GARAGE MANAGEMENT SYSTEM

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PROJECT ABSTRACT

Garage Management System The Garage Management System, based on Salesforce, is a high-end solution custom-orientated for automotive repair facilities to enhance service quality, operational efficiency, and long-lasting customer relationships. At its core, GMS utilizes powerful CRM capabilities of Salesforce to provide an easy user interface as well as more rich functionalities to ensure that garages can thrive in a competitive marketplace. GMS mechanizes key appointment scheduling, inventory management, billing, and customer communications. The integration of these functionalities into Salesforce ensures that customer and staff experiences are seamless and satisfying. This advanced solution empowers automotive repair businesses to deliver top-notch service, optimize workflows, and maintain a competitive edge.

INTRODUCTION

Running an automotive repair shop involves many tasks, from scheduling appointments to managing inventory, and billing customers. The Garage Management System is a Salesforce-based system that aims to make all these tasks easier and much more efficient.

This system utilizes the powerful tools of Salesforce to help garages deliver better service and keep their operations running efficiently. Repair shops can automate important tasks such as booking appointments, tracking of inventories, sending bills, and communicating with customers using GMS.

GMS is user-friendly, so its use will not only make the experience very pleasant for staff but also be appealing to customers.

This system will enable garages to stay ahead of their competitors and provide excellent service while taking care of their business operation. GMS not only simplifies everyday operations but gives meaningful insights to better business decisions.

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TASK 1

1.1 Setting Up a Developer Account

To set up a Salesforce developer account, follow these steps:

1. Navigate to the Salesforce Developer Signup page.
2. Complete the signup form by providing the following information:
    - Your first name and last name.
    - A valid email address.
    - Role: Select Developer.
    - Organization: Enter the name of your institution.
    - Country: India.
    - Postal Code: Enter your area's PIN code.
    - Username: Combine your name and organization in this format: username@organization.com (this does not need to be a valid email address).
3. Click the Sign Me Up button.

1.2 Activating the Account

1. Open the email account you used during registration.
2. Look for an email from Salesforce with a verification link (this may take a few minutes to arrive).
3. Click the verification link to activate your account.
4. Create a password and choose a security question.
5. Save your changes by clicking Change Password.
6. You will be redirected to the Salesforce setup dashboard.

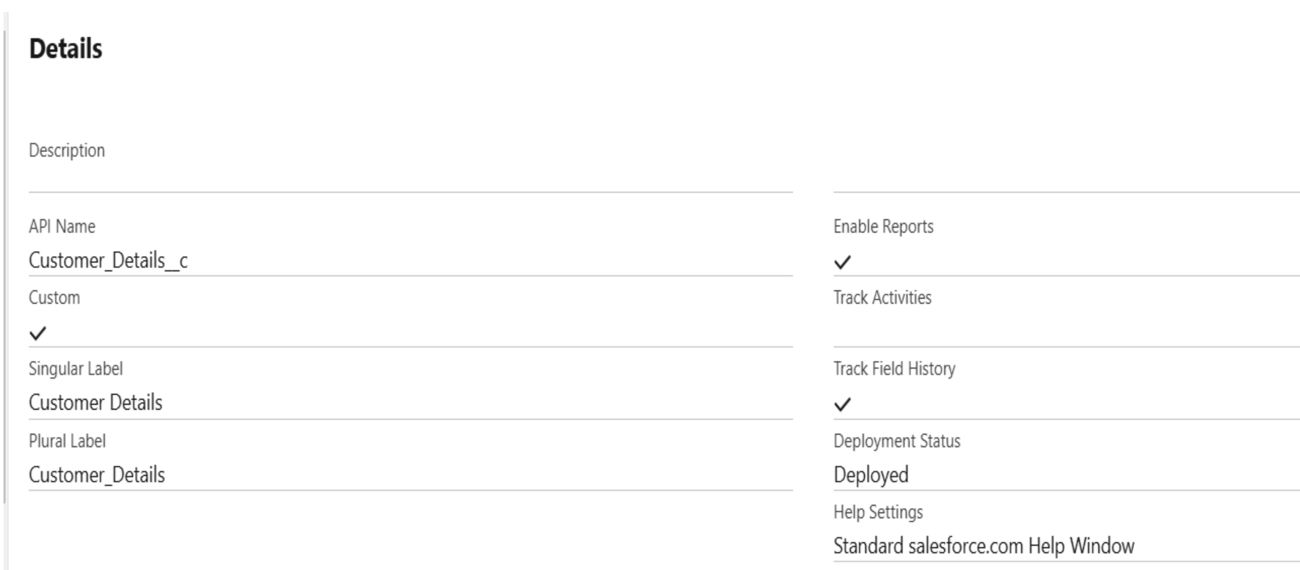
TASK 2

Creating Custom Objects

This section provides steps to create custom objects within Salesforce for a Garage Management System. The objects include Customer Information, Appointments, Service Records, and Billing & Feedback. These objects are designed to enhance operational efficiency and improve data organization.

2.1 Customer Information Object

1. Navigate to the Object Manager section on the setup page.
2. Click on Create >> Custom Object.
3. Enter the following details:
    - Label Name: Customer Information
    - Plural Label Name: Customer Information
    - Record Name: Customer Name
    - Data Type: Text
    - Enable the following options:
        - Allow Reports
        - Track Field History
        - Enable Search
4. Click Save to finalize the creation of the object.



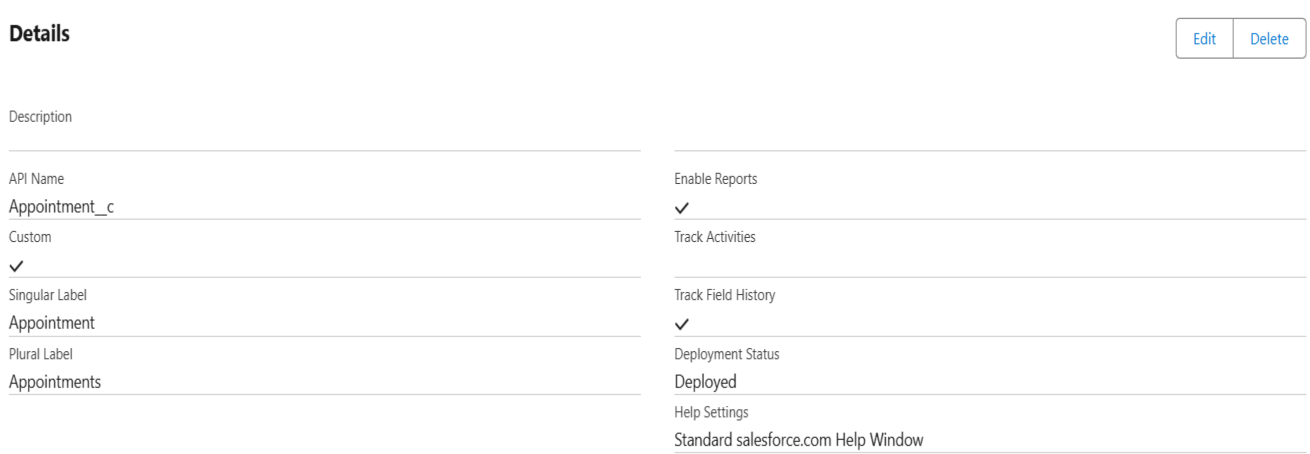
2.2 Appointment custom object

Steps to Create the Appointment Object

1. Navigation:
   - Go to Setup in Salesforce.
   - In the Quick Find box, search for Object Manager and click on it.
   - Click Create > Custom Object.
2. Details:

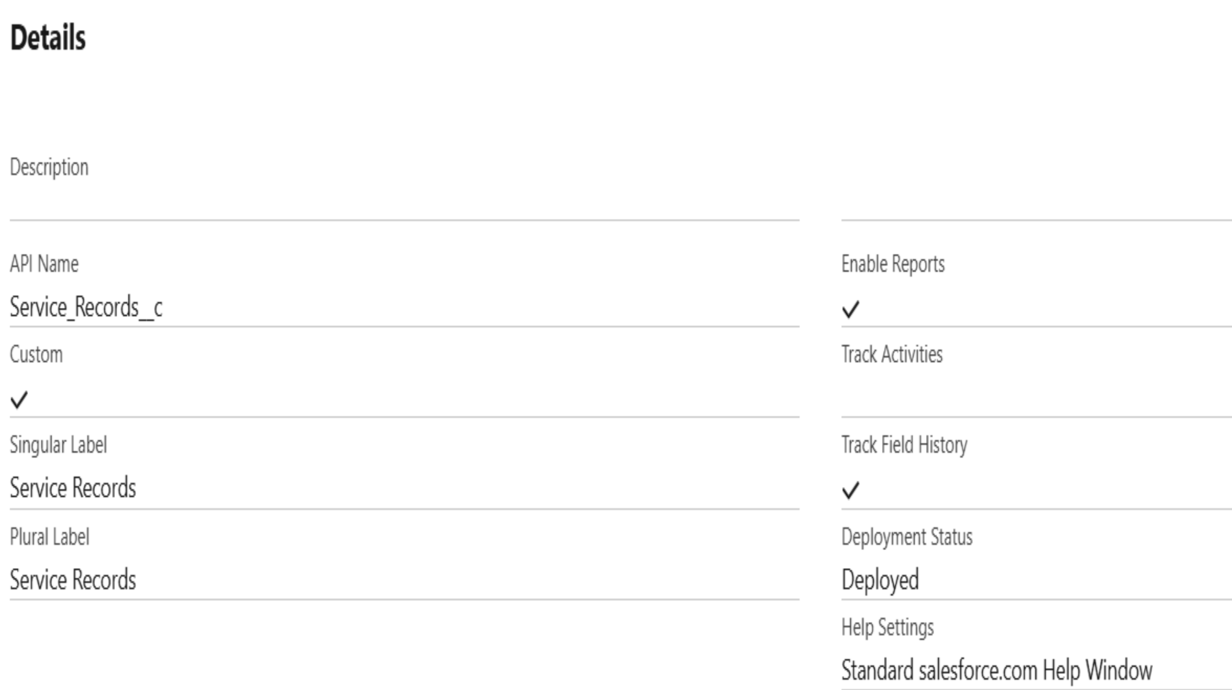
   Fill in the following fields:
   - Label: Appointment
   - Plural Label: Appointments
   - Record Name: Appointment Name
   - Data Type: Auto Number
   - Display Format: app - {000}
   - Starting Number: 1
   - Select the following options:
     - Allow Reports
     - Track Field History
     - Allow Search
3. Save:

   Click Save to create the object.



2.3 Service Records object

1. **Navigation Path**:
   - Go to the **Setup** page in Salesforce.
   - Search for **Object Manager** in the Quick Find box and click on it.
   - Click on **Create** and select **Custom Object**.
2. **Details**:
   - **Label Name**: Service Records
   - **Plural Label Name**: Service Records
   - **Record Name**: Service Records Name
   - **Data Type**: Auto Number
   - **Display Format**: `ser - {000}`
   - **Starting Number**: 1
   - **Options**:
     - Check **Allow Reports**
     - Check **Track Field History**
     - Check **Allow Search**
3. **Save**:
   - Click **Save** to create the object.



2.4 Billing Details and Feedback object

1. Navigation Path:

1. From the **Setup** page, go to **Object Manager**.
2. Click on **Create** > **Custom Object**.

2. Custom Object Details:

Fill in the following fields:

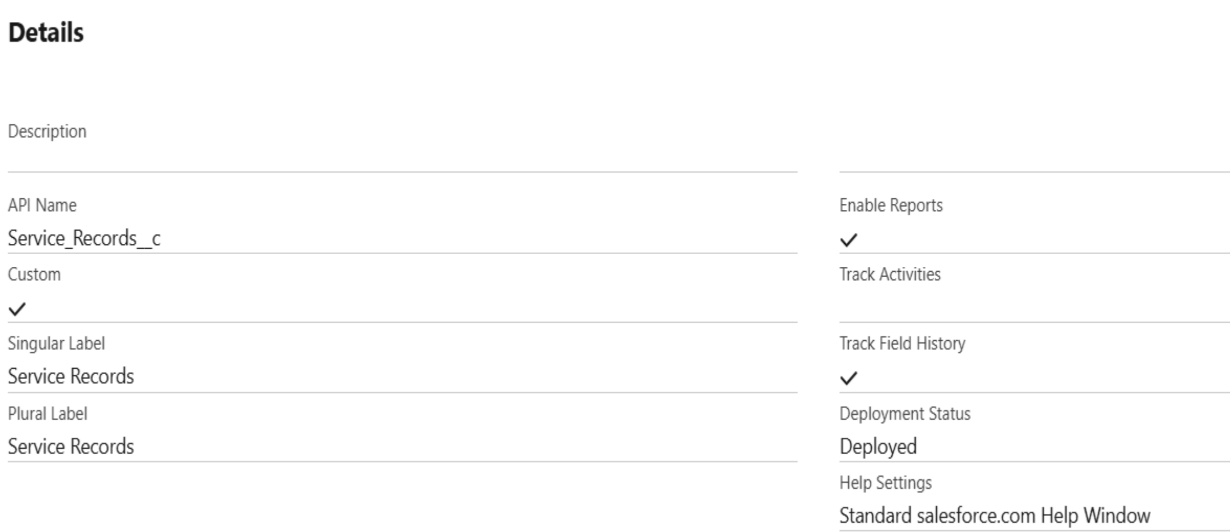
- **Label**: Billing Details and Feedback
- **Plural Label**: Billing Details and Feedback
- **Record Name**: Billing Details and Feedback Name
- **Data Type**: Auto Number
- **Display Format**: `bill - {000}`
- **Starting Number**: 1

3. Options (Enable the following):

- **Allow Reports**
- **Track Field History**
- **Allow Search**

Save:

Click **Save** to create the custom object.



TASK-3

3.1 Creating a Custom Tab for Customer Details

1. Navigation Path:

1. Go to the **Setup** page.
2. Type **"Tabs"** in the **Quick Find** bar.
3. Click on **"Tabs"**.
4. Click on **"New"** under the **Custom Object Tabs** section.

2. Steps:

1. **Select Object**: Choose **Customer Details**.
2. **Select Tab Style**: Pick a style that represents **Customer Details**.
3. Click **Next**.
4. **Add to Profiles Page**: Keep the default settings.
5. Click **Next**.
6. **Add to Custom App**:
- Uncheck **"Include Tab"**.
- Ensure **"Append tab to users' existing personal customizations"** is checked.
7. Click **Save**.

3.2 Creating Remaining Tabs (Appointments, Service Records, Billing Details, and Feedback)

1. Repeat the same process for each object:

- **Appointments**
- **Service Records**
- **Billing Details**
- **Feedback**

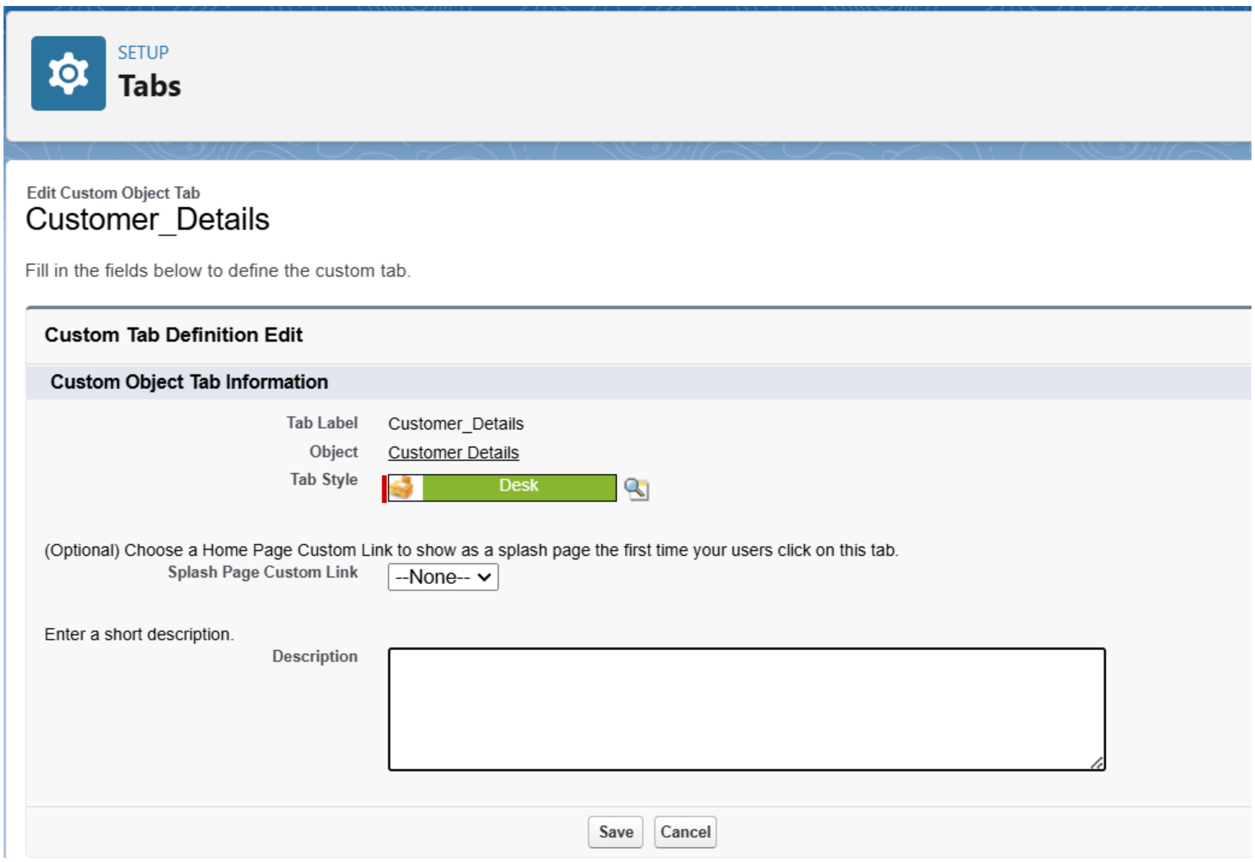
2. Navigation Path:

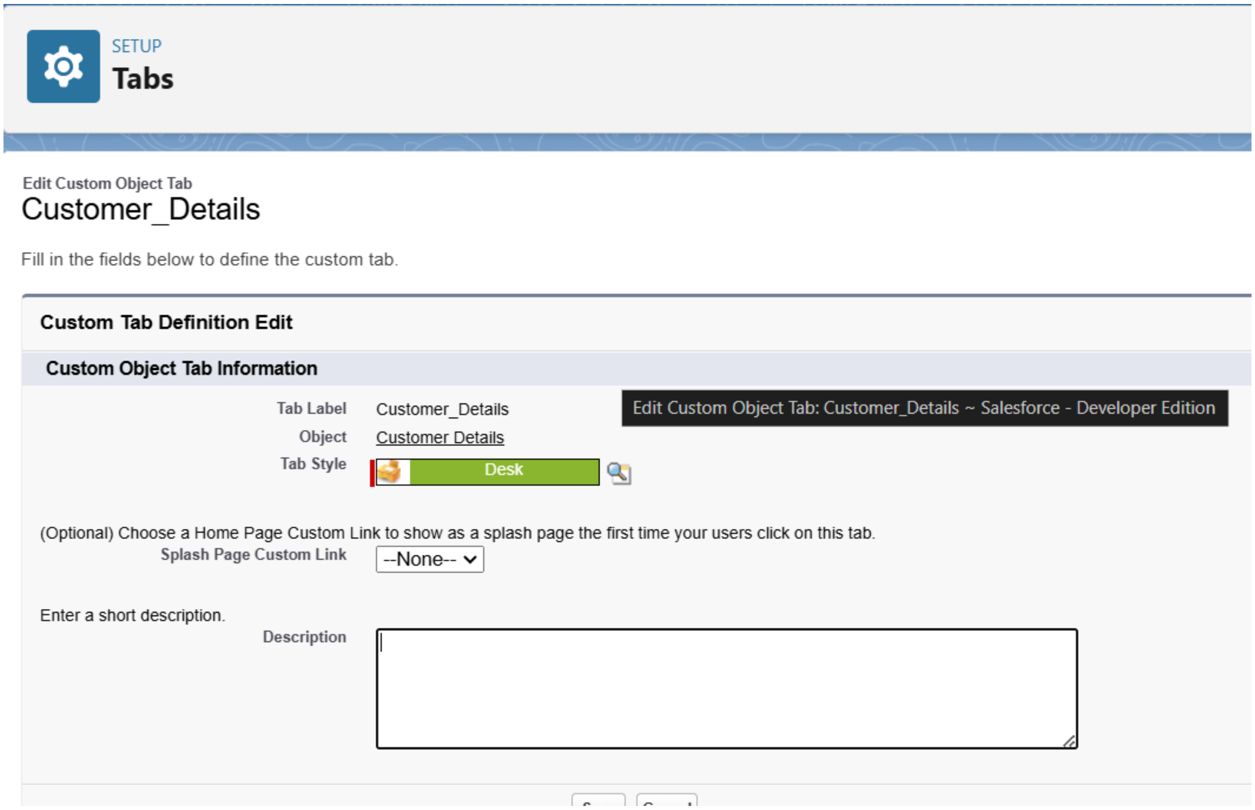
1. Go to the **Setup** page.
2. Type **"Tabs"** in the **Quick Find** bar.
3. Click on **"Tabs"**.
4. Click on **"New"** under the **Custom Object Tabs** section.

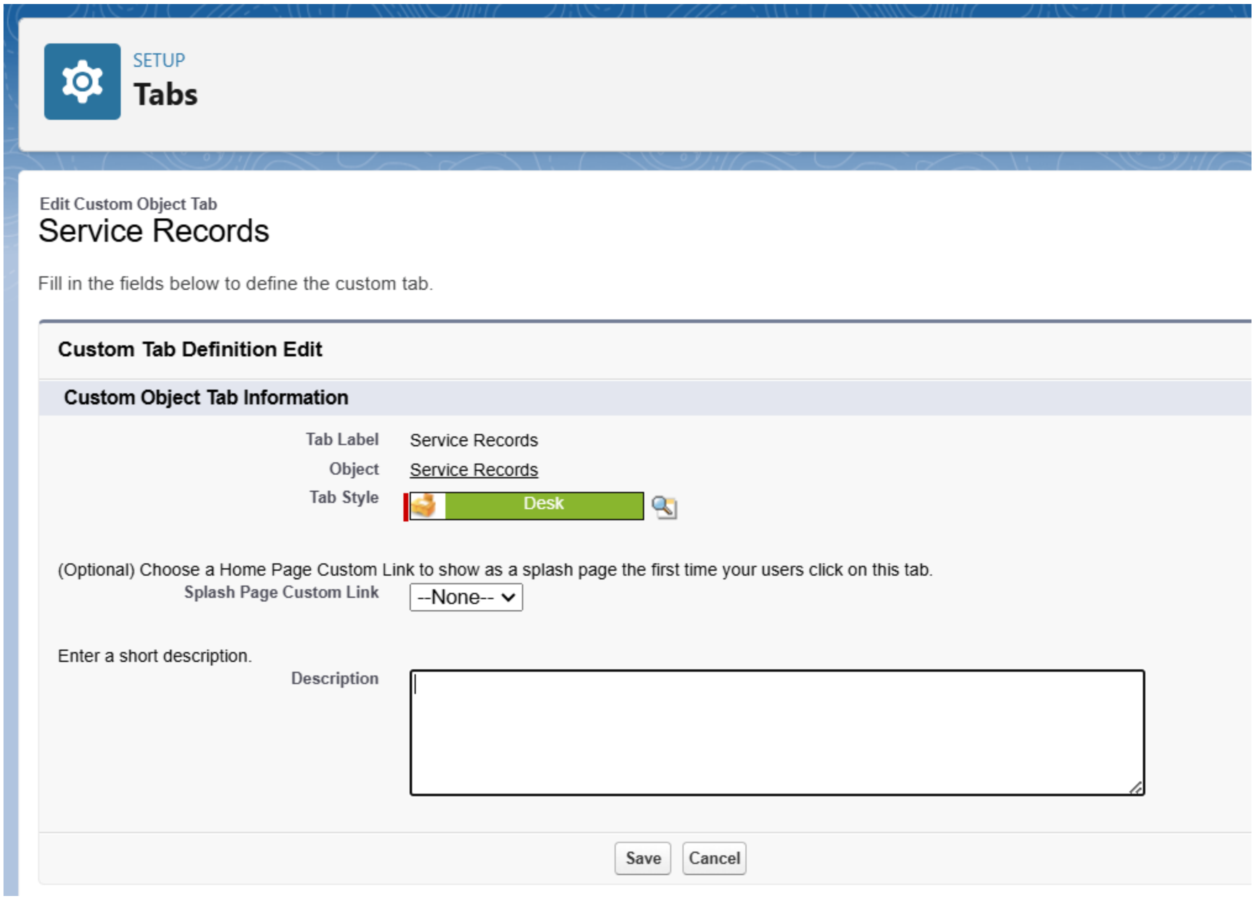
3. Steps for Each Object:

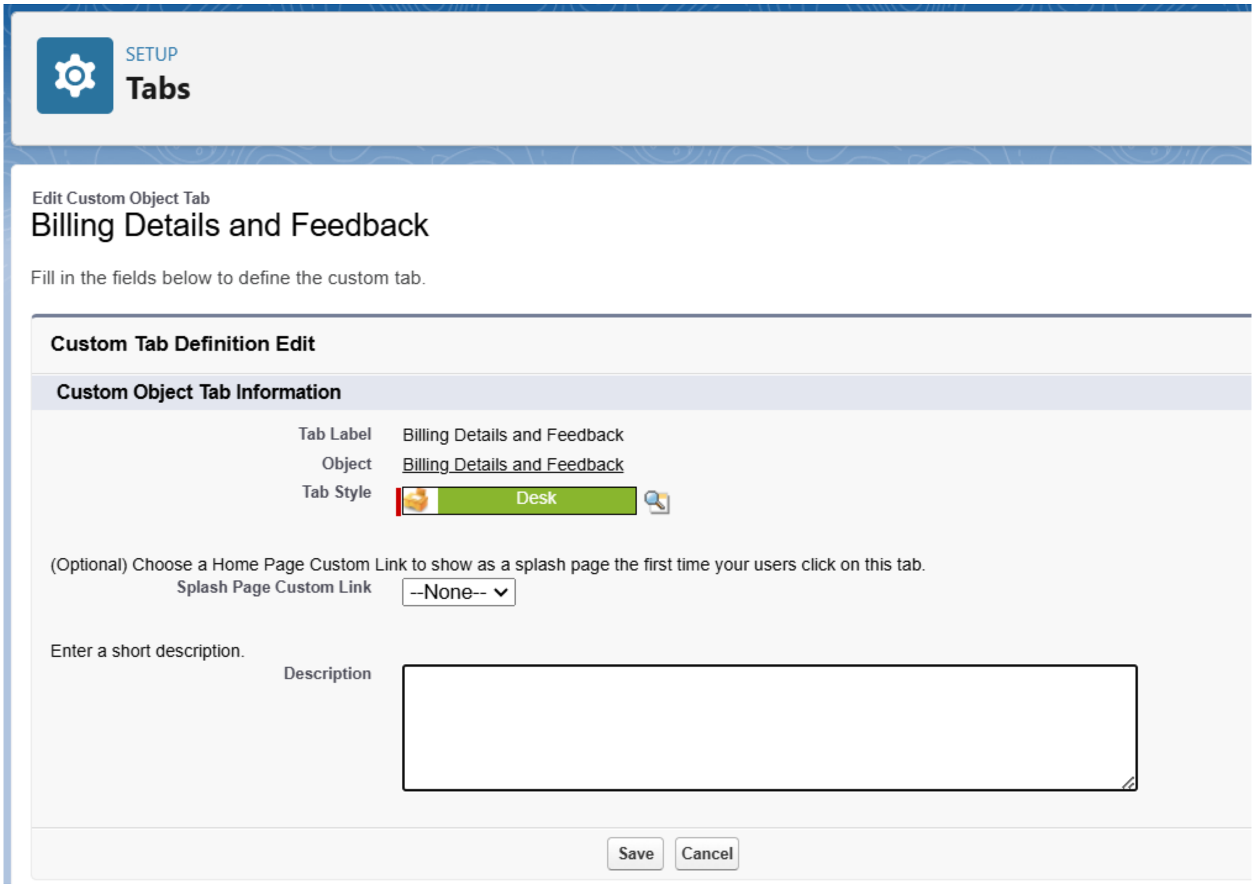
1. **Select Object**: Choose the respective object (**Appointments, Service Records, Billing Details, Feedback**).
2. **Select Tab Style**: Choose an appropriate style for the object.

3. Click **Next**.
4. **Add to Profiles Page**: Keep the default settings.
5. Click **Next**.
6. **Add to Custom App**:
- Uncheck "**Include Tab**".
- Ensure "**Append tab to users' existing personal customizations**" is checked.
7. Click **Save**.




SETUP
Tabs
Edit Custom Object Tab
Customer_Details
Fill in the fields below to define the custom tab.
Custom Tab Definition Edit
Custom Object Tab Information
Tab Label
Customer_Details
Edit Custom Object Tab: Customer_Details ~ Salesforce - Developer Edition
Object
Customer Details
Tab Style
Desk
(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.
Splash Page Custom Link
--None--
Enter a short description.
Description


SETUP
Tabs
Edit Custom Object Tab
Service Records
Fill in the fields below to define the custom tab.
Custom Tab Definition Edit
Custom Object Tab Information
Tab Label
Service Records
Object
Service Records
Tab Style
Desk
(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.
Splash Page Custom Link
--None--
Enter a short description.
Description
Save
Cancel



TASK-4

Building a Lightning App for Garage Management

Steps to Create the Garage Management Application

1. Accessing App Manager:
    - Navigate to the Setup page in Salesforce.
    - In the Quick Find bar, search for App Manager and select it.
    - Click New Lightning App to initiate the app creation process.
2. App Details:
    - Name the app Garage Management Application.
    - Keep all default settings for the App Options and Utility Items pages, and proceed.
3. Adding Navigation Items:
    - In the navigation menu configuration, search for and add the following essential items:
        - Customer Details
        - Appointments
        - Service Records

- Billing Details
- Feedback
- Reports
- Dashboards

■ Use the arrow button to move these items into the app's navigation menu.

4. Assigning User Profiles:
   - To assign appropriate access:
     - Search for the System Administrator profile in the search bar.
     - Add it by clicking the arrow button.
   - Save and complete the setup process.

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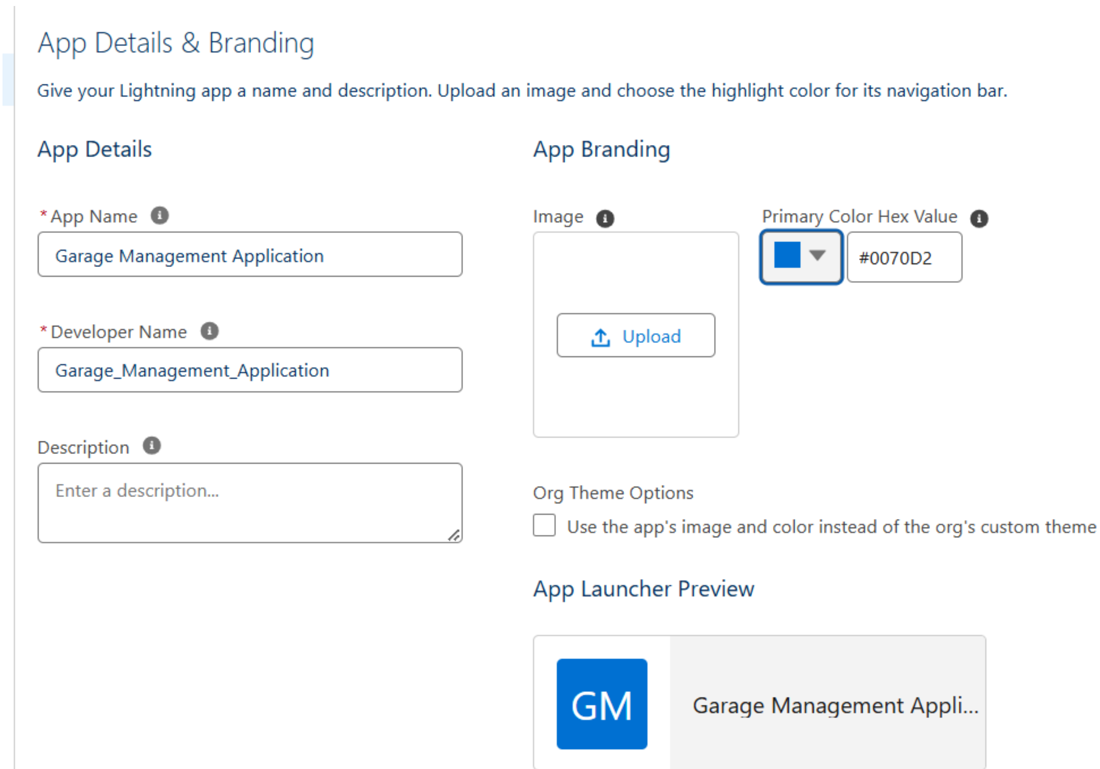


Task 4: Creating Fields

5.1 Customer Details Object Fields

- **Phone Field**:
  - **Label**: Phone Number
  - **Purpose**: Store customer contact numbers.
- **Email Field**:
  - **Label**: Gmail
  - **Purpose**: Capture customer email addresses.

5.2 Lookup Fields

- **Appointment Object**:
  - Established a lookup relationship linking appointments to customer details.
- **Service Records Object**:
  - Lookup relationship linking service records to appointments.
  - **Filter**: Appointment date < Created date (required field with error validation).
- **Billing Details and Feedback Object**:
  - Lookup relationship connecting billing details and feedback to service records.

5.3 Checkbox Fields

- **Appointment Object**:
  - Fields: Maintenance Service, Repairs, Replacement Parts.
  - **Default**: Unchecked.
- **Service Records Object**:
  - Field: Quality Check Status to track quality checks.

5.4 Date Fields

- **Appointment Object**:
  - **Label**: Appointment Date.
  - **Purpose**: Ensure each appointment has a specified date (required).

5.5 Currency Fields

- **Appointment Object**:
  - **Label**: Service Amount.
  - **Purpose**: Record service costs (read-only access).

