>type object name(Appointment) in the search bar >> click on the object.
- Now click on “Fields & Relationships” >>New.
- Select “Text” as data type and click Next.
- Give the Field Label : Vehicle number plate
- Field Name : is auto populated
- Length : 10
- Make field as Required and Unique.
- Click on next >>next >> save.

Creation of Text Fields in Billingdetails and feedbackobject :

- Go to setup >>click on Object Manager >>type object

name(Billing detailsand feedback) in search bar >> click on the object.

- Now click on “Fields & Relationships” >>New.
- Select “text” as data type and click Next.
- Give the Field Label: Rating for service
- Field Name : is auto populated
- Length : 1
- Make field as Required and Unique.
- Click on next >> next >> save

Creation of PicklistFields

Creation of PicklistFields in Servicerecords object :

- Go to setup >>click on ObjectManager >> type object name(Service records) in search bar >> click on the object.
- Click on fields & relationship >> click on New.
- Select Data type as “Picklist” and click Next.
- Enter Field Label as “Service Status”,under values select“Enter values, with each value separated by a new line" and enter values as shown below.
- The values are: Started, Completed.
- Click Next.
- Next >> Next >>Save.

Creation of Picklist Fieldsin Billing detailsand feedback object:

- Go to setup >>click on Object Manager >>type object name(Billing details and feedback) in search bar >> click on the object.
- Click on fields & relationship >> click on New.
- Select Data type as “Picklist” and click Next.
- Enter Field Label as “Payment Status”,under values select“Enter values,

with each value separated by a new line" and enter values as shown below.

- The values are: Pending, Completed.
- Click Next.
- Next >> Next >> Save.

Creating Formula Field in Service records Object

- Go to setup >> click on ObjectManager >> type object name(Service records) in search bar >> click on the object.
- Click on fields & relationship >> click on New.
- Select Data type as "Formula" and click Next.
- Give Field Label and Field Name as "servicedate" and select formula return type as "Date" and click next.
- Insert field formula should be : CreatedDate
- click "Check Syntax" .
- Click next >> next >> Save.

Validation rule

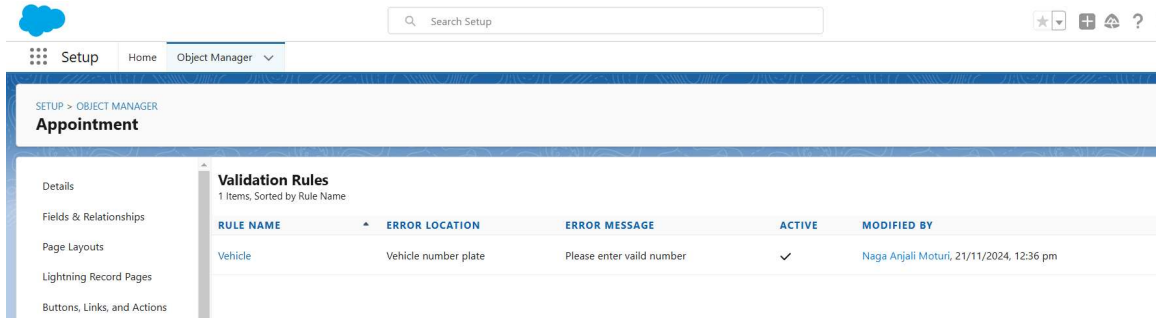
Validation rules are applied when a user tries to save a record and are used to check if the data meets specified criteria. If the criteria are not met, the validation rule triggers an error message and prevents the user from saving the record until the issues are resolved.

To create a validation rule to an Appointment Object

- Go to the setup page >> click on objectmanager >> From drop down click edit for Appointment object.
- Click on the validation rule >> click New.
- Enter the Rule name as " Vehicle ".
- Insert the ErrorCondition Formula as : -
NOT(REGEX(Vehicle_number_plate__c , "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}"))

5 . Enter the Error Message as "Please enter valid number", select the Error location as

Field and select the field as “Vehicle number plate”, and click Save.

