

GARAGE MANAGEMENT

SYSTEM

By

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Project Abstraction

The Garage Management System is a web-based tool designed to manage and track all garage operations. The system aims to provide a centralized platform for garage owners to monitor and control their business activities, including employee management, inventory tracking, and customer service. The system is built on the Salesforce platform, which provides a robust and secure infrastructure for managing and storing data. The Salesforce platform also offers a wide range of tools and features that can be used to customize and extend the system to meet the specific needs of the garage business.

One of the key features of the Garage Management System is its employee management module. This module allows garage owners to keep track of all their employees, including their contact information, work schedules, and job assignments. The system also provides tools for

managing employee performance, such as tracking attendance and evaluating performance.

The Garage Management System also includes a customer service module, which allows garage owners to keep track of all their customers and their interactions with the garage. The system provides tools for managing customer information, such as contact details and service history, as well as tools for scheduling appointments and tracking customer feedback.

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INTRODUCTION

The Garage Management System is a comprehensive solution designed to optimize the usage of vehicles and trailers that carry inventories to stores. The system aims to streamline the management of vehicle records, track vehicles, and ensure efficient inventory transportation. The Garage Management System will be built on the Salesforce platform, leveraging its robust architecture and scalability. The system will consist of several components, including vehicle records, inventory management, workflow automation, and integration with other Salesforce modules. The implementation strategy will involve requirements gathering, design, development, testing, and deployment. The abstraction framework for the system will use an Integration Procedure to get input from a workflow, query the product model based on that input, and update products, attributes, and inventory levels. The Garage Management System will provide a flexible and scalable architecture for managing and optimizing inventory transportation, ensuring efficient vehicle utilization, and

automating

business processes.

TASK 1:

Creating Developer Account:

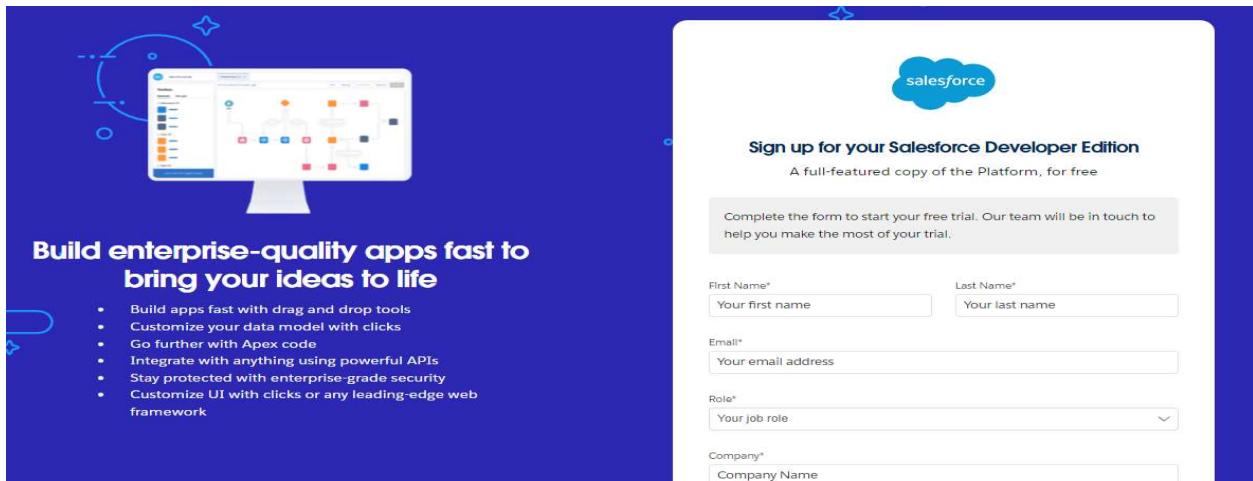
Creating a developer org in salesforce.

1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form, enter the following details :
3. First name & Last name
4. Email
5. Role : Developer
6. Company : College Name
7. County : India
8. Postal Code : pin code
9. 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 :

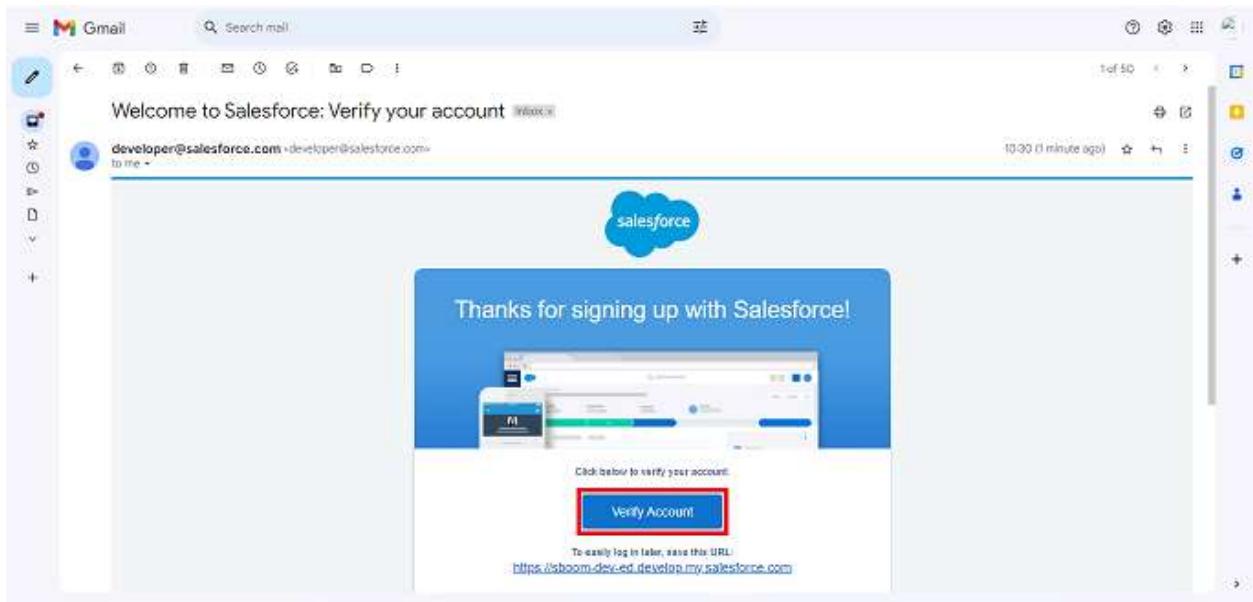
username@organization.com

10. Click on sign me up after filling these.



Account Activation

1. 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.