- **Billing Details and Feedback Object**:
  - **Label**: Payment Paid.
  - **Purpose**: Track payments made by customers.

5.6 Text Fields

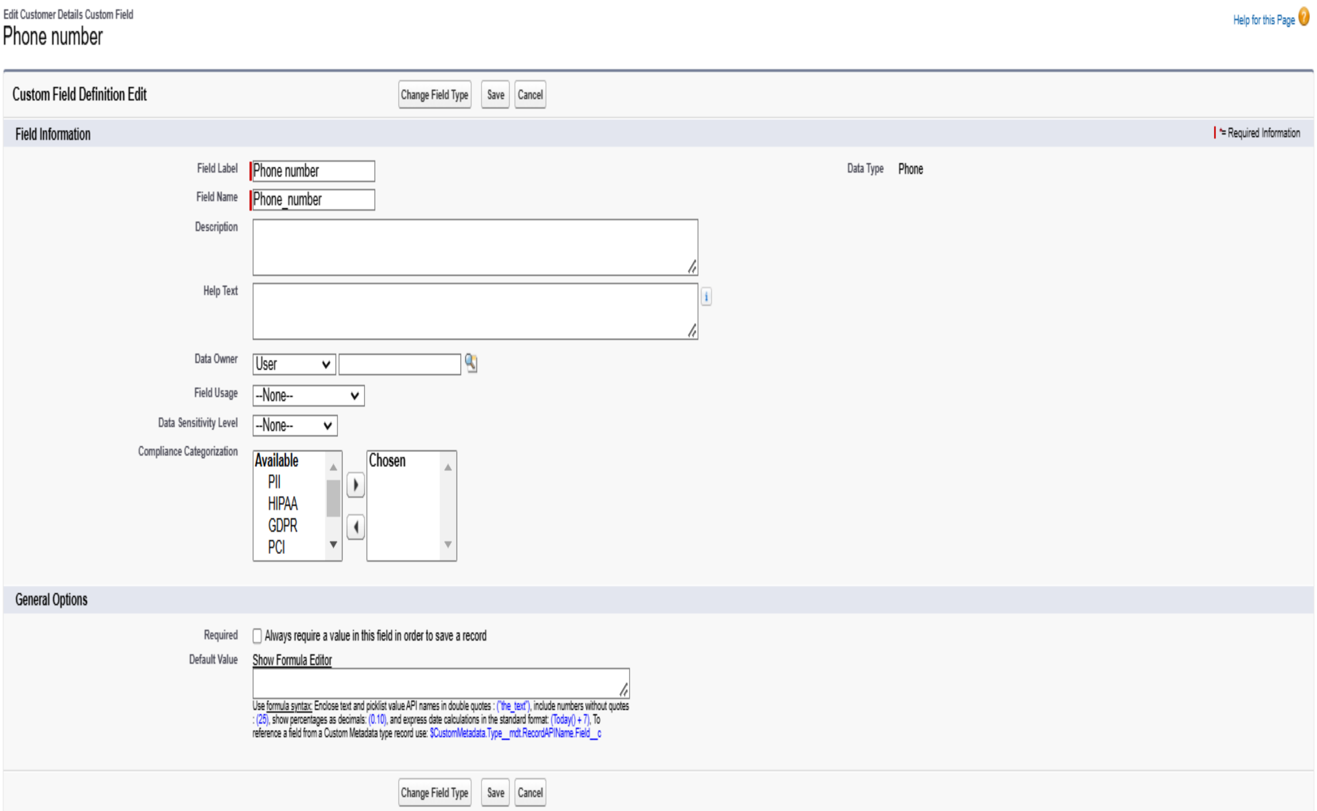
- **Appointment Object**:
  - **Label**: Vehicle Number Plate.
  - **Length**: 10 characters.
  - **Attributes**: Required, unique.
- **Billing Details and Feedback Object**:
  - **Label**: Rating for Service.
  - **Length**: 1 character.
  - **Attributes**: Required, unique.

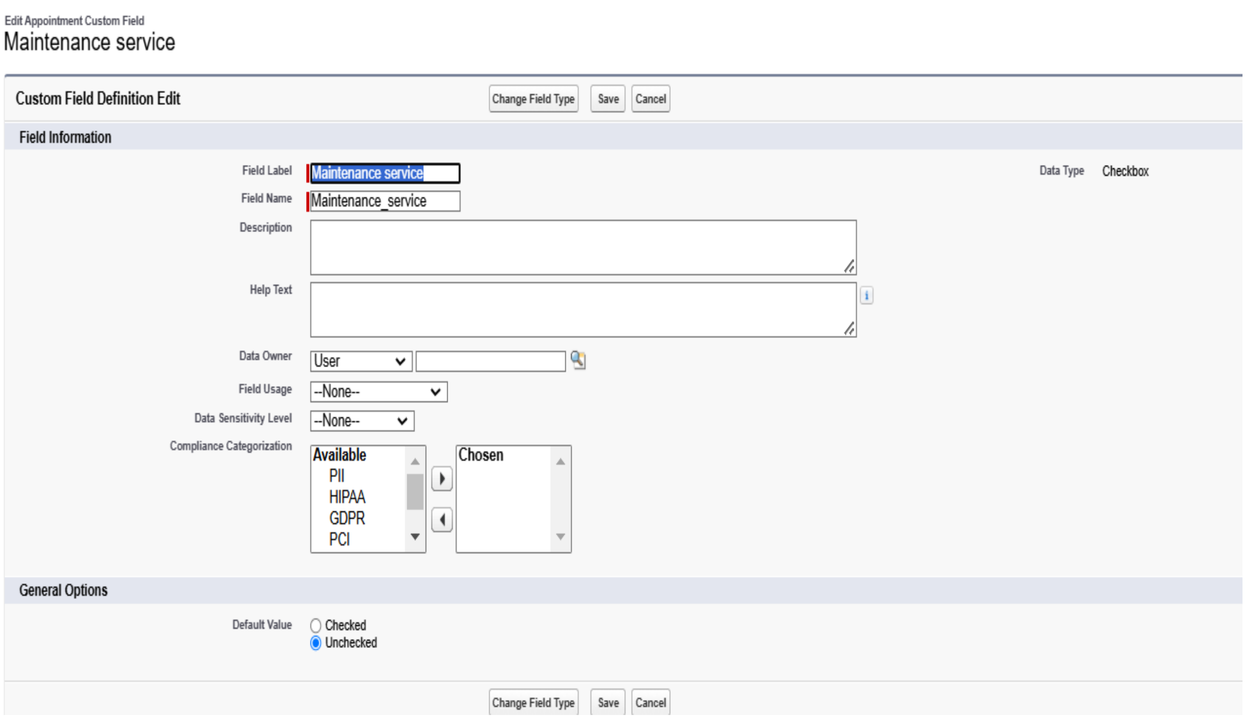
5.7 Picklist Fields

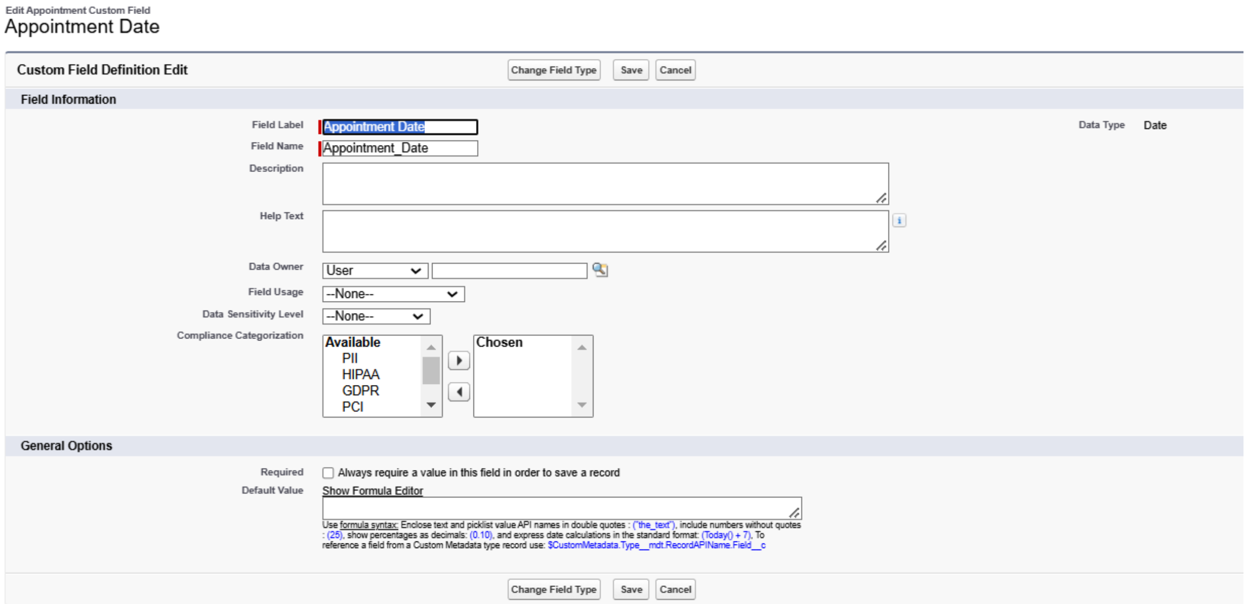
- **Service Records Object**:
  - **Label**: Service Status.
  - **Values**: Started, Completed.
- **Billing Details and Feedback Object**:
  - **Label**: Payment Status.
  - **Values**: Pending, Completed.