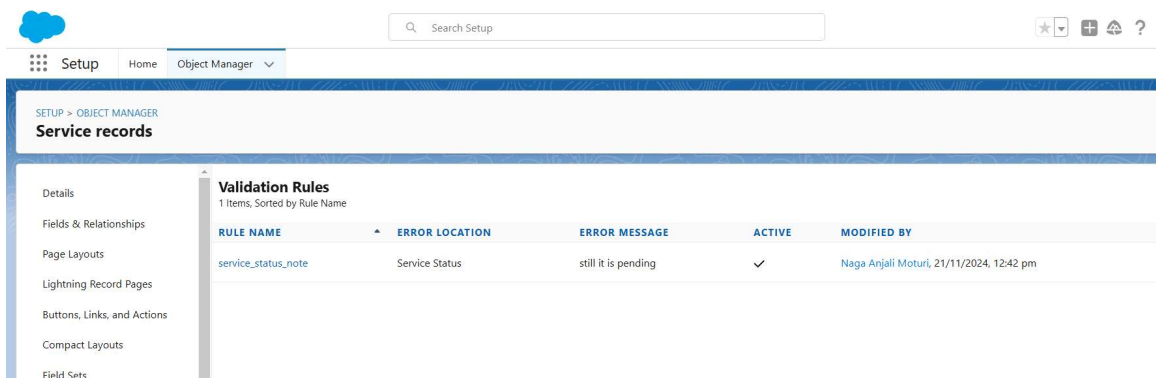


The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The left sidebar lists various setup options. The main content area is titled 'Appointment' and shows a 'Validation Rules' section with 1 item. The table below lists the validation rule details.

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Vehicle	Vehicle number plate	Please enter valid number	✓	Naga Anjali Moturi, 21/11/2024, 12:36 pm

To create a validation rule to an Service records Object

- Go to the setup page >> click on object manager >> From drop down click edit for Service records object.
- Click on the validation rule >> click New.
- Enter the Rule name as “ service_status_note ”.
- Insert the ErrorCondition Formula as : -
- NOT(ISPICKVAL(Service_Status__c , "Completed"))
- Enter the Error Message as “still it is pending”, select the Error location as Field and select the field as “Service status”, and click Save.



The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The left sidebar lists various setup options. The main content area is titled 'Service records' and shows a 'Validation Rules' section with 1 item. The table below lists the validation rule details.

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
service_status_note	Service Status	still it is pending	✓	Naga Anjali Moturi, 21/11/2024, 12:42 pm

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

- Go to the setup page >> click on object manager >> From drop down

clicked it for Billing details and feedback object.

- Click on the validation rule >> click New.
- Enter the Rule name as “rating_should_be_less_than_5”.
- Insert the ErrorCondition Formula as : - NOT(REGEX(Rating_for_service c , "[1-5]{1}"))

5. Enter the ErrorMessage as “ratingshould be from 1 to 5”, select the Error location as Field and select the field as “Rating for Service”, and click Save.

SETUP > OBJECT MANAGER
Billing details and feedback

Validation Rules
1 Items, Sorted by Rule Name


RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
rating_should_be_less_than_5	Rating for service	rating should be from 1 to 5	✓	Naga Anjali Moturi, 21/11/2024, 12:43 pm

Duplicate rule

To create a matching rule to an Customer details Object

- Go to quick find box in setup and search for matchingRule.
- Click on matchingrule >> click on New Rule.
- Select the object as Customer details and click Next.
- Give the Rule name : Matching customer details
- Unique name : is auto populated
- Define the matching criteria as
 - Field : MatchingMethod
 - Gmail:Exact
 - Phone Number:Exact
- Click save.

- After Saving Click on Activate.



SETUP

Matching Rules

Matching Rule

Matching customer details

Help ?

