

# **PROJECT OF SALESFORCE DEVELOPER GARAGE MANAGEMENT SYSTEM**

**to optimize customer details, appointment, service records, and billing for automotive garages.**

By

**NALLA ANUSHA KUMARI**

BONAM VENKATA CHALAMYA INSTITUTE OF  
TECHNOLOGY&SCIENCE,AUTONOMOUS

Email : 22h41a04a2anusha.n@gmail.com

## **PROJECT OVERVIEW**

The Garage Management System (GMS) project on Salesforce is a CRM solution aimed at transforming the way automotive garages manage customer relationships, vehicle service records, and day-to-day operations. With centralized customer profiles, service histories, and appointment scheduling, the system empowers garages to deliver more personalized and efficient customer service. Automated reminders and service notifications help enhance customer engagement, ensuring regular maintenance and timely service updates to boost customer satisfaction.

In addition to customer management, the GMS CRM includes comprehensive vehicle tracking and work order management, allowing technicians and advisors to access detailed service histories, track service progress, and assign tasks seamlessly. An integrated parts inventory module ensures that essential components are in stock, with automated reordering for low-stock items to prevent service delays. Technicians can use mobile access to view work orders and inventory on the go, optimizing workflow and reducing downtime.

Finally, the GMS CRM supports billing and invoicing, providing a streamlined system for generating service estimates, digital invoices, and online payment options. With built-in analytics and reporting, managers gain insights into customer trends, revenue, and operational efficiency, enabling data-driven decisions for business growth. The system is designed to scale with the garage, offering robust data security and compliance, making it a future-proof solution for modern garage management needs.

## **OBJECTIVES**

- **Enhance Customer Retention and Loyalty:** By providing personalized service reminders, streamlined appointment scheduling, and post-service follow-ups, the GMS CRM aims to build long-term customer relationships and increase repeat visits.
- **Optimize Resource Allocation & Technician Efficiency:** Efficient scheduling, real-time work order tracking, and inventory management help maximize technician productivity, reduce wait times, and ensure that resources are allocated effectively for each service job.
- **Increase Revenue through Data-Driven Upselling:** With insights into customer preferences and service history, the CRM enables garages to offer tailored service recommendations and upsell additional maintenance packages, driving revenue growth.
- **Reduce Operational Costs through Automation:** By automating routine tasks like appointment reminders, parts reordering, and invoicing, the GMS CRM minimizes manual workload, reduces errors, and cuts down operational costs.
- **Improve Business Insights and Strategic Planning:** Advanced reporting and analytics provide managers with valuable insights into service trends, technician performance, and financial metrics, supporting informed decision-making and strategic business growth.

## KEY FEATURES

- **Customer details:**
  - Store and manage customer details including contact information, service history, and preferences.
  - Access comprehensive service records for customer insights and tailored service.
- **Appointment:**
  - Automated reminders and notifications to reduce no-shows.
  - Integrated calendar to optimize working time.
- **Service records:**
  - Track detailed service information including service type, parts used, and associated costs.
  - Link service records to specific customer appointments for easy tracking and reference.
- **Billing details:**
  - Generate and manage billing details, linking them to service records.
  - Track payment status and send timely payment reminders.
  - Automated invoice generation and email notifications for a streamlined payment process.
- **Feedback:**
  - Collect and manage customer feedback post-service.
  - Track ratings and comments to enhance service quality.
  - Analyze feedback trends for continuous improvement.

## **DETAILED PROCESS**

## Activity – 1

### Salesforce account Creation & Activation

- Create a Developer Account by providing all the required details and Activate the account.

## Activity – 2

### Object Creation

- Create all the required objects with the given label name and format.
- **Customer details Object**

The screenshot shows the Salesforce Object Manager interface for the 'Customer Details' object. The left sidebar lists various configuration options: 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, and List View Button Layout. The 'Details' section is selected, showing the following configuration:

Field	Value
Description	
API Name	Customer_Details__c
Custom	Custom
Singular Label	✓
Customer Details	
Plural Label	Customer Details
Customer Details	
Enable Reports	✓
Track Activities	
Track Field History	
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

- **Appointment Object**

Appointment	Appointment__c	Custom Object	27/10/2024	✓	▼
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- **Service records Object**

Service records	Service_records__c	Custom Object	27/10/2024	✓	▼
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- **Billing details & Feedback Object**

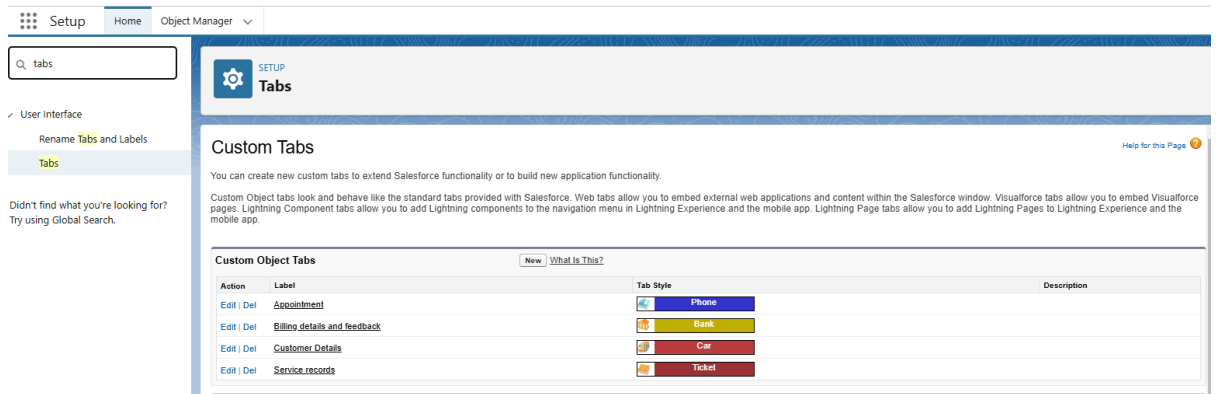
Billing details and feedback	Billing_details_and_feedback__c	Custom Object	27/10/2024	✓	▼
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## Activity – 3