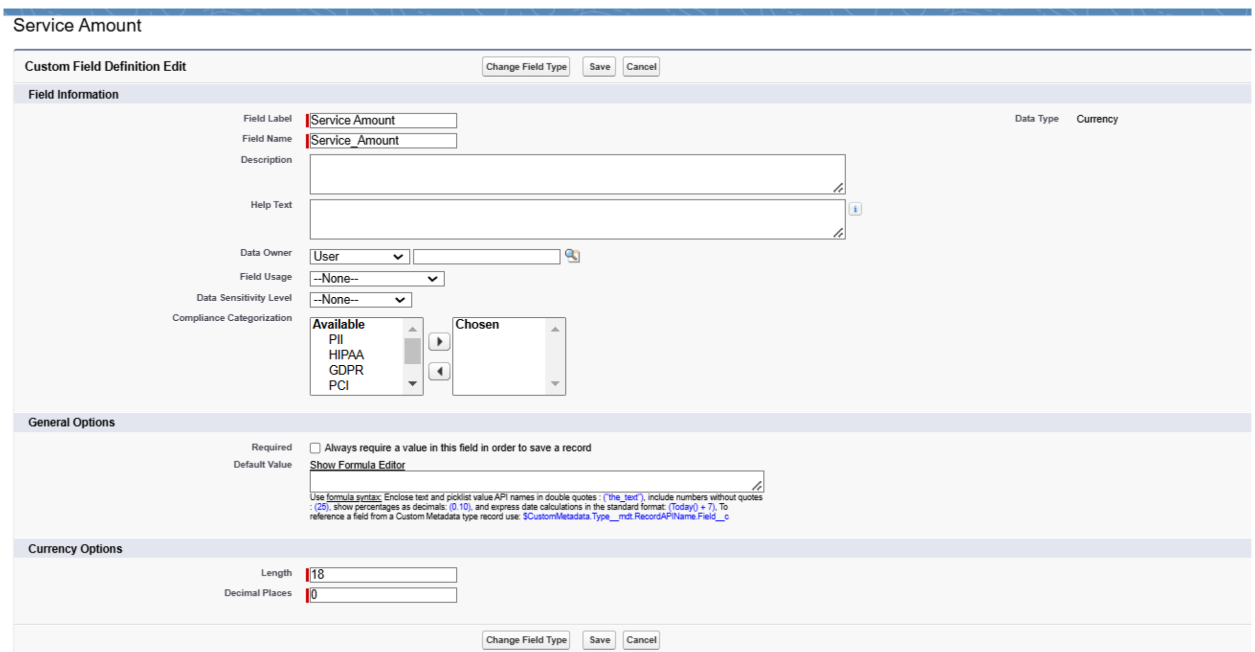
5.8 Formula Fields

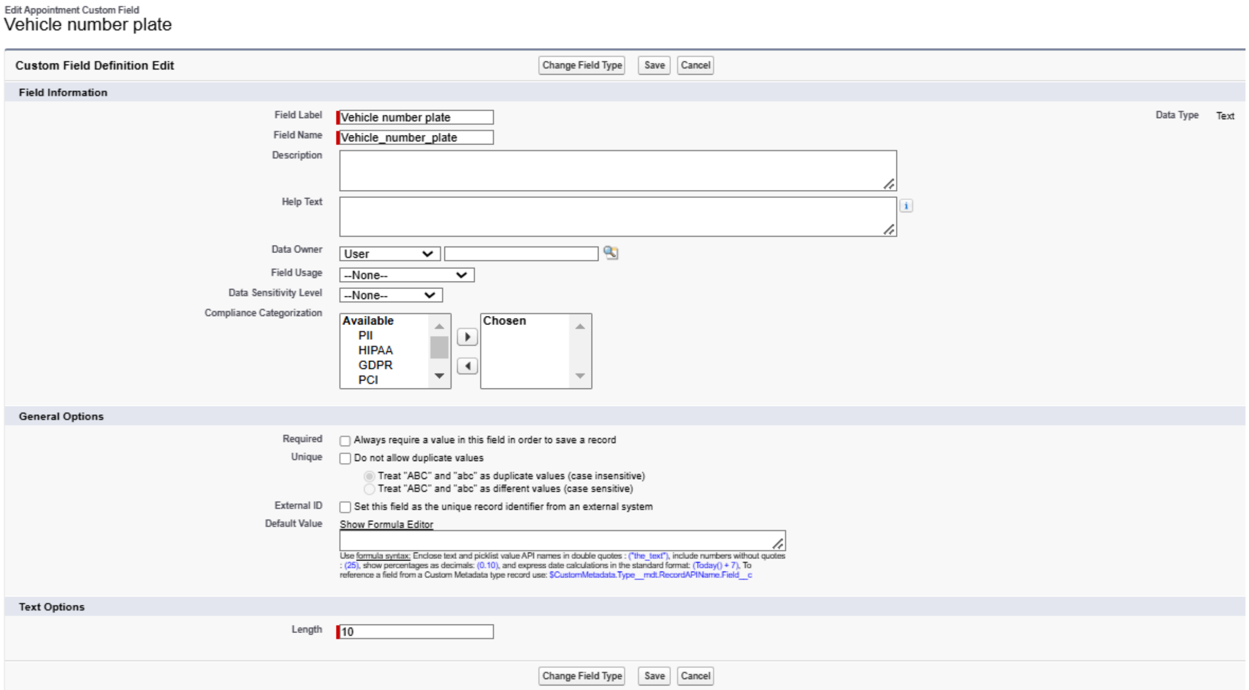
- **Service Records Object**:
  - **Label**: Service Date.
  - **Formula**: Automatically populates with the record's created date.

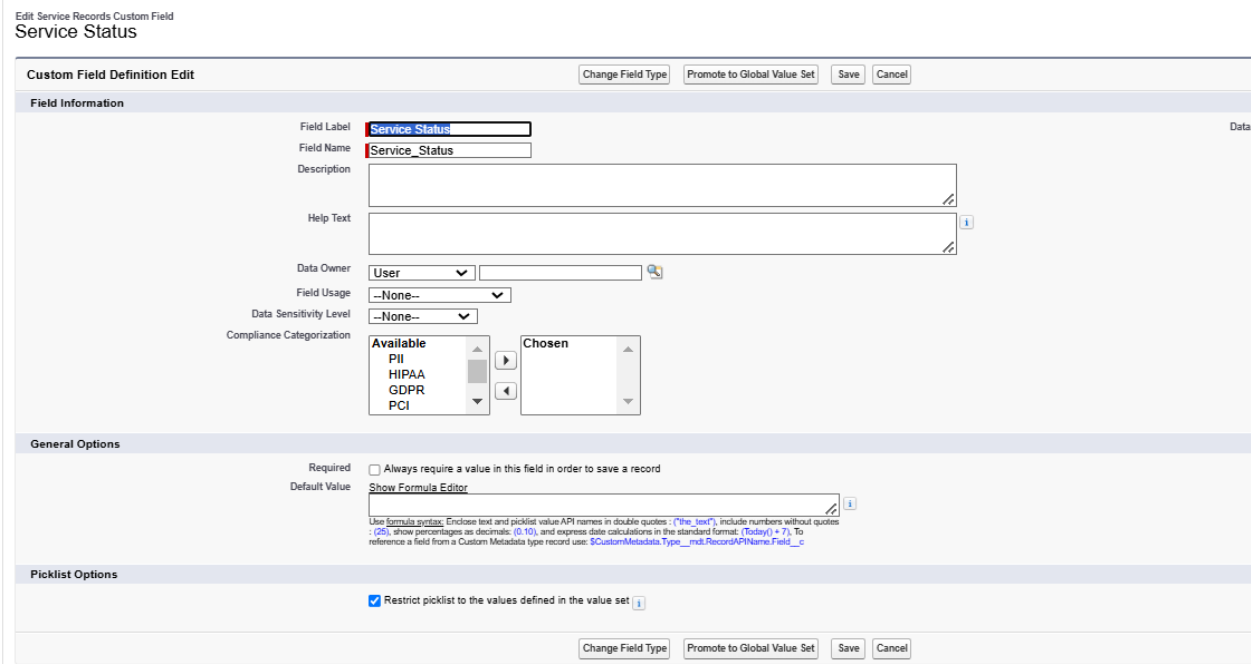

Edit Customer Details Custom Field
Phone number
Help for this Page
Custom Field Definition Edit
Change Field Type
Save
Cancel
Field Information
= Required Information
Field Label
Phone number
Field Name
Phone_number
Description
Help Text
Data Owner
User
Field Usage
--None--
Data Sensitivity Level
--None--
Compliance Categorization
Available
PII
HIPAA
GDPR
PCI
Chosen
Data Type
Phone
General Options
Required
Always require a value in this field in order to save a record
Default Value
Show Formula Editor
Use formula syntax: Enclose text and picklist value API names in double quotes : ("the_text"), include numbers without quotes : (25), show percentages as decimals: (0.10), and express date calculations in the standard format: (Today() + 7). To reference a field from a Custom Metadata type record use: $CustomMetadata.Type__mdt.RecordAPIName.Field__c
Change Field Type
Save
Cancel