2. Click on Verify Account

3. Give a password and answer a security question and click on change password.

Change Your Password

Enter a new password for lead@sb.oom.
Make sure to include at least:

- 8 characters
- 1 letter
- 1 number

* New Password
..... Good

* Confirm New Password
..... Match

Security Question
In what city were you born?

* Answer
asdfghijkl

Change Password

4. Then you will redirect to your salesforce setup page.

Cloud icon

Setup Home

Search Setup

Home Object Manager

Quick Find

Setup Home

Service Setup Assistant

Multi-Factor Authentication Assistant

Release Updates

Lightning Experience Transition Assistant

Salesforce Mobile App

Lightning Usage

Optimizer

ADMINISTRATION

Users

SETUP Home

Create

Get Started with Einstein Bots

Launch an AI-powered bot to automate your digital connections.

Get Started

Mobile Publisher

Use the Mobile Publisher to create your own branded mobile app.

Learn More

Real-time Collaborative Docs

Transform productivity with collaborative docs, spreadsheets, and slides inside Salesforce.

Get Started

TASK 2:CREATING THE OBJECTS

i)Create Customer DetailsObject

To create an object:

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

The screenshot shows the Salesforce setup interface for managing object details. The top navigation bar includes links for Setup, Home, and Object Manager. A search bar labeled 'Search Setup' is at the top right. The main content area is titled 'Customer Details' under 'OBJECT MANAGER'. On the left, a sidebar 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, and Restriction Rules. The main panel is titled 'Details' and contains sections for API Name ('Customer_Details__c'), Singular Label ('Customer Details'), Plural Label ('Customer Details'), and various checkboxes for reports, activities, field history, and deployment status. Buttons for 'Edit' and 'Delete' are located in the top right corner of the main panel.

ii) Create Appointment Object

To create an object:

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

iii) Create Service Records Object

To create an object:

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

The screenshot shows the Salesforce Setup interface for managing objects. The URL in the address bar is <https://gurunankinstituteoftechnolo-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01INS0000003l5d/Details/view>. The page title is "Service records". The left sidebar has a "Details" tab selected, showing 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 content area shows the "Details" section for the "Service records" object. It includes fields for API Name (Service_records__c), Singular Label (Service records), Plural Label (Service records), and various checkboxes for Enable Reports, Track Activities, and Track Field History. Deployment status is set to Deployed, and Help Settings point to Standard salesforce.com Help Window. There are "Edit" and "Delete" buttons at the top right.

iv) Create Billing Details And Feedback Object

To create an object:

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

1. Enter the label name >> Billing details and feedback

2. Plural label name >> Billing details and feedback

3. Enter Record Name Label and Format

- Record Name >> Billing details and feedback Name

- Data Type >> Auto Number

- Display Format >> bill-{000}

- Starting number >> 1

2. Click on Allow reports and Track Field History,

3. Allow search >> Save.

The screenshot shows the Salesforce Object Manager setup page. The URL in the address bar is gurunankinstituteoftechnolo-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01INS0000003IAT/Details/view. The page title is "Billing details and feedback". On the left, there is a sidebar with various tabs like Details, Fields & Relationships, Page Layouts, etc. The main content area shows the object's details, including API Name (Billing_details_and_feedback__c), Singular Label (Billing details and feedback), Plural Label (Billing details and feedback), and other settings like Enable Reports (checked), Deployment Status (Deployed), and Help Settings (Standard salesforce.com Help Window). There are "Edit" and "Delete" buttons at the top right.

TASK 3:CREATE TABS

Creating A Custom Tab

To create a Tab:(Customer Details)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)

The screenshot shows the Salesforce Setup interface. At the top, there are tabs for 'Setup' and 'Custom Tabs'. The 'Custom Tabs' tab is highlighted with a red box and an arrow pointing to it. Below the tabs, there's a search bar and a sidebar with 'User Interface' and 'Recent Tabs and Labels' sections. The main content area is titled 'Custom Tabs' and contains a table of 'Custom Object Tabs'. A red box highlights the 'New' button in the top right corner of the table header.

2. 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 .

3. Make sure that the Append tab to users' existing personal customizations is checked.

4. Click save.

The screenshot shows the 'New Custom Object Tab' setup page, Step 1. It has a title 'New Custom Object Tab' and a progress indicator 'Step 1 of 3'. The form includes:

- Step 1. Enter the Details:** A sub-header with the instruction 'Choose the custom object for this new custom tab. Fill in other details.' Below this, there's a dropdown for 'Object' set to 'Customer Details' and a 'Tab Style' dropdown set to 'Blank'.
- Optional:** A section for 'Splash Page Custom Link' with a dropdown set to '--None--'.
- Description:** A text input field labeled 'Enter a short description.' with the placeholder 'Description'.
- Buttons:** 'Next' and 'Cancel' buttons at the bottom right.



To create a Tab:(Appointment)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
2. Select Object(Appointment) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
3. Make sure that the Append tab to users' existing personal customizations is checked.
4. Click save

To create a Tab:(Service Records)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)
2. Select Object(Service Records) >> Select the tab style >> Next (Add to

profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .

3. Make sure that the Append tab to users' existing personal customizations is checked.

4. Click save

To create a Tab:(Billing details and feedback)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)

2. Select Object(Billing details and feedback) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App)
uncheck the include tab .