### Custom Tabs Creation

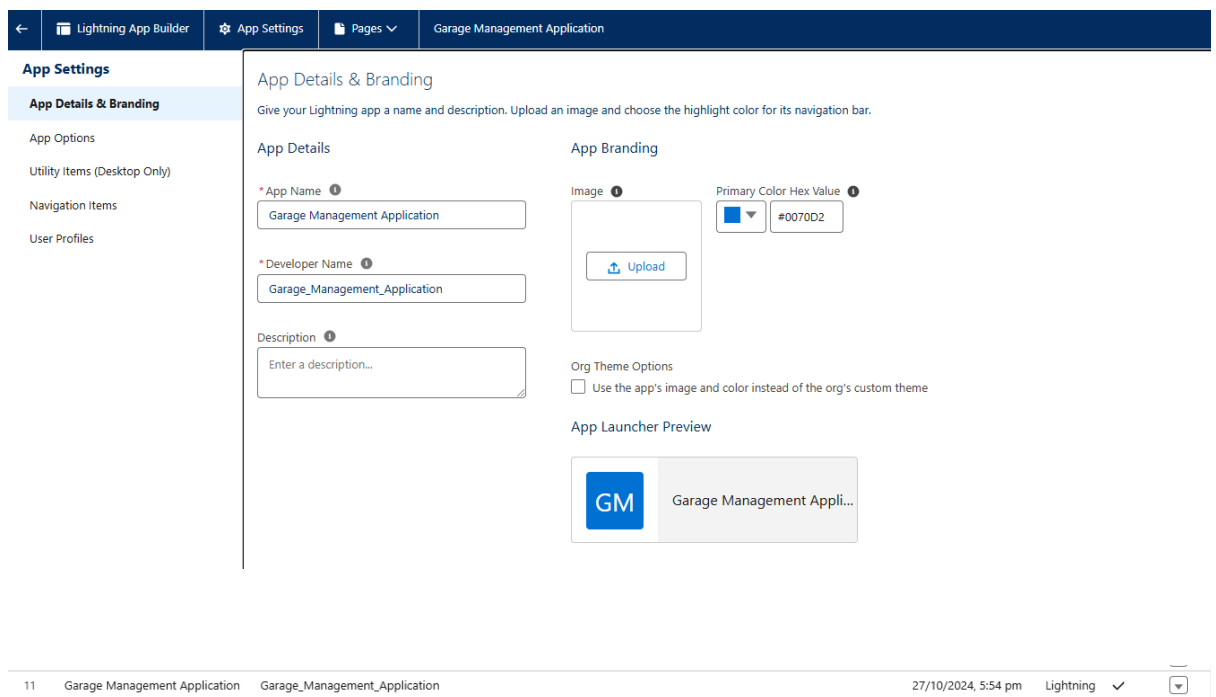
- A tab is like a user interface that is used to build records for objects and to view the records in the objects.

- Create these Custom tabs for every Object.



## Activity – 4

### Create a Lightning App



## Activity – 5

### Field Creation for every object

- Customer details object



- **Billing details & Feedback object**

SETUP > OBJECT MANAGER

**Billing details and feedback**

Details	<b>Fields &amp; Relationships</b> 8 Items, Sorted by Field Label					Q, Quick Find	New	Deleted Fields	Field Dependencies	Set History Tracking
<b>Fields &amp; Relationships</b>	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED					
Page Layouts	Billing details and feedback Name	Name	Auto Number		✓					▼
Lightning Record Pages	Created By	CreatedById	Lookup(User)							
Buttons, Links, and Actions	Last Modified By	LastModifiedById	Lookup(User)							
Compact Layouts	Owner	OwnerId	Lookup(User,Group)		✓					
Field Sets	Payment Paid	Payment_Paid__c	Currency(18, 0)							▼
Object Limits	Payment Status	Payment_Status__c	Picklist							▼
Record Types	Rating for service	Rating_for_service__c	Text(1)							▼
Related Lookup Filters	Service records	Service_records__c	Lookup(Service records)		✓					▼
Search Layouts										
List View Button Layout										

**Activity – 6**

**Validation Rules**

- **For Appointment**

SETUP > OBJECT MANAGER

**Appointment**

Lightning Record Pages	<b>Validation Rules</b> 1 Items, Sorted by Rule Name					New
Buttons, Links, and Actions	RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY	
Compact Layouts	Vehicle	Vehicle number plate	Please enter valid number	✓	Manohara Sai Subba Raju Golla, 27/10/2024, 6:45 pm	▼
Field Sets						
Object Limits						
Record Types						
Related Lookup Filters						
Search Layouts						
List View Button Layout						
Restriction Rules						
Scoping Rules						
Object Access						
Triggers						
Flow Triggers						
<b>Validation Rules</b>						