Matching Rule Detail

Delete

Clone

Deactivate

Object	Customer Details
Rule Name	Matching customer details
Unique Name	Matching_customer_details
Description	
Matching Criteria	(Customer Details: GMail EXACT MatchBlank = FALSE) AND (Customer Details: Phone_number EXACT MatchBlank = FALSE)
Status	Active
Created By	Naga Anjali Moturi, 21/11/2024, 12:46 pm
Modified By	Naga Anjali Moturi, 21/11/2024, 12:46 pm

To create a Duplicate rule to an Customer detailsObject

- Go to quick find box in setup and search for Duplicate rules.
- Click on Duplicate rule >> click on New Rule >>select customer detailsobject.
- Give the Rule name as : CustomerDetail duplicate
- Scroll a little in Matching rule section
- Select the matching rule : Matching customer details
- And Click on save.
- After saving the Duplicate Rule, Click on Activate.

SETUP

Duplicate Rules

Customer Details Duplicate Rule

Customer Detail duplicate

Help for this Page

Duplicate Rule Detail

Edit

Delete

Clone

Deactivate

Rule Name

Customer Detail duplicate

Order

1 of 1

Reorder

Description

Customer Details

Object

Customer Details

Record-Level Security

Enforce sharing rules

Action On Create

Allow

Operations On Create

Alert

Report

Action On Edit

Allow

Operations On Edit

Alert

Report

Alert Text

Use one of these records?

Active

☒

Matching Rule

☒ Matching customer details
 ☒ Mapped

Matching Criteria

(Customer Details: Email EXACT MatchBlank = FALSE) AND
 (Customer Details: Phone_number EXACT MatchBlank = FALSE)

Conditions

Created By

Naga Anjali Moturi, 21/11/2024, 12:48 pm

Modified By

Naga Anjali Moturi, 21/11/2024, 12:48 pm

Edit

Delete

Clone

Deactivate

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.

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 roles

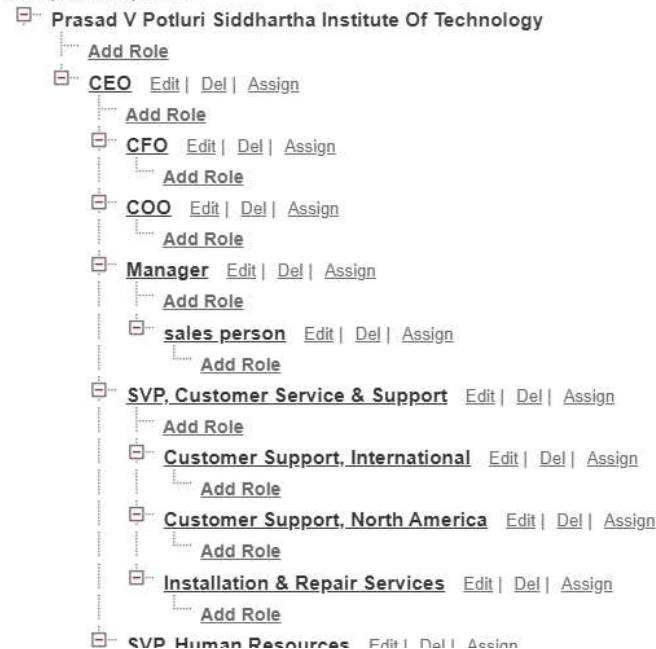
- Go to quick find >> Search for Roles >> click on set up roles.
- Click plus on CEO role, and click add role under manager.
- Give Label as "sales person" and Role name gets auto populated. Then click on Save.

Creating the Role Hierarchy

You can build on the existing role hierarchy shown on this page. To insert a new role, click **Add Role**.

Your Organization's Role Hierarchy

[Collapse All](#) [Expand All](#)



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.

Create User

- Go to setup >> type users in quick find box >> select users >> click New user.

- Fill in the fields
 - First Name : Niklaus
 - Last Name : Mikaelson
 - Alias : Give a Alias Name
 - Email id : Give your Personal Emailid
 - Username : Username should be in this form: text@text.text
 - Nick Name : Give a Nickname
 - Role : Manager
 - User licence : Salesforce
 - Profiles : Manager
- Save.