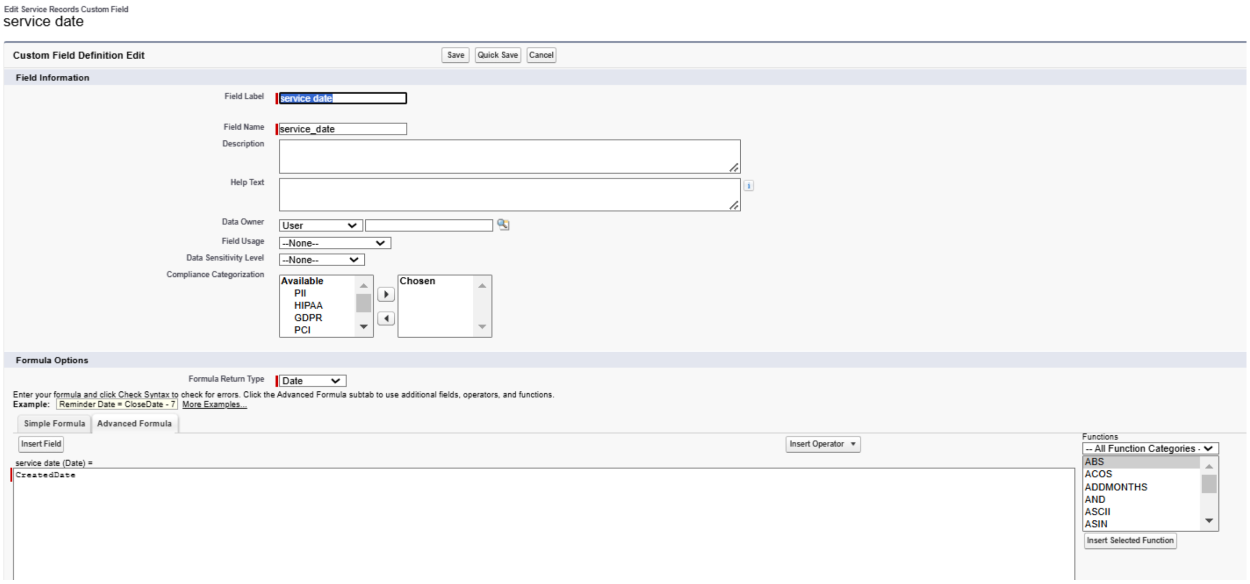

Edit Appointment Custom Field
Maintenance service
Custom Field Definition Edit
Change Field Type
Save
Cancel
Field Information
Field Label
Maintenance service
Field Name
Maintenance_service
Description
Help Text
Data Owner
User
Field Usage
--None--
Data Sensitivity Level
--None--
Compliance Categorization
Available
PII
HIPAA
GDPR
PCI
Chosen
Data Type
Checkbox
General Options
Default Value
Checked
Unchecked
Change Field Type
Save
Cancel


Edit Appointment Custom Field
Appointment Date
Custom Field Definition Edit
Change Field Type
Save
Cancel
Field Information
Field Label
Appointment Date
Field Name
Appointment_Date
Description
Help Text
Data Owner
User
Field Usage
--None--
Data Sensitivity Level
--None--
Compliance Categorization
Available
PII
HIPAA
GDPR
PCI
Chosen
Data Type
Date
General Options
Required
Always require a value in this field in order to save a record
Default Value
Show Formula Editor
Change Field Type
Save
Cancel


Service Amount
Custom Field Definition Edit
Change Field Type
Save
Cancel
Field Information
Field Label
Service Amount
Field Name
Service_Amount
Description
Help Text
Data Owner
User
Field Usage
--None--
Data Sensitivity Level
--None--
Compliance Categorization
Available
PII
HIPAA
GDPR
PCI
Chosen
Data Type
Currency
General Options
Required
Always require a value in this field in order to save a record
Default Value
Show Formula Editor
Currency Options
Length
18
Decimal Places
0
Change Field Type
Save
Cancel


Edit Appointment Custom Field
Vehicle number plate
Custom Field Definition Edit
Change Field Type
Save
Cancel
Field Information
Field Label
Vehicle number plate
Field Name
Vehicle_number_plate
Description
Help Text
Data Owner
User
Field Usage
--None--
Data Sensitivity Level
--None--
Compliance Categorization
Available
PII
HIPAA
GDPR
PCI
Chosen
Data Type
Text
General Options
Required
Always require a value in this field in order to save a record
Unique
Do not allow duplicate values
Treat "ABC" and "abc" as duplicate values (case insensitive)
Treat "ABC" and "abc" as different values (case sensitive)
External ID
Set this field as the unique record identifier from an external system
Default Value
Show Formula Editor
Use formula syntax: Enclose text and picklist value API names in double quotes : ("the_text"), include numbers without quotes : (25), show percentages as decimals: (0.10), and express date calculations in the standard format: (Today() + 7). To reference a field from a Custom Metadata type record use: $CustomMetadata.Type__mdt.RecordAPIName.Field__c
Text Options
Length
10
Change Field Type
Save
Cancel


Edit Service Records Custom Field
Service Status
Custom Field Definition Edit
Change Field Type
Promote to Global Value Set
Save
Cancel
Field Information
Field Label
Service Status
Field Name
Service_Status
Description
Help Text
Data Owner
User
Field Usage
--None--
Data Sensitivity Level
--None--
Compliance Categorization
Available
PII
HIPAA
GDPR
PCI
Chosen
Data
General Options
Required
Always require a value in this field in order to save a record
Default Value
Show Formula Editor
Use formula syntax: Enclose text and picklist value API names in double quotes : ("the_text"), include numbers without quotes : (25), show percentages as decimals: (0.10), and express date calculations in the standard format: (Today() + 7). To reference a field from a Custom Metadata type record use: $CustomMetadata.Type__mdt.RecordAPIName.Field__c
Picklist Options
Restrict picklist to the values defined in the value set
Change Field Type
Promote to Global Value Set
Save
Cancel