- **For Service records**

SETUP > OBJECT MANAGER

**Service records**

Lightning Record Pages	<b>Validation Rules</b> 1 Items, Sorted by Rule Name					New
Buttons, Links, and Actions	RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY	
Compact Layouts	service_status_note	Service Status	still it is pending	✓	Manohara Sai Subba Raju Golla, 27/10/2024, 6:47 pm	▼
Field Sets						
Object Limits						
Record Types						
Related Lookup Filters						
Search Layouts						
List View Button Layout						
Restriction Rules						
Scoping Rules						
Object Access						
Triggers						
Flow Triggers						
<b>Validation Rules</b>						

- **For Billing details & Feedback**



SETUP > OBJECT MANAGER

Billing details and feedback

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

Object Access

Triggers

Flow Triggers

Validation Rules

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

✓

Manohara Sai Subba Raju Golla, 28/10/2024, 11:41 pm

New

## Activity – 7

### Duplication Rules

#### - Matching Rule:

Create a matching rule for the Customer details Object with the given criteria.

Setup Home Object Manager

Q matchi

✓ Data

✓ Duplicate Management

Matching Rules

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

SETUP Matching Rules						
All Matching Rules <span>Help for this Page</span>						
What Are Matching Rules? <span>[ Expand ]</span>						
View: All Matching Rules 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 Z Other All						
Action	Rule Name ↑	Object	Status	Description	Last Modified Date	Last Modified By
Del   Deactivate	Matching customer details	Customer Details	Active		27/10/2024	Manohara

#### - Duplicate Rule:

Create a duplicate rule for the same customer details object which allows the duplication in input fields.

Setup Home Object Manager

Q dup

✓ Data

✓ Duplicate Management

Duplicate Error Logs

Duplicate Rules

Matching Rules

Feature Settings

Sales

Individual Settings

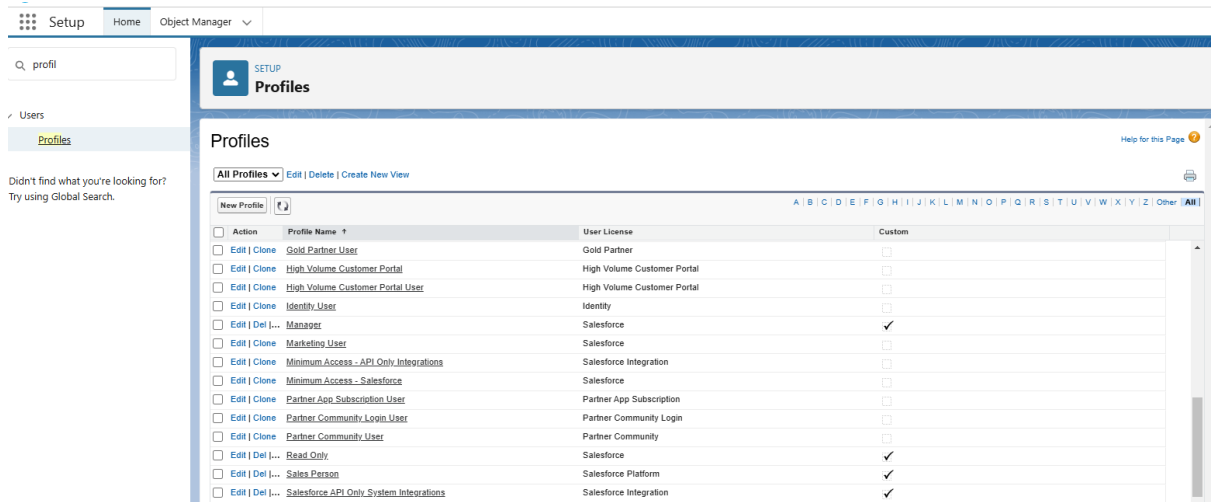
Products

SETUP Duplicate Rules						
All Duplicate Rules <span>Help for this Page</span>						
What Are Duplicate Rules? <span>[ Expand ]</span>						
View: All Duplicate Rules						
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						
Rule Name ↑	Description	Object	Matching Rule	Active	Last Modified By	Last Modified Date
Customer Detail duplicate		Customer Details	Matching customer details	✓	Manohara	27/10/2024