SETUP
Users

User
Niklaus Mikaelson

[Permission Set Assignments \(0\)](#) | [Permission Set Assignments, Activation Required \(0\)](#) | [Permission Set Group Assignments \(0\)](#) | [Permission Set License Assignments \(0\)](#) | [Personal Groups \(0\)](#) | [Public Group Membership \(1\)](#) | [Queue Membership \(0\)](#) | [Managers in the Role Hierarchy \(0\)](#) | [OAuth Apps \(0\)](#) | [Third-Party Account Links \(0\)](#) | [Installed Mobile Apps \(0\)](#) | [Authentication Settings for External Systems \(0\)](#) | [Login History \(0+\)](#) | [User Provisioning Accounts \(0\)](#)

User Detail [Edit](#) [Sharing](#) [Reset Password](#) [Freeze](#) [View Summary](#)

Name	Niklaus Mikaelson	Role	Manager
Alias	nmika	User License	Salesforce
Email	anjalimoturi@gmail.com (Verify)	Profile	Manager
Username	anjalimoturi@gmail.com	Active	<input checked="" type="checkbox"/>
Nickname	User17321742697356042344 i	Marketing User	<input type="checkbox"/>
Title		Offline User	<input type="checkbox"/>
Company		Knowledge User	<input type="checkbox"/>
Department		Flow User	<input type="checkbox"/>
Division		Service Cloud User	<input type="checkbox"/>
Address		Site.com Contributor User	<input type="checkbox"/>
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	Site.com Publisher User	<input type="checkbox"/>
Locale	English (India)	WDC User	<input type="checkbox"/>
Language	English	Mobile Push Registrations	View
Delegated Approver		Data.com User Type	i
Manager		Accessibility Mode (Classic Only)	<input type="checkbox"/> i

creating another users

- Repeat the steps and create another user using
 - Role : sales person
 - User licence : Salesforce Platform
 - Profile :sales person

Note : create atleast 3 users with these permissions.

Users

All Users

On this page you can create, view, and manage users.

To get more licenses, use the Your Account app. [Let's Go](#)

View: **All Users** Edit | [Create New View](#)

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

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Chatter Expert	Chatter	chatty.00dns000007cn2x2as.uxyg1c4dsbz@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/> Edit	Madupu Ishwarya	imadu	anjallimoturi388@gmail.com	sales person	✓	sales person
<input type="checkbox"/> Edit	Mikaelson Niklaus	nmika	anjallimoturi@gmail.com	Manager	✓	Manager
<input type="checkbox"/> Edit	Moturi Naga Anjali	NMotu	anjali@pvpsit.ac.in		✓	System Administrator
<input type="checkbox"/> Edit	Padhmanabhuni Divya Teja	dpadh	anjali271155@gmail.com	sales person	✓	sales person
<input type="checkbox"/> Edit	Pottati Rajeswari	rpotl	rajan6276@gmail.com	sales person	✓	sales person
<input type="checkbox"/> Edit	User Integration	integ	integration@00dns000007cn2x2as.com		✓	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User Security	sec	insightssecurity@00dns000007cn2x2as.com		✓	Analytics Cloud Security User


New User Reset Password(s) Add Multiple Users

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.

Creating New Public Group

- Go to setup >> type users in quick find box >> select public groups >> click New.
- Give the Label as "sales team".
- Group name is autopopulated.
- Search for Roles.
- In Available Members select Sales person and click on add it will be moved to selected member.
- Click on save.


SETUP

Public Groups

Public Groups [Help for](#)

A public group is a set of users. It can contain individual users, other groups, the users in a particular role or territory, or the users in a role or territory plus all of the users below that role or territory in the hierarchy.

View: All [Edit](#) [Create New View](#)

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

Action	Label ↑	Group Name	Created By	Created Date
Edit Del	sales_team	sales_team	Moturi, Naga Anjali	21/11/2024, 1:08 pm

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.