3. Make sure that the Append tab to users' existing personal customizations is checked.

4. Click save

TASK 4:CREATE THE LIGHTING APP

To create a lightning app page:

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

2. 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.

3. To Add Navigation Items:

4. 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.

5. To Add User Profiles:

Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Chatter Expert	Chatter	chatty.0000000000000000000000000000000@zak.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>	Mikaelson_Niklaus	omika	mikaelson@mikaelson.mikaelson	Manager	<input checked="" type="checkbox"/>	Manager
<input type="checkbox"/>	Mitesh_B	bmitre	21831a66118@gnindia.org	sales person	<input checked="" type="checkbox"/>	sales person
<input type="checkbox"/>	mohan_k	kmoha	21831a66119@gnindia.org	sales person	<input checked="" type="checkbox"/>	sales person
<input type="checkbox"/>	Nikhil kumar Alampally	ANikh	nikhilalampally24@gmail.com	System Administrator	<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	sarita_A	asait	21831a66072@gnindia.org	sales person	<input checked="" type="checkbox"/>	sales person
<input type="checkbox"/>	User_Integration	integ	integration@00nd0000000000000000000000000000@zak.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>	User_Security	sec	insightssecurity@000ms000000000000000000000000000@zak.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

TASK 5:CREATE THE FIELDS

1. To create fields in an object:

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

5. 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 field for the same object.

2. To create another fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Customer Details) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data type as a “Email” and Click on Next
4. Fill the Above as following:

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

Creation Of Lookup Fields

Creation of Lookup Field on Appointment Object :

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

5. Next >> Next >> Save.

Note: Make sure you complete Activity 4 Before continuing.

Creation of Lookup Field on Service records Object :

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

Creation of Lookup Field on Billing details and feedback Object :

1. Go to setup >> click on Object Manager >> type object name(Billing details and feedback) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.

3. Select “Look-up relationship” as data type and click Next.
4. Select the related object “ Service records” and click next.
5. Next >> Next >> Save & new.

Creation Of Checkbox Fields

Creation of Checkbox Field on Appointment Object :

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

Creation of Another Checkbox Field on Appointment Object :

1. Repeat the steps form 1 to 3.
2. Give the Field Label : Repairs
3. Field Name : is auto populated
4. Default value : unchecked
5. Click on next >> next >> save.
6. Follow the same and create another checkbox with given names
7. Give the Field Label : Replacement Parts

8. Field Name : is auto populated

9. Default value : unchecked

10. Click on next >> next >> save.

Creation of Checkbox Field on Service records Object :

1. Go to setup >> click on Object Manager >> type object name(Service records)

in search bar >> click on the object.

2. Now click on “Fields & Relationships” >> New.

3. Select “Check box” as data type and click Next.

4. Give the Field Label : Quality Check Status

5. Field Name : is auto populated

6. Default value : unchecked

7. Click on next >> next >> save

Creation Of Date Fields

Creation of Date Field on Appointment Object :

1. Go to setup >> click on Object Manager >> type object name(Appointment) in

the search bar >> click on the object.

2. Now click on “Fields & Relationships” >> New.

3. Select “Date” as data type and click Next.

4. Give the Field Label : Appointment Date

5. Field Name : is auto populated

6. Make it as a Required field by click on the Required option.

7. Click on next >> next >> save.

Creation Of Currency Fields

Creation of Currency Field on Appointment Object :

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

Creation of Currency Field on Billing details and feedback Object :

1. Follow the same steps as mentioned above in Billing details and feedback Object.
2. Change the label name as mentioned.
3. Give the Field Label : Payment Paid
4. Field Name : is auto populated

Creation Of Text Fields

1. Go to setup >> click on Object Manager >> type object name(Appointment) in the search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New.

3. Select "Text" as data type and click Next.
4. Give the Field Label : Vehicle number plate
5. Field Name : is auto populated
6. Length : 10
7. Make field as Required and Unique.
8. Click on next >> next >> save.

Creation of Text Fields in Billing details and feedback object :

1. Go to setup >> click on Object Manager >> type object name(Billing details and feedback) in search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New.
3. Select "text" as data type and click Next.
4. Give the Field Label : Rating for service
5. Field Name : is auto populated
6. Length : 1
7. Make field as Required and Unique.
8. Click on next >> next >> save

Creation Of Picklist Fields

Creation of Picklist Fields in Service records object :

1. Go to setup >> click on Object Manager >> type object name(Service records) in search bar >> click on the object.
2. Click on fields & relationship >> click on New.

3. Select Data type as "Picklist" and click Next.
4. 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.
5. The values are: Started, Completed
6. Click Next.
7. Next >> Next >> Save.

Creation of Picklist Fields in Billing details and feedback object :

1. Go to setup >> click on Object Manager >> type object name(Billing details and feedback) in search bar >> click on the object.
2. Click on fields & relationship >> click on New.
3. Select Data type as "Picklist" and click Next.
4. 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.
5. The values are: Pending, Completed.
6. Click Next.

Creating Formula Field In Service Records Object

1. Go to setup >> click on Object Manager >> type object name(Service records) in search bar >> click on the object.
2. Click on fields & relationship >> click on New.
3. Select Data type as "Formula" and click Next.
4. Give Field Label and Field Name as "service date" and select formula return type as

"Date" and click next.

5. Insert field formula should be : CreatedDate

6. click "Check Syntax" .