## Activity – 8

### Creating Profiles

- **Manager Profile**
- **Sales Person Profile**

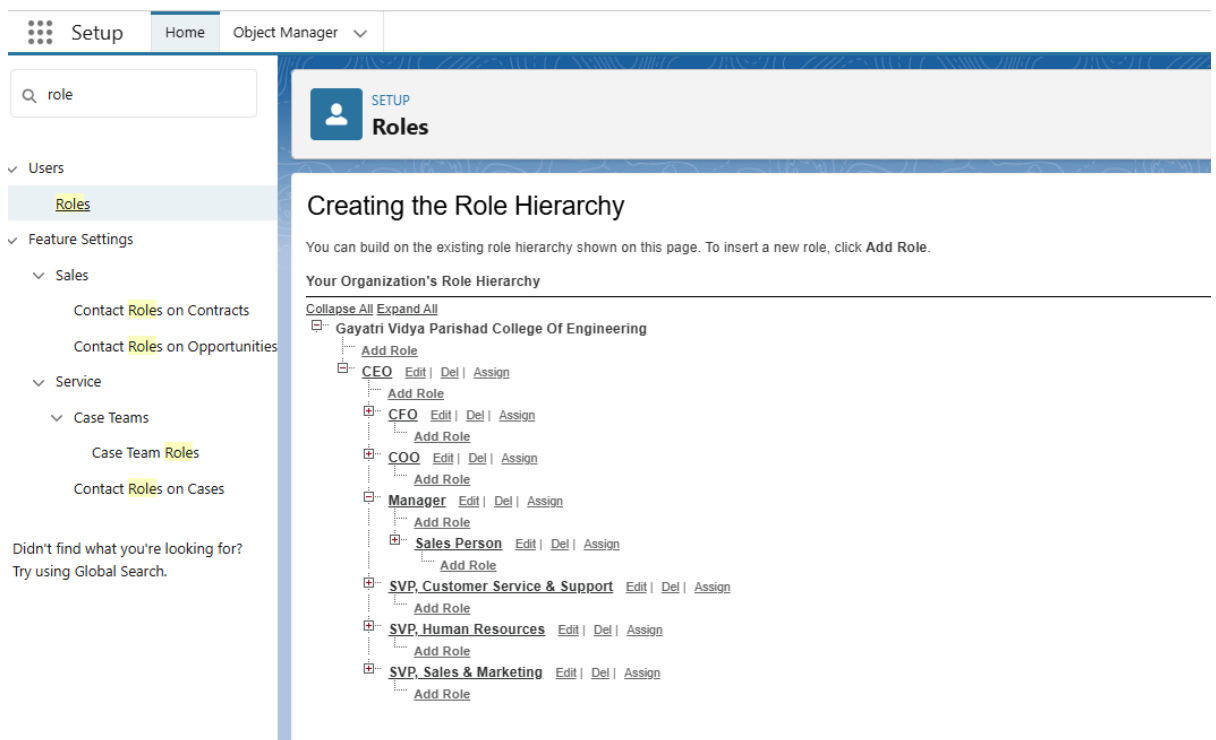


The screenshot shows the Salesforce Setup interface for the 'Profiles' section. The left sidebar contains navigation links for 'Setup', 'Home', and 'Object Manager'. The main content area displays a table of profiles with columns for 'Action', 'Profile Name', 'User License', and 'Custom'. The table lists various profiles such as 'Gold Partner User', 'High Volume Customer Portal', 'Identity User', 'Manager', 'Marketing User', 'Minimum Access - API Only Integrations', 'Minimum Access - Salesforce', 'Partner App Subscription User', 'Partner Community Login User', 'Partner Community User', 'Read Only', 'Sales Person', and 'Salesforce API Only System Integrations'. Each profile has a corresponding user license and a checkbox for 'Custom'.

Action	Profile Name	User License	Custom
<a href="#">Edit</a>   <a href="#">Clone</a>	Gold Partner User	Gold Partner	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Clone</a>	High Volume Customer Portal	High Volume Customer Portal	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Clone</a>	High Volume Customer Portal User	High Volume Customer Portal	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Clone</a>	Identity User	Identity	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Del</a>   ...	Manager	Salesforce	<input checked="" type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Clone</a>	Marketing User	Salesforce	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Clone</a>	Minimum Access - API Only Integrations	Salesforce Integration	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Clone</a>	Minimum Access - Salesforce	Salesforce	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Clone</a>	Partner App Subscription User	Partner App Subscription	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Clone</a>	Partner Community Login User	Partner Community Login	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Clone</a>	Partner Community User	Partner Community	<input type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Del</a>   ...	Read Only	Salesforce	<input checked="" type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Del</a>   ...	Sales Person	Salesforce Platform	<input checked="" type="checkbox"/>
<a href="#">Edit</a>   <a href="#">Del</a>   ...	Salesforce API Only System Integrations	Salesforce Integration	<input checked="" type="checkbox"/>

## Activity – 9

### Roles & Role Hierarchy



## Activity – 10

### Users

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.

Setup

Home

Object Manager

users

Users

Permission Set Groups

Permission Sets

Profiles

Public Groups

Queues

Roles

User Management Settings

Users

Feature Settings

Data.com

Prospector

Users

Didn't find what you're looking for?

Try using Global Search.

SETUP

Users

Help for this Page

All Users

Create New User

New User

Reset Password(s)

Add Multiple Users

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Brown, Courtney	cbrow	courtney@brown.cbrow	Sales Person	✓	Sales Person
<input type="checkbox"/> Edit	Chatter Expert	Chatter	chatter.00dd000007z0sual.fmr4th1tssu@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/> Edit	Golla, Manohara Sai Subba Raju	Manohara	21131a05d3@qvnce.ac.in		✓	System Administrator
<input type="checkbox"/> Edit	Mikaelson, Niklaus	nmika	niklausmikaelson@nmika.niklaus	Manager	✓	Manager
<input type="checkbox"/> Edit	gappu, ganesh	gappu	ganesh@gappu.gappu	Sales Person	✓	Sales Person
<input type="checkbox"/> Edit	User, Integration	inteo	integration@00dd000007z0sual.com		✓	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User, Security	sec	insightsecurity@00dd000007z0sual.com		✓	Analytics Cloud Security User
<input type="checkbox"/> Edit	Wheeler, Allison	awhee	allison@wheeler.awhee	Sales Person	✓	Sales Person

New User

Reset Password(s)

Add Multiple Users

Activity – 11

Public Groups

- **Creating New Public Groups**  
a valuable tool for Salesforce administrators and developers to streamline user management, data access, and security settings.