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 as shown in fig.
- Click on save and refresh.
- Scroll down a bit, Click new on Service records sharing Rules.
- Give the Label name as “ Sharing setting”
- Rule name is auto populated.
- In step 3 : Select which records to be shared, members of “ Roles ” >> “ Sales person”
- In step 4: share with, select “ Roles ” >> “ Manager ”
- In step 5 : Change the access level to “ Read / write ”.
- Click on save.

Flows

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.
- Select the Object as “Billing details and feedback” in the Drop down list.
- Select the Trigger Flow when: “A record is Created or Updated”.
- Select the Optimize the flow for: “Actions and Related Records” and Click on Done.
- Under the Record-triggered Flow Click on “+” Symbol and In the Drop down List select the “Update records Element”. Give the Label Name : Amount Update
- Api name : is auto populated
- Set a filter condition : All Conditions are met(AND)
- Field : Payment_Status_c

- Operator : Equals
- Value : Completed
- And Set Field Values for the Billingdetails and feedbackRecord
- Field : Payment_Paid__c
- Value : {!\$Record.Service_records_r.Appointment_r.Service_Amount_c}
- Click On Done.Before creating another Element.Create a New Resource form Toolbox form top left.
- Click on the New Resource,And select Variable.
- Select the resourcetype as text template.
- Enter the API name as “ alert”.
- Change the view as Rich Text ? View to Plain Text.
- In body fieldpaste the syntaxthat given below.

Dear {!\$Record.Service_records_r.Appointment_r.Customer_Name_r.Name},

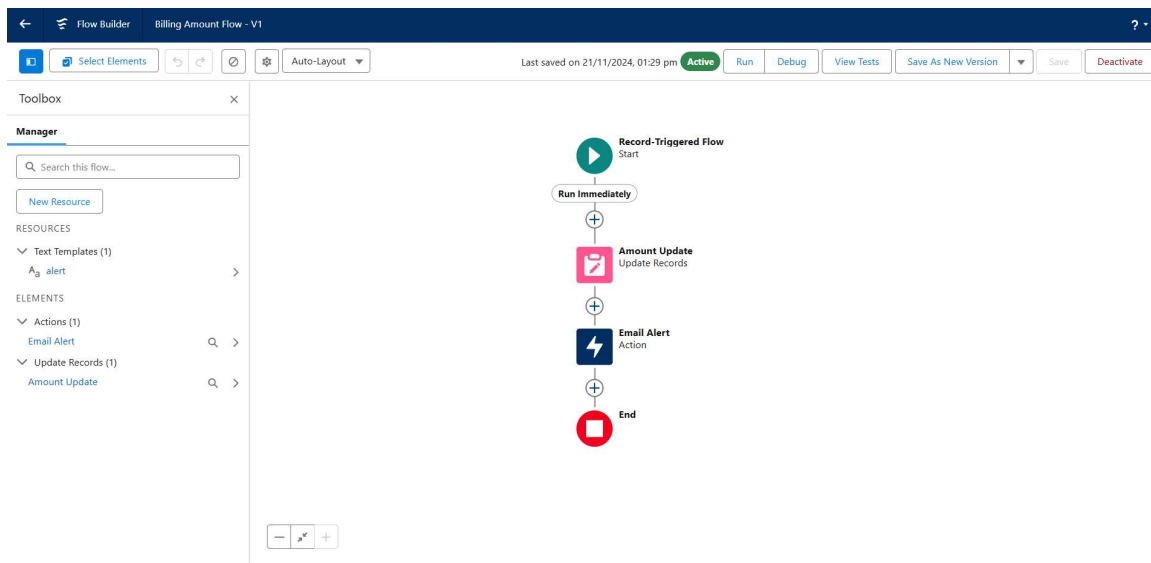
I hope this message findsyou well. I wanted to take a moment to express my sincere gratitude for your recent paymentfor the servicesprovided by our garage management team. Your prompt paymentis greatly appreciated, and it helps us continue to provide top-notch services to you and all our valued customers.

Amount paid : {!
\$Record.Payment_Paid_____c}

Thank you for Coming .