7. Click next >> next >> Save.

The screenshot shows the Salesforce Object Manager interface for the 'Customer Details' object. The left sidebar has 'Fields & Relationships' selected. The main area displays a table titled 'Fields & Relationships' with 6 items, sorted by Field Label. The columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The data includes:

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		✓

The screenshot shows the Salesforce Object Manager interface for the 'Appointment' object. The left sidebar has 'Fields & Relationships' selected. The main area displays a table titled 'Fields & Relationships' with 13 items, sorted by Field Label. The columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The data includes:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Last Modified By	LastModifiedById	Lookup(User)		
Maintenance service	Maintenance_service__c	Checkbox		
Owner	OwnerId	Lookup(User,Group)		✓
Payment Paid	Payment_Paid__c	Currency(18, 0)		
Quality Check Status	Quality_Check_Status__c	Checkbox		
Repairs	Repairs__c	Checkbox		
Replacement Parts	Replacement_Parts__c	Checkbox		
Service Amount	Service_Amount__c	Currency(18, 0)		
Vehicle number plate	Vehicle_number_plate__c	Text(10) (Unique Case Insensitive)		✓

The screenshot shows the 'Service records' object's field configuration. The left sidebar lists various setup categories like Details, Page Layouts, Lightning Record Pages, etc. The main area displays the 'Fields & Relationships' table with the following data:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment	Appointment_c	Lookup(Appointment)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
service date	service_date_c	Formula (Date)		
Service records Name	Name	Auto Number		✓
Service Status	Service_Status_c	Picklist		

The screenshot shows the 'Billing details and feedback' object's field configuration. The left sidebar lists various setup categories. The main area displays the 'Fields & Relationships' table with the following data:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Billing details and feedback Name	Name	Auto Number		✓
Created By	CreatedById	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(2)		
Service records	Service_records_c	Lookup(Service records)		✓

TASK 6:VALIDATION RULES

To Create A Validation Rule To An Appointment

Object

1. Go to the setup page >> click on object manager >> From drop down click edit for Appointment object.

2. Click on the validation rule >> click New.

3. Enter the Rule name as “ Vehicle ”.

4. Insert the Error Condition 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.

To Create A Validation Rule To An Service

Records Object

1. Go to the setup page >> click on object manager >> From drop down click edit for Service records object.

2. Click on the validation rule >> click New.

3. Enter the Rule name as “ service_status_note ”.

4. Insert the Error Condition Formula as :-

`NOT(ISPICKVAL(Service_Status__c , "Completed"))`

5. 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 under the Object Manager section for Service records. On the left, a sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, and Lightning Record Pages. The main content area displays a validation rule named "Service records Validation Rule". The rule details are as follows:

Validation Rule Detail	
Rule Name	service_status_note
Error Condition Formula	NOT(ISPICKVAL(Service_Status__c , "Completed"))
Error Message	still it is pending
Description	
Created By	Ajampally_Nikhil kumar 25/07/2024, 1:52 pm
Modified By	Ajampally_Nikhil kumar 25/07/2024, 1:52 pm
Active	<input checked="" type="checkbox"/>
Error Location	Service Status

To Create A Validation Rule To An Billing Details And Feedback Object

1. Go to the setup page >> click on object manager >> From drop down click edit for Billing details and feedback object.

2. Click on the validation rule >> click New.

3. Enter the Rule name as “ rating_should_be_less_than_5”.

4. Insert the Error Condition Formula as :-

NOT(REGEX(Rating_for_service__c , "[1-5]{1}"))

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

The screenshot shows the Salesforce Setup interface for the Object Manager, specifically for the Service records object. The left sidebar lists various setup categories like Details, Page Layouts, Lightning Record Pages, etc. The main content area is titled "Fields & Relationships" and displays a table of fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The indexed column contains checkmarks for most fields.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Appointment	Appointment_c	Lookup(Appointment)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
service date	service_date_c	Formula (Date)		
Service records Name	Name	Auto Number		✓
Service Status	Service_Status__c	Picklist		

TASK 7:DUPLICATE RULE

To Create A Matching Rule To An Customer Details

Object

1. Go to quick find box in setup and search for matching Rule.
2. Click on matching rule >> click on New Rule.
3. Select the object as Customer details and click Next.
4. Give the Rule name : Matching customer details
5. Unique name : is auto populated
6. Define the matching criteria as
7. Field Matching Method
 1. Gmail Exact
 2. Phone Number Exact
8. Click save.
9. After Saving Click on Activate.

The screenshot shows the 'Matching Rule Detail' page for a rule named 'matching Customer details'. The page includes fields for Object (Customer Details), Rule Name (matching Customer details), Unique Name (matching_Customer_details), Matching Criteria ((Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone_Number EXACT MatchBlank = FALSE)), Status (Inactive), Created By (project_2, 25/09/2023, 10:15 am), and Modified By (project_2, 10/10/2023, 3:32 pm). The 'Activate' button is highlighted with a green arrow pointing to it.

To Create A Duplicate Rule To An Customer Details

Object

1. Go to quick find box in setup and search for Duplicate rules.

2. Click on Duplicate rule >> click on New Rule >> select customer details object.
 3. Give the Rule name as : Customer Detail duplicate
 4. Scroll a little in Matching rule section
 5. Select the matching rule : Matching customer details
 6. And Click on save.
7. After saving the Duplicate Rule, Click on Activate.

Matching Rules

Define how duplicate records are identified.

Compare Customer Details With: Customer Details

Matching Rule: matching Customer details

Matching Criteria: (Customer Details: Gmail EXACT MatchBlank = FALSE) AND (Customer Details: Phone Number EXACT MatchBlank = FALSE)

Field Mapping: Mapping Selected

Add Rule | Remove Rule

Conditions

Optionally, specify the conditions a record must meet for the rule to run.

Field	Operator	Value	AND
--None--	--None--		
--None--	--None--		AND
--None--	--None--		AND
--None--	--None--		AND
--None--	--None--		

Add Filter Logic...

Save | Save & New | Cancel

TASK 8:CREATE PROFILES

To Create A Duplicate Rule To An Customer Details

Object

1. Go to quick find box in setup and search for Duplicate rules.
2. Click on Duplicate rule >> click on New Rule >> select customer details object.
3. Give the Rule name as : Customer Detail duplicate
4. Scroll a little in Matching rule section
5. Select the matching rule : Matching customer details
6. And Click on save.