Setup

Home

Object Manager

publi

Public Groups

Users

Feature Settings

Salesforce Files

Content Deliveries and Public Links

User Interface

Global Actions

Publisher Layouts

Company Settings

Calendar Settings

Public Calendars and Resources

SETUP

Public Groups

Help for this Page

Public Groups

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.

All

Create New View

New

Action	Label	Group Name	Created By	Created Date
<input type="checkbox"/> Edit	sales team	sales_team	Golla, Manohara Sai Subba Raju	27/10/2024, 7:26 pm

Activity – 12

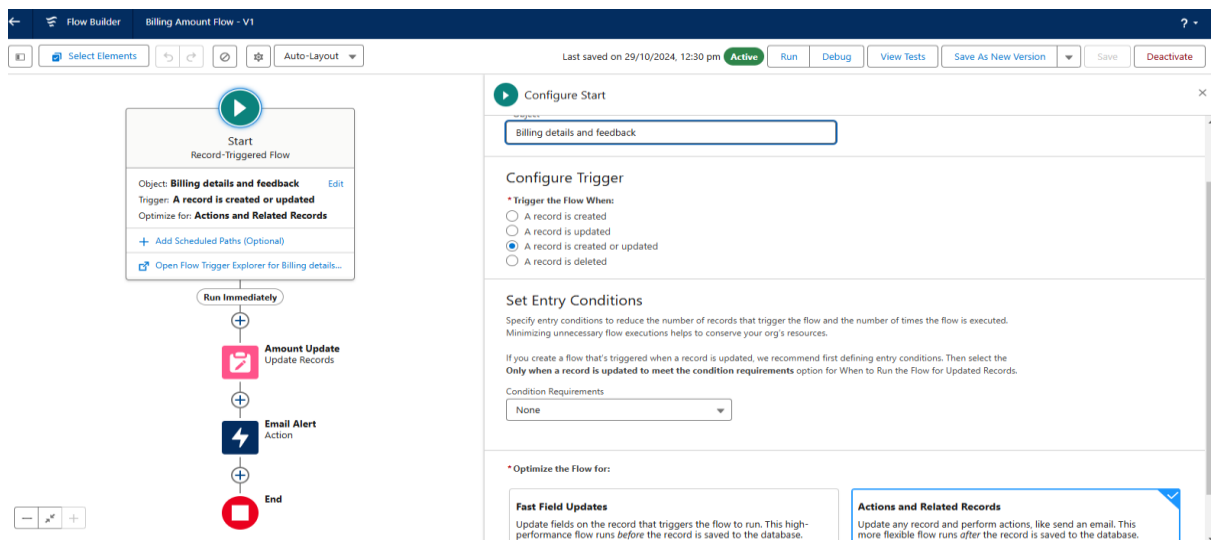
**Sharing Settings:** control how records are accessed and shared within your organization. These settings are crucial for maintaining data security and privacy.

The screenshot shows the 'Sharing Settings' page in Salesforce. The left sidebar contains a search bar and a list of objects. The main area displays a table of sharing settings for various objects. The 'Other Settings' section at the bottom includes checkboxes for 'Standard Report Visibility', 'Manual User Record Sharing', 'Manager Groups', 'Secure guest user record access', and 'Require permission to view record names in lookup fields'.

## Activity – 13

**Flows:** a powerful tool that allows you to automate business processes, collect and update data, and guide users through a series of screens or steps.

### - Record-Trigger Flow



### - Amount Update Flow

- Field : Payment\_Paid\_\_c
- Value : `{!$Record.Service_records__r.Appointment__r.Service_Amount__c}`

Flow Builder: Billing Amount Flow - V1

Last saved on 29/10/2024, 12:30 pm **Active** Run Debug View Tests Save As New Version Save Deactivate

Record-Triggered Flow Start

Run Immediately

Update Records

Copy Element

Cut Element

Delete Element

Add Fault Path

Edit Element

Email Alert Action

End

Update Records

Amount Update

Amount\_Update

Description

\*How to Find Records to Update and Set Their Values

☒ Use the billing details and feedback record that triggered the flow

☐ Update records related to the billing details and feedback record that triggered the flow

☐ Use the IDs and all field values from a record or record collection

☐ Specify conditions to identify records, and set fields individually

Set Filter Conditions

Condition Requirements to Update Record

All Conditions Are Met (AND)

Field: Payment\_Status\_c Operator: Equals Value: Completed

+ Add Condition

Set Field Values for the Billing details and feedback Record

Field: Payment\_Paid\_c Value: \$Record > Service records > Appointment > S...

## - Email Alert Flow

- RecipientAddressList:  
{!\$Record.Service\_records\_\_r.Appointment\_\_r.Customer\_Name\_\_r.Gmail\_\_c}

Flow Builder: Billing Amount Flow - V1

Last saved on 29/10/2024, 12:30 pm **Active** Run Debug View Tests Save As New Version Save Deactivate

Toolbox

Manager

Search this flow...