- Click done.
- Now Click on Add Element, select Action.
- Their action bar will be opened in that searchfor “ send email ” and click on it.
- Give the label name as “ Email Alert”
- API name will be auto populated.
- Enable the body in set input values for the selected action.
- Select the text template that created , Body : {!alert}
- Include recipient address list select the email form the record.

- RecipientAddressList:
`{!$Record.Service_records__r.Appointment__r.Customer_Name__r.Gmailc}`
- Include subject as “ Thank You for Your Payment - Garage Management”.
- Click done.
- Click on save. Give the Flow label , Flow Api name will be autopopulated.
- And click save, and click on activate.



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.

Apex handler

Use Case : This use case works for Amount Distribution for each Service the customer selected for their 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".

Code:

```
public class AmountDistributionHandler {  
    public static void amountDist(list<Appointment__c>
```



```

listApp){ list<Service_records__c> serList = new list
<Service_records__c>(); for(Appointment__c app :
listApp){
    if(app.Maintenance_service__c == true && app.Repairs__c == true &&
app.Replacement_Parts__c == true){
        app.Service_Amount__c = 10000;
    }

    else if(app.Maintenance_service__c == true && app.Repairs__c == true)
    { app.Service_Amount__c = 5000;
    }

    else if(app.Maintenance_service__c == true && app.Replacement_Parts__c
    == true){ app.Service_Amount__c = 8000;
    }

    else if(app.Repairs__c == true && app.Replacement_Parts__c == true)
    { app.Service_Amount__c = 7000;
    }

    else if(app.Maintenance_service__c == true)
    { app.Service_Amount__c = 2000;
    }

    else if(app.Repairs__c ==
    true)
    { app.Service_Amount
    c = 3000;
    }

    else if(app.Replacement_Parts__c == true)
    { app.Service_Amount__c = 5000;
    }
}
}
}

```

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

Syntax For creating trigger:

The syntax for creating trigger is :

Trigger [trigger name] on [object name](Before/After event)

```
{  
}
```

In this project, trigger is called whenever the particular record sum exceeds the threshold i.e. minimum business requirement value. Then the code in the trigger will get executed.

Code:

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

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.