7. After saving the Duplicate Rule, Click on Activate.

The screenshot shows the Salesforce Setup interface with the 'Profiles' page open. A profile named 'Manager' is selected. The 'Profile Detail' section shows the following information:

- Name: Manager
- User License: Salesforce
- Description:
- Created By: Atamapally_Nikhil_kumar, 25/07/2024, 2:04 pm

Below this, the 'Page Layouts' section lists various layouts for different objects:

Standard Object Layouts	Global	Location Group Assignment
Email Application	Global Layout [View Assignment]	Macro [View Assignment]
Home Page Layout	No Assignment [View Assignment]	Object Milestone Layout [View Assignment]
Account	DE Default [View Assignment]	Operating Hours Layout [View Assignment]
Alternative Payment Method Layout	Alternative Payment Method Layout [View Assignment]	Opportunity [View Assignment]
Appointment Invitation	Appointment Invitation Layout [View Assignment]	Opportunity Product Layout [View Assignment]
Asset	Asset Layout [View Assignment]	Order [View Assignment]
Asset Action	Asset Action Layout [View Assignment]	Order Product Layout [View Assignment]

Sales Person Profile

1. 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.

2. While still on the profile page, then click Edit.
3. Select the Custom App settings as default for the GArage management.
4. Scroll down to Custom Object Permissions and Give access permissions for Appointments,Billing details and feedback , service records and customer details objects as mentioned in the below diagram.

5. And click save.

The screenshot shows the Salesforce Setup interface with the 'Profiles' page open. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. A search bar at the top left contains the text 'profil'. On the left, a sidebar shows 'Users' and 'Profiles' under 'Object Manager'. A message says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Profiles' and shows a 'Profile Detail' for 'sales person'. It includes fields for Name, User License, Description, Created By, and Modified By. Below this, the 'Page Layouts' section lists standard object layouts for various objects like Lead, Location, and Asset. The 'Alternative Payment Method' layout is specifically highlighted with a black box around its entry in the list.

TASK 9:Role & Role Hierarchy

Creating Manager Role:

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

Creating Another Roles

Creating another two roles under manager

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



3. Give Label as “sales person” and Role name gets auto populated. Then click on Save.

TASK 10:USERS

Create User

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

ii.Fill in the fields

1. First Name : Nicklaus

2. Last Name : Mikaelson

3. Alias : Give a Alias Name

4. Email id : Give your Personal Email id

5. Username : Username should be in this form: text@text.text

6. Nick Name : Give a Nickname

7. Role : Manager

8. User license : Salesforce

9. Profiles : Manager

iii.Save.

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. The main area displays a list of users with columns for Action, Full Name, Alias, Username, Role, Active, and Profile. The 'Active' column contains checkmarks for most users. The 'Profile' column lists various profiles such as 'Chatter Free User', 'Manager', 'Sales Person', 'System Administrator', and 'Analytics Cloud Integration User'. The 'Role' column includes 'Chatter Expert', 'Mikaelson_Niklaus', 'Mitesh_B', 'mohan_k', 'Nikhil_kumar_Alampally', 'saileja_A', 'User_Integration', and 'User_Security'. The 'Username' column shows unique email addresses for each user. The 'Alias' column contains abbreviations like 'nmika', 'bmite', 'kmoha', etc. The 'Action' column contains edit links for each user entry. Navigation links at the bottom include 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 and a 'All' link.

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Chatter Expert	Chatter	chatty_00dns0000000dzy@2ak.comformwa1hgza@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>	Mikaelson_Niklaus	nmika	mikaelson@mikaelson.mikaelson	Manager	<input checked="" type="checkbox"/>	Manager
<input type="checkbox"/>	Mitesh_B	bmite	21831a6518@qmindia.org	Sales Person	<input checked="" type="checkbox"/>	Sales Person
<input type="checkbox"/>	mohan_k	kmoha	21831a6535@qmindia.org	Sales Person	<input checked="" type="checkbox"/>	Sales Person
<input type="checkbox"/>	Nikhil_kumar_Alampally	ANikh	nikhilalampally24@gmail.com	System Administrator	<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	saileja_A	asail	21831a6507@qmindia.org	Sales Person	<input checked="" type="checkbox"/>	Sales Person
<input type="checkbox"/>	User_Integration	integ	integration@00dns000000dzy@2ak.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>	User_Security	sec	insightsssecurity@00dns000000dzy@2ak.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

TASK 11:PUBLIC GROUPS

Creating New Public Group

1. Go to setup >> type users in quick find box >> select public groups >> click New.
2. Give the Label as “sales team”.
3. Group name is auto populated.
4. Search for Roles.
5. In Available Members select Sales person and click on add it will be moved to selected member.
6. Click on save.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Setup', 'Home', 'Object Manager', a search bar ('Search Setup'), and various icons. On the left, a sidebar shows 'Users' and 'Public Groups'. A search bar on the sidebar contains 'public g'. The main content area is titled 'Public Groups' and displays a table with one row:

Action	Label	Group Name	Created By	Created Date
Edit Del	sales team	sales_team	Nikhil kumar Alampally	25/07/2024, 2:36 pm

TASK 12:SHARE SETTING

Creating Sharing Settings

1. Go to setup >> type users in quick find box >> select Sharing Settings >> click Edit.
2. Change the OWD setting of the Service records Object to private as shown in fig.
3. Click on save and refresh.
4. Scroll down a bit, Click new on Service records sharing Rules.
6. Give the Label name as “ Sharing setting”
7. Rule name is auto populated.
8. In step 3 : Select which records to be shared, members of “ Roles ” >> “ Sales person”
9. In step 4: share with, select “ Roles ” >> “ Manager ”
10. In step 5 : Change the access level to “ Read / write ”.
11. Click on save.