New Resource

RESOURCES

Text Templates (1)

alert

ELEMENTS

Actions (1)

Email Alert

Update Records (1)

Amount Update

Record-Triggered Flow Start

Run Immediately

Amount Update Update Records

Action

Copy Element

Cut Element

Delete Element

Add Fault Path

Edit Element

End

Send Email

BCC Recipient Address List

Not Included

Body

alert

Included

CC Recipient Address List

Not Included

Email Template ID

Not Included

Log Email on Send

Not Included

Recipient Address Collection

Not Included

Recipient Address List

\$Record > Appointment > Customer Gmail > Gmail

Included

Recipient ID

Not Included

Related Record ID

Not Included

## Activity – 14

## Triggers

## - AmountDistributionHandler.apxc (Class)

```

File Edit Debug Test Workspace Help
AmountDistribution.apxt AmountDistributionHandler.apxc
Code Coverage: None API Version: 62 Go To

1 public class AmountDistributionHandler {
2
3     public static void amountDist(list<Appointment__c> listApp){
4
5         list<Service_records__c> serList = new list<Service_records__c>();
6
7         for(Appointment__c app : listApp){
8
9             if(app.Maintenance_service__c == true && app.Repairs__c == true && app.Replacement_Parts__c == true){
10
11                 app.Service_Amount__c = 10000;
12
13             }
14
15             else if(app.Maintenance_service__c == true && app.Repairs__c == true){
16
17                 app.Service_Amount__c = 5000;
18
19             }
20
21             else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
22
23                 app.Service_Amount__c = 8000;
24
25             }
26
27             else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
28
29                 app.Service_Amount__c = 7000;
30
31             }
32
33             else if(app.Maintenance_service__c == true){
34
35                 app.Service_Amount__c = 2000;
36
37             }
38
39             else if(app.Repairs__c == true){
40
41                 app.Service_Amount__c = 3000;
42
43             }
44
45             else if(app.Replacement_Parts__c == true){
46
47                 app.Service_Amount__c = 5000;
48
49             }
50         }
51     }
52 }

```

## - AmountDistribution.apxt (Trigger)

```

File Edit Debug Test Workspace Help
AmountDistribution.apxt AmountDistributionHandler.apxc
Code Coverage: None API Version: 62 Go To

1 trigger AmountDistribution on Appointment__c (before insert, before update) {
2
3     if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
4
5         AmountDistributionHandler.amountDist(trigger.new);
6
7     }
8 }

```

User	Application	Operation	Time	Status	Read	Size
Manohara Sai Subba Raju Golla	Browser	/aura	10/29/2024, 12:30:35 PM	Success	Unread	279 bytes
Manohara Sai Subba Raju Golla	Browser	/aura	10/29/2024, 12:30:24 PM	Success	Unread	1.3 KB
Manohara Sai Subba Raju Golla	Browser	/flow/Billing_Amount_Flow/301d00000...	10/29/2024, 12:30:24 PM	Success	Unread	279 bytes
Manohara Sai Subba Raju Golla	Browser	/aura	10/29/2024, 12:29:58 PM	Success	Unread	1.3 KB
Manohara Sai Subba Raju Golla	Browser	/flow/Billing_Amount_Flow/301d00000...	10/29/2024, 12:29:57 PM	Success	Unread	279 bytes
Manohara Sai Subba Raju Golla	Browser	/aura	10/29/2024, 12:29:47 PM	Success	Unread	1.3 KB

Filter Click here to filter the log list

## Activity – 15

### Reports

- **Report Folder Creation**

Garage Manage... Customer Details Appointment Service records Billing details and feedback Reports

Reports

All Folders

8 items

Q Search all folders... New Report New Folder

REPORTS	Name	Created By	Created On	Last Modified By	Last Modified Date
Recent	Einstein Bot Reports	Automated Process	15/7/2024, 11:47 pm	Automated Process	15/7/2024, 11:47 pm
Created by Me	Einstein Bot Reports Spring '23	Automated Process	15/7/2024, 11:47 pm	Automated Process	15/7/2024, 11:47 pm
	Einstein Bot Reports Summer '23	Automated Process	15/7/2024, 11:47 pm	Automated Process	15/7/2024, 11:47 pm
Private Reports	Einstein Bot Reports Summer '22	Automated Process	15/7/2024, 11:47 pm	Automated Process	15/7/2024, 11:47 pm
Public Reports	Einstein Bot Reports Winter '23	Automated Process	15/7/2024, 11:47 pm	Automated Process	15/7/2024, 11:47 pm
All Reports	Enablement Dashboard Reports Spring '24	Automated Process	15/7/2024, 11:47 pm	Automated Process	15/7/2024, 11:47 pm
FOLDERS	Enablement Dashboard Reports Summer '24	Automated Process	15/7/2024, 11:47 pm	Automated Process	15/7/2024, 11:47 pm
All Folders	Garage Management Folder	Manohara Sai Subba Raju Golla	27/10/2024, 10:56 pm	Manohara Sai Subba Raju Golla	27/10/2024, 10:56 pm
Created by Me					

- **Report Type**

Setup Home Object Manager

Q report

Feature Settings

- Analytics
  - Reports & Dashboards
    - Access Policies
    - Historical Trending
    - Report Types
    - Reporting Snapshots
    - Reports and Dashboards Settings
- Security
  - Guest User Sharing Rule Access
  - Report

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

Report Types

Custom report type Definition

Report Type Label: Service information

Report Type Name: Service information

Report Type Category: Other Reports

Deployment Status: Deployed

Description: Service information

Created By: Manohara Sai Subba Raju Golla

Modified By: Manohara Sai Subba Raju Golla

Object Relationships

Customer Details (A)

- with at least one related record from Appointment (B)
- with at least one related record from Service records (C)
- with at least one related record from Billing details and feedback (D)

Fields Available for Reports

Source	Selected Fields
Customer Details	9
Appointment	15
Service records	10
Billing details and feedback	10