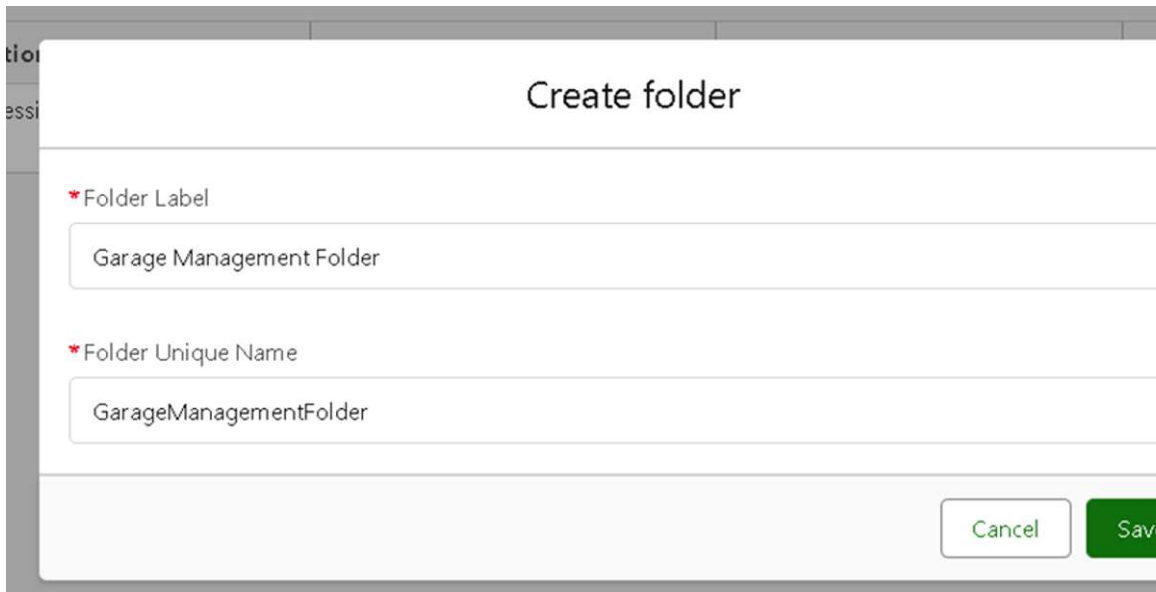
Types of Reports in Salesforce

- Tabular
- Summary

- Matrix
- Joined Reports

create a report folder

- Click on the app launcher and search for reports.
- Click on the report tab, click on new folder.
- Give the Folder label as “Garage Management Folder”, Folder unique name will be auto populated.
- Click save.



The screenshot shows a 'Create folder' dialog box. It has a title bar with the text 'Create folder'. Below the title bar, there are two input fields. The first field is labeled 'Folder Label' and contains the text 'Garage Management Folder'. The second field is labeled 'Folder Unique Name' and contains the text 'GarageManagementFolder'. At the bottom right of the dialog, there are two buttons: 'Cancel' and 'Save'.

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

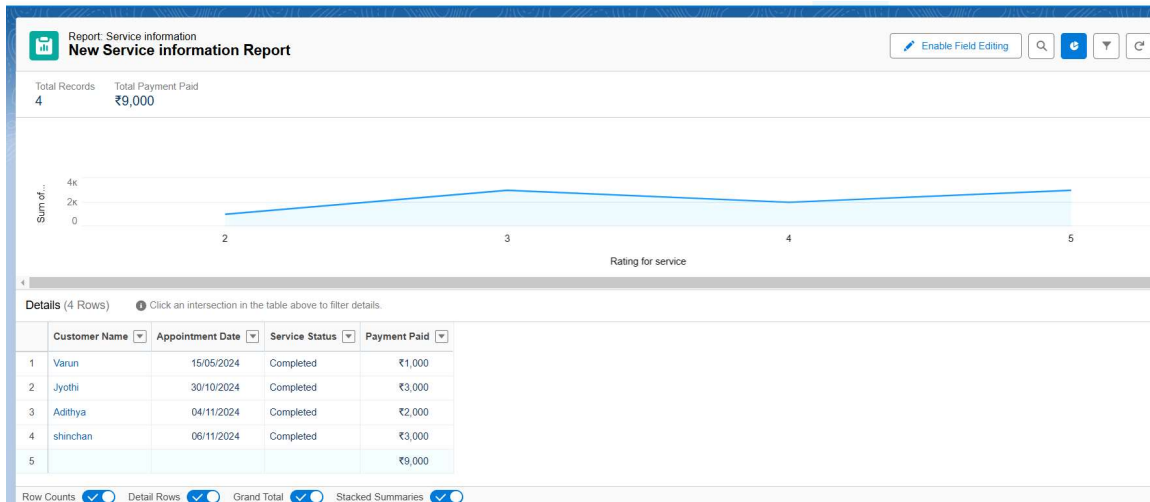
- Go to setup >> type users in quick find box >>select Report Type >> click on Continue.
- Click on new custom reporttype.
- Select the Primary object as “ Customer details” .
- Give the Reporttype Label as “ Serviceinformation ”
- Report type Name is autopopulated.
- Keep the Description as same.
- Select Store in Category as “ otherReports ”
- Select the deployment status as “ Depolyed ”, click on Next.
- now , Click on Relatedobject box.
- Click on SelectObject, choose Appointment Object as shownin fig
- Again Click to relate anotherobject.
- And select the related objectas “ service records”.
- Repeat the process and select the related object as “ Billing details and feedback”.
- And click on save.

Create Report

Note : Before creating report,create latest “10” records in every object. Try to fill every field in each record for better experience.

- Go to the app >>click on the reports tab
- Click New Report.
- Select the Category as other reports,search for ServiceInformation, select that report, click on it. And click on start report.
- Their outline pane is opened alrely,select the fields that mentionedbelow 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 reportName : New Service information Report
- Report unique Name is auto populated.
- Select the folder the createdand Click on save.