The screenshot shows the Salesforce Sharing Settings page. At the top, there's a navigation bar with icons for Home, Object Manager, and a search bar labeled "Search Setup". Below the navigation is a sidebar with a "Security" section containing a "Sharing Settings" link. The main content area has a title "Sharing Settings" with a sub-section "Sharing Settings". A note says: "This page displays your organization's sharing settings. These settings specify the level of access your users have to each others' data. Go to Background Jobs to monitor the progress of a change to an organization-wide default or a parallel sharing recalculations." There's a dropdown menu "Manage sharing settings for: All Objects". Below this is a "Default Sharing Settings" section with a "Disable External Sharing Model" button. The main feature is a table titled "Organization-Wide Defaults". It has columns: "Object", "Default Internal Access", "Default External Access", and "Grant Access Using Hierarchies". The table lists various objects like Lead, Account and Contract, Contact, Order, Asset, Opportunity, Case, and Campaign. For each object, the internal access is set to "Public Read/Write/Transfer" and the external access is "Private". The "Grant Access Using Hierarchies" column contains a checked checkbox for most objects, except for Contact, Order, Asset, Opportunity, Case, and Campaign where it is unchecked.

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	✗

TASK 13: FLOWS

Create A Flow

1. Go to setup >> type Flow in quick find box >> Click on the Flow and Select the New Flow.
2. Select the Record-triggered flow and Click on Create.
3. Select the Object as "Billing details and feedback" in the Drop down list.
4. Select the Trigger Flow when: "A record is Created or Updated".
5. Select the Optimize the flow for: "Actions and Related Records" and Click on Done.
6. Under the Record-triggered Flow Click on "+" Symbol and In the Drop down List select the "Update records Element".
7. Give the Label Name : Amount Update
8. Api name : is auto populated
Set a filter condition : All Conditions are met(AND)
9. Field : Payment_Status__c
10. Operator : Equals
11. Value : Completed
12. And Set Field Values for the Billing details and feedback Record
13. Field : Payment_Paid__c
14. Value : {!\$Record.Service_records__r.Appointment__r.Service_Amount__c}
15. Click On Done.
17. Before creating another Element. Create a New Resource form Toolbox form top

left.

18. Click on the New Resource, And select Variable.

19. Select the resource type as text template.

20. Enter the API name as “ alert”.

21. Change the view as Rich Text ? View to Plain Text.

22. In body field paste the syntax that given below.

Dear {!\$Record.Service_records__r.Appointment__r.Customer_Name__r.Name},

I hope this message finds you well. I wanted to take a moment to express my sincere gratitude for your recent payment for the services provided by our garage management team. Your prompt payment is 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

23. Click done.

24. Now Click on Add Element , select Action.

25. Their action bar will be opened in that search for “ send email ” and click on it.

26. Give the label name as “ Email Alert”

27. API name will be auto populated.

28. Enable the body in set input values for the selected action.

29. Select the text template that created , Body : {!alert}

30. Include recipient address list select the email form the record.

31. RecipientAddressList:

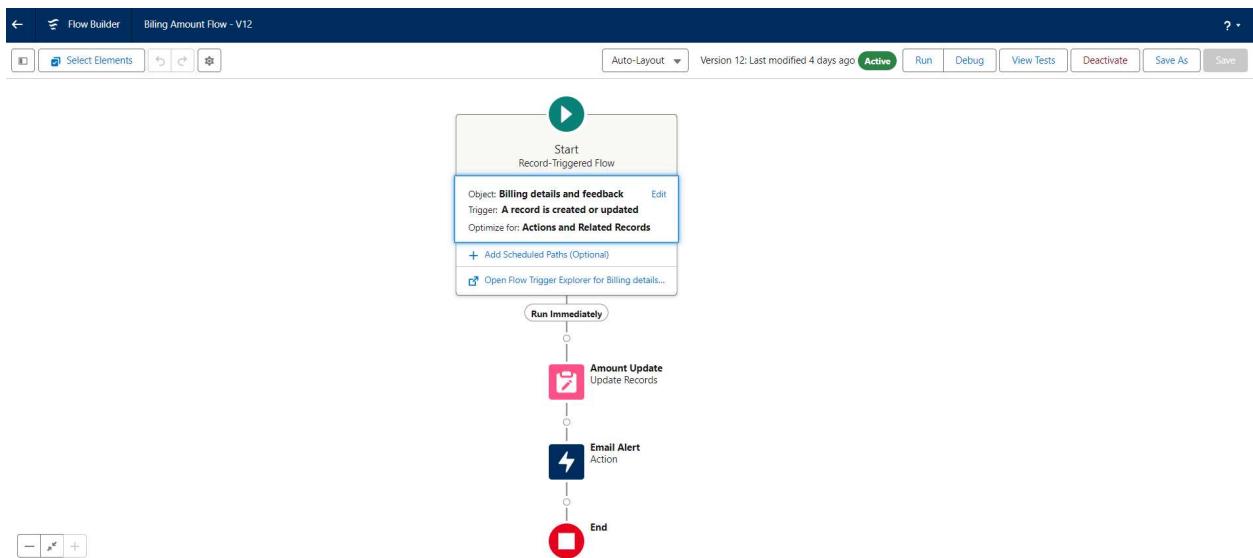
{!\$Record.Service_records__r.Appointment__r.Customer_Name__r.Gmail__c}