- **New Service Information Report**

Garage Manage... Customer Details Appointment Service records Billing details and feedback Reports

REPORT

New Service Information Report Service information

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

Update Preview Automatically

Rating for service

Rating for service	Payment Status	Completed	Total
4	Sum of Payment Paid Record Count	1	3
5	Sum of Payment Paid Record Count	2	2
Total	Sum of Payment Paid Record Count	3	5

Sum of Payment Paid

Rating for service

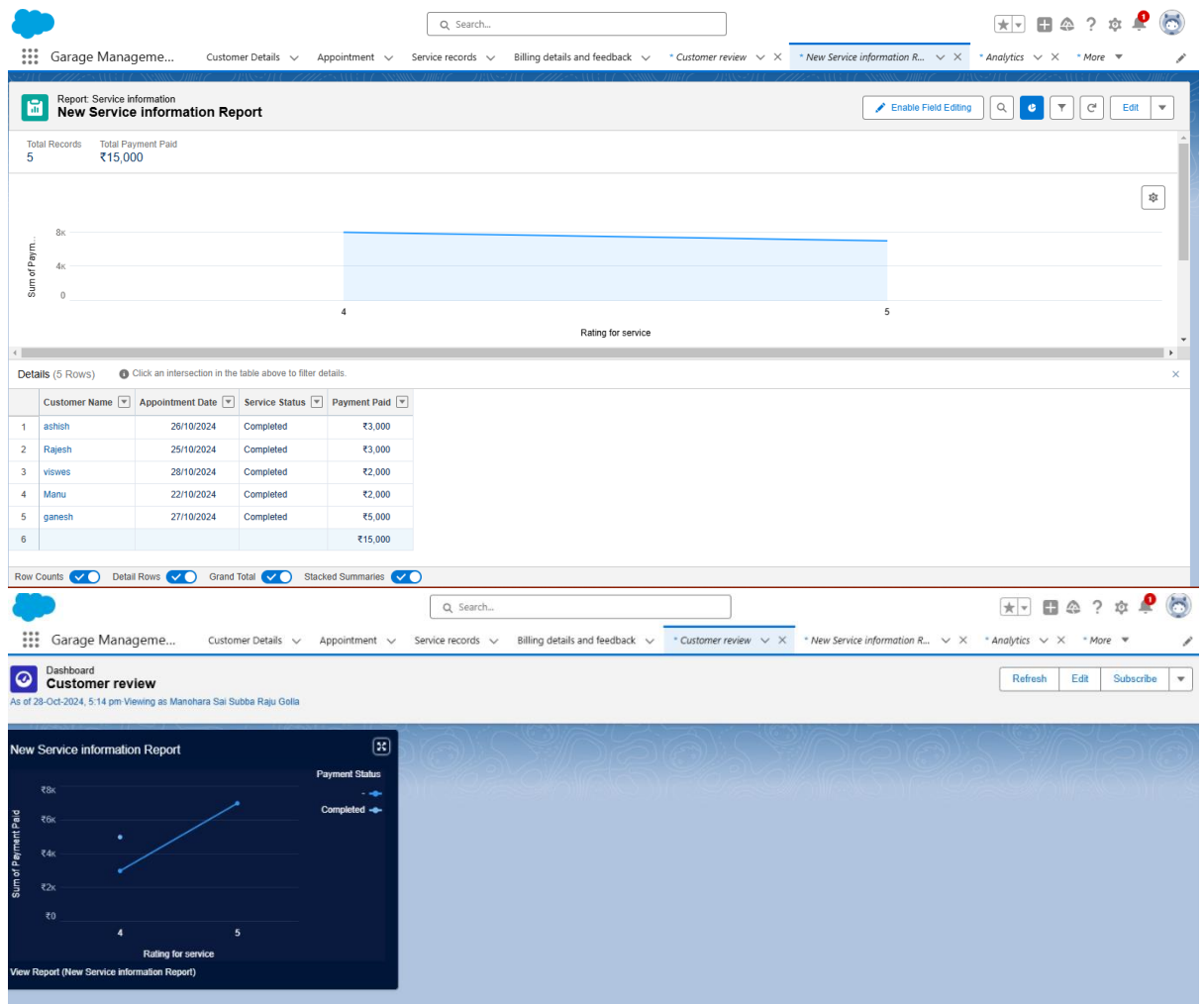
Details (5 Rows)

Customer Name	Appointment Date	Service Status	Payment Paid
ashish	26/10/2024	Completed	₹3,000
Rajesh	25/10/2024	Completed	₹3,000
viswes	28/10/2024	Completed	₹2,000
Manu	22/10/2024	Completed	₹2,000
ganesh	27/10/2024	Completed	₹5,000
			₹15,000

Row Counts Detail Rows Grand Total Stacked Summaries Conditional Formatting

**Activity – 16**

**Dashboard:** Dashboards help you visually understand changing business conditions so you can make decisions based on the real-time data you've gathered with reports.



# CONCEPTS UTILIZED

(FOR OUR PROJECT IMPLEMENTATION)

- **What is SALESFORCE?**

Salesforce is like a digital hub that helps businesses stay connected with their customers. Imagine having a central place



where a company can keep track of every conversation, email, and sale, so no detail slips through the cracks. It's built to bring together sales, customer support, and marketing efforts, so everyone is on the same page.

With Salesforce, businesses can customize tools to fit their needs, automate repetitive tasks, and use built-in AI to get insights on what customers want. It's essentially a smart assistant for companies to build stronger, more personalized customer relationships.