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.

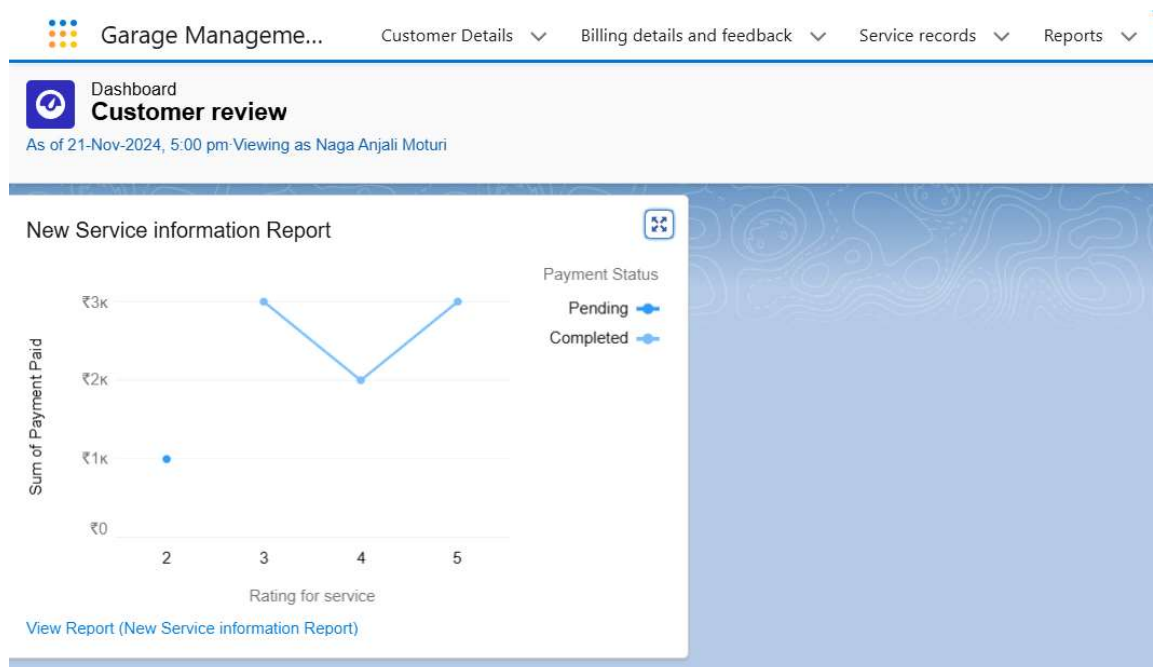
Create Dashboard Folder

- Click on the app launcher and search for dashboard.

- Click on dashboard tab.
- Click new folder,give the folderlabel as “ Service Ratingdashboard”.
- Folder unique name will be auto populated.
- Click save.
- Follow the same steps,form milestone 15, and activity2, and provide the sharing settings for the folder that just created.

Create Dashboard

- Go to the app >>click on the Dashboards tabs.
- Give a Name and select the folder that created, and click on create.
- Select add component.
- Select a Reportand 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.



Subscription:

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

Edit Subscription

Schedule dashboard refreshes and subscribe to receive results.


Settings


Frequency

Days

Time

Recipients

 Recipients see the same report data as the person running the report.

☒ Receive new results by email when dashboard is refreshed. 

Send email to

Me

Conclusion:

The Garage Management System (GMS) implemented on the Salesforce platform successfully achieves its goal of streamlining and automating daily garage operations. By leveraging Salesforce’s cloud-based CRM capabilities, the system provides an integrated solution for managing customers, vehicles, service bookings, inventory, billing, and reporting—all within a single, scalable environment.

Through this project, we demonstrated how Salesforce can be customized using objects, workflows, process builders, and automation tools such as Flow and Apex to meet the unique needs of a garage business. The system improves operational efficiency, data accuracy, and customer satisfaction by ensuring real-time tracking of service requests, automated communication, and transparent billing processes.