32. Include subject as " Thank You for Your Payment - Garage Management".

33. Click done.

34. Click on save. Give the Flow label , Flow Api name will be auto populated.

35. And click save, and click on activate.



TASK 14:APEX TRIGGER

Apex Handler

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

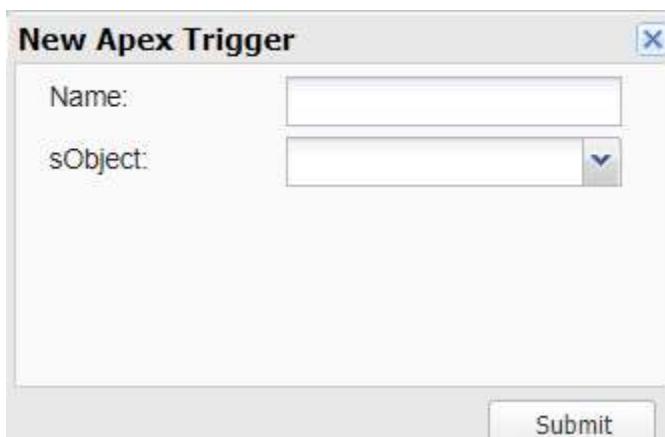
1. Login to the respective trailhead account and navigate to the gear icon in the top right corner.
 2. Click on the Developer console. Now you will see a new console window.
 3. In the toolbar, you can see FILE. Click on it and navigate to new and create New apex class.
 4. Name the class as “AmountDistributionHandler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

```
AmountDistribution.apxc [ ] AmountDistributionHandler.apxc [x]
Code Coverage: None API Version: 58
1 public class AmountDistributionHandler {
2
3     public static void amountDist(list<Appointment__c> listApp){
4         list<Service_records__c> serlist = new list <Service_records__c>();
5
6         for(Appointment__c app : listApp){
7             if(app.Maintenance_service__c == true && app.Repairs__c == true && app.Replacement_Parts__c == true){
8                 app.Service_Amount__c = 10000;
9             }
10            else if(app.Maintenance_service__c == true && app.Repairs__c == true){
11                app.Service_Amount__c = 5000;
12            }
13            else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
14                app.Service_Amount__c = 8000;
15            }
16            else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
17                app.Service_Amount__c = 7000;
18            }
19            else if(app.Maintenance_service__c == true){
20                app.Service_Amount__c = 2000;
21            }
22        }
23    }
24
25    else if(app.Maintenance_service__c == true && app.Replacement_Parts__c == true){
26        app.Service_Amount__c = 8000;
27    }
28
29    else if(app.Repairs__c == true && app.Replacement_Parts__c == true){
30        app.Service_Amount__c = 7000;
31    }
32
33    else if(app.Maintenance_service__c == true){
34        app.Service_Amount__c = 2000;
35    }
36
37    else if(app.Repairs__c == true){
38        app.Service_Amount__c = 3000;
39    }
40
41    else if(app.Replacement_Parts__c == true){
42        app.Service_Amount__c = 5000;
43    }
44
45    }
46
47 }
```

Trigger Handler :

How to create a new trigger :

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



Syntax For creating trigger :

The syntax for creating trigger is :

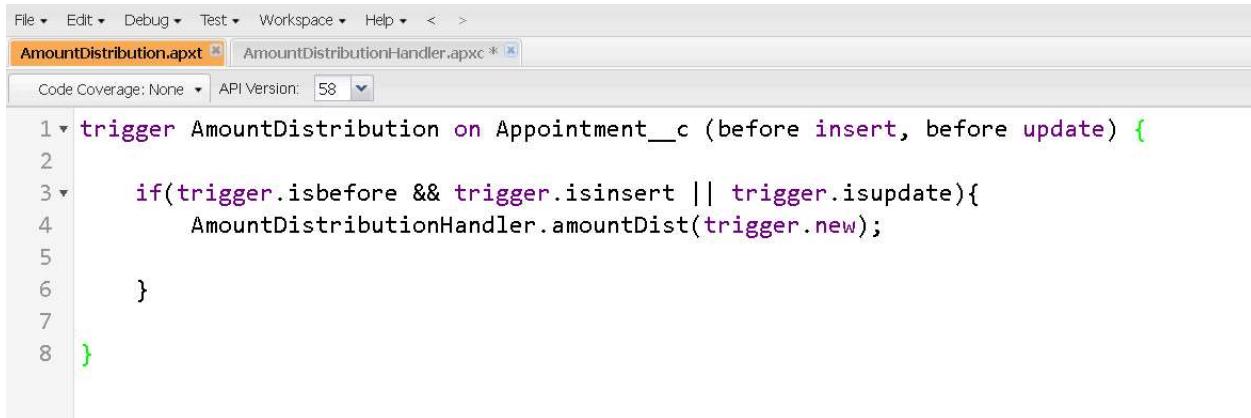
Trigger [trigger name] on [object name](Before/After event)

```
{  
}
```

In this project , trigger is called whenever the particular records sum exceed the threshold

i.e minimum business requirement value. Then the code in the trigger will get executed.

1. Handler for the Appointment Object



The screenshot shows a code editor interface with the following details:

- Menu bar: File ▾, Edit ▾, Debug ▾, Test ▾, Workspace ▾, Help ▾, < >
- Tab bar: AmountDistribution.apxt (highlighted in orange), AmountDistributionHandler.apxc *
- Status bar: Code Coverage: None ▾, API Version: 58 ▾
- Code area:

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

TASK 15: REPORTS

Create A Report Folder

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

Sharing A Report Folder

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

Create Report Type

1. Go to setup >> type users in quick find box >> select Report Type >> click on Continue.
2. Click on new custom report type.
3. Select the Primary object as “ Customer details” .
4. Give the Report type Label as “ Service information ”
5. Report type Name is autopopulated.

6. Keep the Description as same.
7. Select Store in Category as " other Reports "
8. Select the deployment status as " Deployed ", click on Next.
9. now , Click on Related object box.
10. Click on Select Object, choose Appointment Object as shown in fig.
11. Again Click to relate another object.
12. And select the related object as " service records".
13. Repeat the process and select the related object as " Billing details and feedback".
14. And click on save.