- **Objects**

Objects are database tables that permit you to store data that is specific to an organization.

Types:-

1. Standard Objects

- Provided by salesforce

2. Custom Objects

- Created by users as per their requirements and flexibilities.

- **Tabs**

Tabs are navigation links that give users quick access to different objects, features, or data, like accounts, contacts, or dashboards, within the platform.

- **Lightning App**

A Lightning App in Salesforce is a tool that lets users build easy-to-use, interactive apps to streamline work and improve how they interact with data.

- **Fields**

Fields in Salesforce are like labelled blanks in a form where you fill in specific details like a person's name, phone number, or Gmail, so that all relevant information is organized and easy to find.

- **Validation & Duplication Rules**

- Validation rules in Salesforce are conditions that ensure data entered meets specific criteria before being saved, helping maintain data quality and accuracy.
- Duplication rules in Salesforce are settings that help prevent or manage duplicate records by identifying and blocking or alerting users about potential duplicates during data entry.

- **Profiles**

Profiles define what a user can see and do within the platform, acting like "permission sets" for different roles.

- **Role & Role Hierarchy**

Roles define a user's level of access to data and functions, creating a hierarchy that helps organizations manage who can see and edit information, ensuring everyone has the right permissions while still promoting collaboration across teams.

- **Users**

Users are people who can log in to the platform to manage customer information, track sales, and work with their teammates, helping them do their jobs better.

- **Public Groups**

Public groups in Salesforce are like team huddles that bring users together, making it easier to share information and collaborate on projects seamlessly.

- **Sharing Settings**

Sharing settings determine how and with whom you share data within your organization, ensuring the right people have access to the right information to collaborate effectively.

- **Flows**

Flows are powerful tools that allow users to automate complex business processes by visually designing step-by-step workflows that guide users or update records without needing to write code.

- **Apex Triggers**

APEX Triggers are custom pieces of code that automatically execute before or after specific events occur in the database, helping businesses automate tasks and enforce rules without needing manual input.

- **Reports**

Reports are tools that help businesses visualize and analyse their data, making it easier to understand trends and track performance at a glance.

- **Dashboard**

Dashboards are visual displays that summarize key metrics and data, helping businesses quickly see their performance and make informed decisions at a glance.

## **TEST AND VALIDATION**

- **Approach to Testing:**

For the Garage Management System, our testing strategy ensures everything works smoothly and meets user needs. We'll combine both automated and manual testing methods, including:

1. Functional Testing
2. Integration Testing
3. User Acceptance Testing (UAT)
4. Performance Testing

- **Unit Testing (Apex Classes & Triggers):**

Unit testing will focus on individual components, like Apex classes and triggers, to ensure they function correctly. Key elements include:

1. **Positive Tests:** To confirm expected functionality under normal conditions.
2. **Negative Tests:** To check how the system handles errors or unexpected inputs.
3. **Bulk Tests:** To ensure the system can handle large amounts of data without issues.

## **EXAMPLE SCENARIO**

### **Problem Statement:**

XYZ Auto's, a local garage, is facing some real challenges. Customers often find it hard to get their cars in for service because of scheduling issues, leading to long wait times and frustrated clients. The mechanics have trouble accessing the latest information on repairs, which can slow things down. Plus, the garage doesn't have a good way to track inventory or understand its performance, making it tough to know how to improve.

## **Solution:**

**To turn things around, XYZ Auto's decides to use a Garage Management System built on the Salesforce platform.**

- **Centralized Customer Database:**

Salesforce helps create a single place where all customer details, vehicle information, and repair histories are stored. This means when customers come in, staff can quickly pull up their records, making check-ins a breeze.

- **Appointment Scheduling:**

The new system includes an easy-to-use online scheduling tool, allowing customers to book their service appointments anytime. This helps the garage manage availability better and reduces those annoying scheduling conflicts.

- **Real-Time Tracking of Repairs:**

Mechanics can update status of repairs right in Salesforce. This means customers get real-time updates about their vehicles, which makes the whole process more transparent and keeps everyone in the loop.

- **Inventory Management:**

An integrated inventory feature keeps track of parts and supplies, alerting the manager when stocks are running low. This way, XYZ Auto's can always have the parts it needs on hand, helping to speed up repairs.

- **Performance Analytics:**

With Salesforce dashboards, the garage can easily analyze important metrics like average repair times and customer satisfaction. This data helps management make smarter decisions, spot popular services, and develop effective marketing strategies.

## **Outcome:**

The new Garage Management System, XYZ Auto's sees a big boost in customer satisfaction. With shorter wait times and better communication, customers feel more valued. Mechanics are also happier, as they can easily access the latest repair information. Plus, the garage can manage its inventory better and gain valuable insights into its performance. Overall, this solution not only streamlines operations but also sets the stage for future growth, allowing XYZ Auto's to focus on what it does best: getting cars back on the road quickly and efficiently.

# **CONCLUSION**

In conclusion, the Salesforce Garage Management System is a powerful tool that makes running a service centre easier and more

efficient. It combines features like online appointment scheduling, real-time updates on car repairs, and smart inventory management, all in one place. This means customers get faster service and clear communication, which helps keep them happy. For the staff, it reduces confusion and makes their jobs smoother. Plus, the system gives managers valuable insights into performance, allowing them to spot trends and improve the business. Overall, this system helps garages provide excellent service and build strong relationships with their customers.

Thank You