Create Report

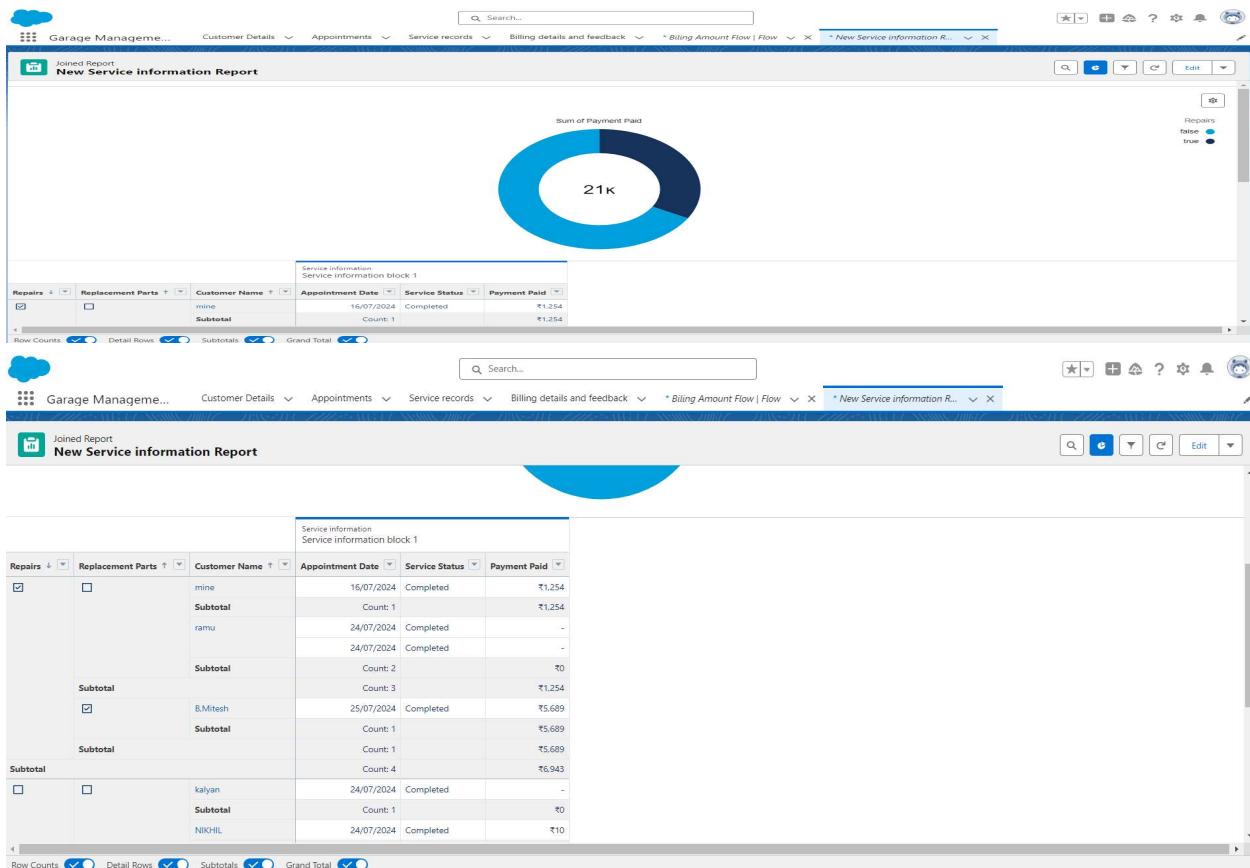
Note : Before creating report, create latest "10" records in every object.

Try to fill every field in each record for better experience.

1. Go to the app >> click on the reports tab
2. Click New Report.
3. Select the Category as other reports, search for Service Information, select that report, click on it. And click on start report.
4. Their outline pane is opened already, select the fields that mentioned below in column section.
 1. Customer name
 2. Appointment Date
 3. Service Status

4. Payment paid
5. Remove the unnecessary fields.
6. Select the fields that mentioned below in GROUP ROWS section.
1. Rating for Service
7. Select the fields that mentioned below in GROUP ROWS section.
1. Payment Status
8. Click on Add Chart , Select the Line Chart.
9. Click on save, Give the report Name : New Service information Report
10. Report unique Name is auto populated.

11. Select the folder the created and Click on save.



TASK 16: DASHBOARD

Create Dashboard Folder

1. Click on the app launcher and search for dashboard.
2. Click on dashboard tab.
3. Click new folder, give the folder label as " Service Rating dashboard".
4. Folder unique name will be auto populated.
5. Click save.
6. Follow the same steps, from milestone 15, and activity 2, and provide the sharing settings for the folder that just created.

Create Dashboard

1. Go to the app >> click on the Dashboards tabs.
2. Give a Name and select the folder that created, and click on create.
3. Select add component.
4. Select a Report and click on select.
5. Select the Line Chart. Change the theme.
6. Click Add then click on Save and then click on Done.
7. Preview is shown below.
8. After that Click on Subscribe on top right.
9. Set the Frequency as " weekly ".
10. Set a day as monday.
11. And Click on save.

Garage Management System

Last refreshed 3 days ago. Refresh this dashboard to see the latest data.

As of 26-Jul-2024, 12:35 am Viewing as Alampally Nikhil Kumar

New Service Information Report

Customer Name	Appointment Date	Service Status	Payment Paid
kalyan	24/07/2024	Completed	-
mine	16/07/2024	Completed	₹1k
Nik	16/07/2024	Completed	-
Nik	16/07/2024	Completed	-
NIKHIL	24/07/2024	Completed	₹10
Nithin	24/07/2024	Completed	-
NTR	21/07/2024	Completed	-

[View Report \(New Service Information Report\)](#)

Edit Subscription

Schedule dashboard refreshes and subscribe to receive results.

Settings

Frequency

Daily Weekly Monthly



Days

Sun Mon Tue Wed Thu Fri Sat



Time

3:00 pm

Recipients

Receive new results by email when dashboard is refreshed. i

Send email to:

Me

[Edit Recipients](#)



[Cancel](#) [Save](#)

THANK YOU