TASK-6

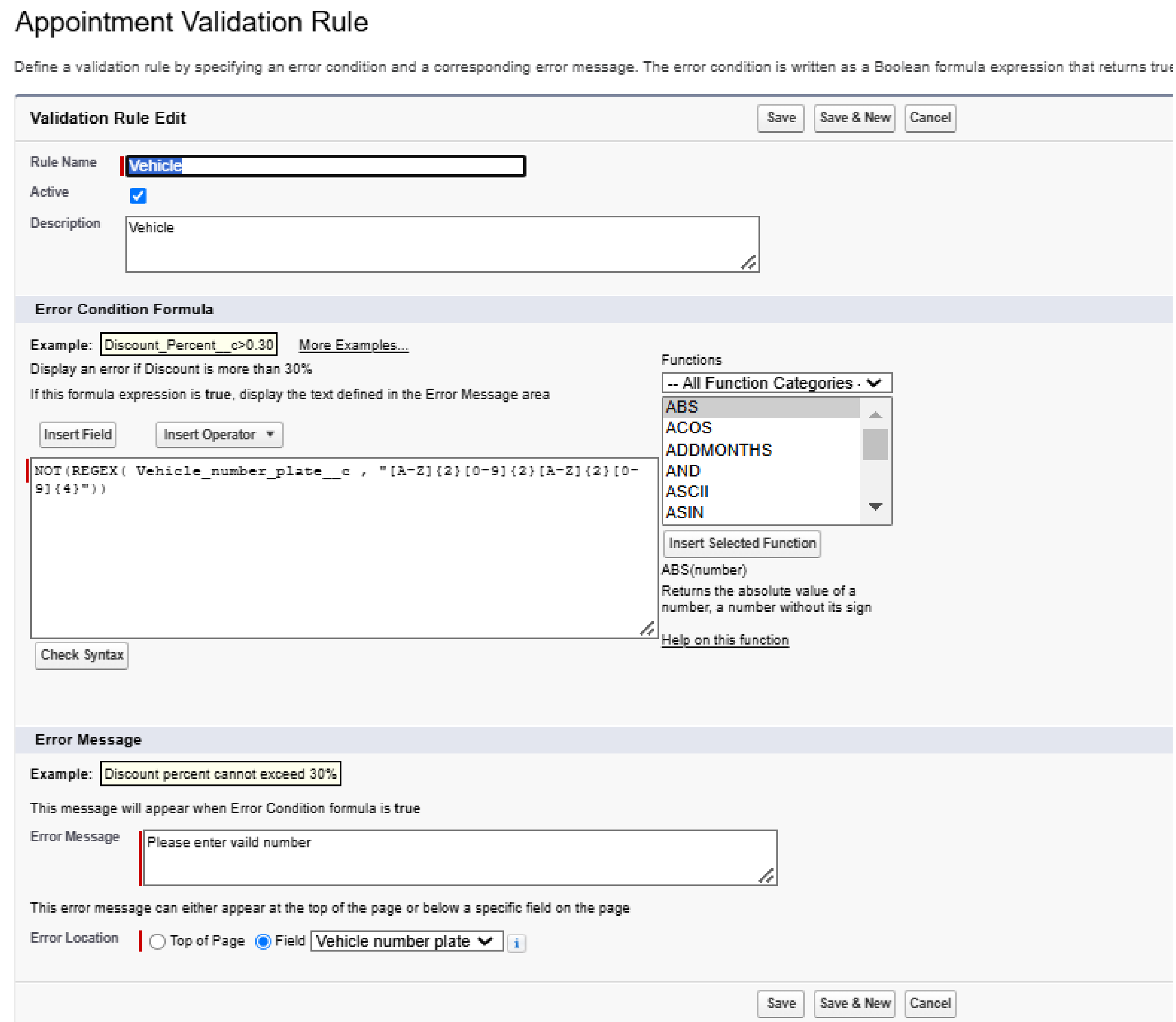
6.1 VALIDATION RULE

1. **Object**: Appointment
2. **Validation Rule Name**: Vehicle
3. **Error Condition Formula**:
4. `NOT(REGEX(Vehicle_number_plate__c, "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}"))`
5. **Error Message**:
   `NOT(REGEX(Vehicle_number_plate__c, "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}"))`
6. **Error Location**:
   Field → Vehicle number plate

Explanation of the Regex:

- `[A-Z]{2}`: Ensures two uppercase letters (e.g., "AB").
- `[0-9]{2}`: Ensures two digits (e.g., "12").
- `[A-Z]{2}`: Ensures two uppercase letters again (e.g., "CD").
- `[0-9]{4}`: Ensures four digits (e.g., "5678").

This format typically resembles an Indian vehicle registration number like "KA01AB1234".


Appointment Validation Rule
Define a validation rule by specifying an error condition and a corresponding error message. The error condition is written as a Boolean formula expression that returns true
Validation Rule Edit
Save
Save & New
Cancel
Rule Name
Vehicle
Active
Description
Vehicle
Error Condition Formula
Example:
Discount_Percent__c>0.30
More Examples...
Display an error if Discount is more than 30%
If this formula expression is true, display the text defined in the Error Message area
Insert Field
Insert Operator
NOT(REGEX(Vehicle_number_plate__c , "[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{4}"))
Check Syntax
Functions
-- All Function Categories
ABS
ACOS
ADDMONTHS
AND
ASCII
ASIN
Insert Selected Function
ABS(number)
Returns the absolute value of a number, a number without its sign
Help on this function
Error Message
Example:
Discount percent cannot exceed 30%
This message will appear when Error Condition formula is true
Error Message
Please enter vaild number
This error message can either appear at the top of the page or below a specific field on the page
Error Location
Top of Page
Field
Vehicle number plate
Save
Save & New
Cancel

6.2 Validation Rule on the **Service Records Object**

Rule Name:

`service_status_note`

Purpose:

To ensure that the **Service Status** is marked as "Completed" before saving the record.

Validation Rule Formula:

NOT(ISPICKVAL(Service_Status__c, "Completed"))

Error Message:

`"Still it is pending"`

Error Location:

Field: **Service_Status__c** (Service Status)

This rule will prevent the record from being saved unless the **Service Status** is set to "Completed." Let me know if you need further assistance!

6.3 Validation Rule Overview for Billing Details and Feedback

Rule Title:

`rating_should_be_less_than_5`

Objective:

To validate that the **Rating for Service** field accepts values strictly within the range of 1 to 5.

Formula Used for Validation:

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

Displayed Error Message:

`"Rating should be from 1 to 5"`

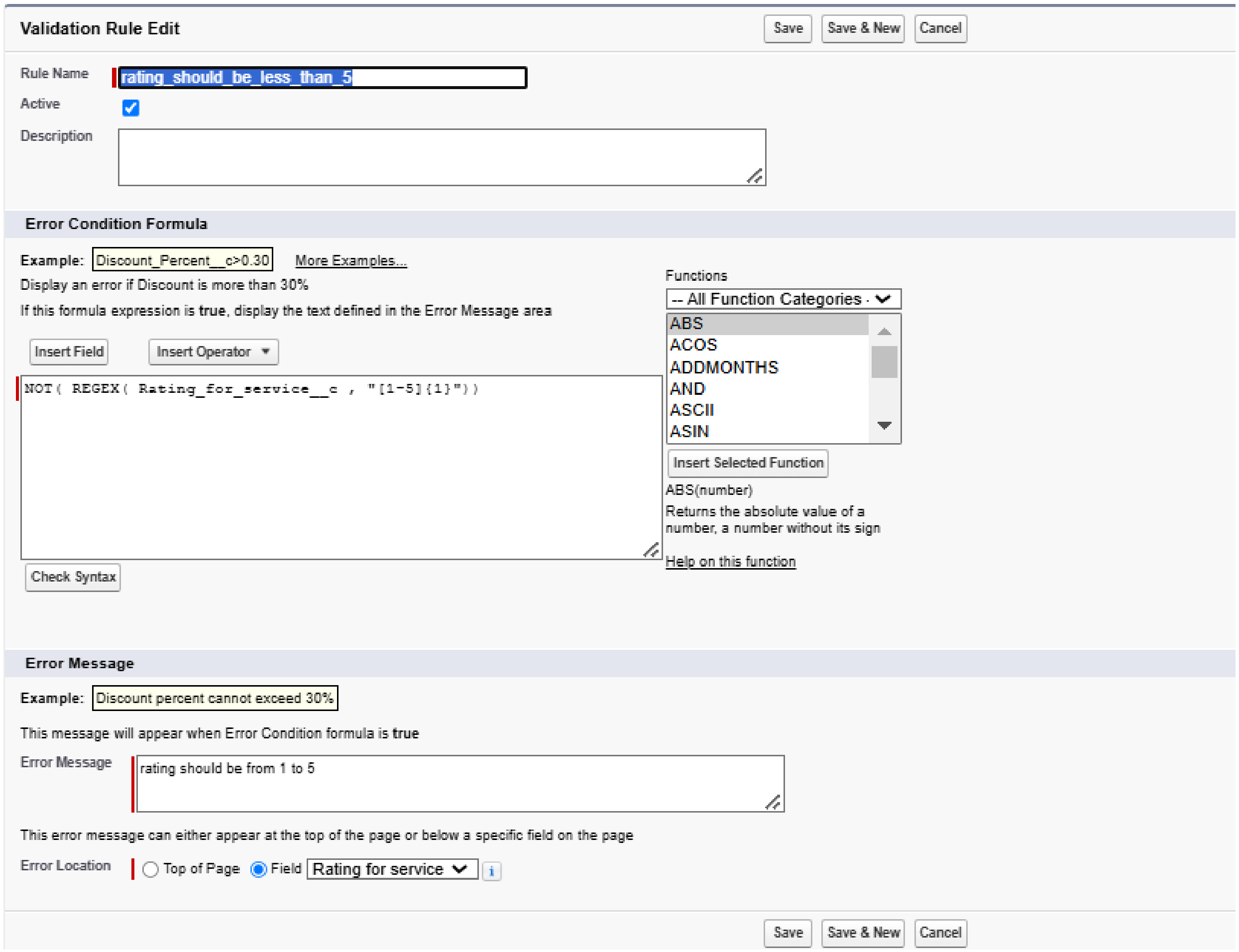
Error Displayed On:

Field: **Rating_for_Service__c**

This rule is designed to ensure that ratings outside the defined range are not accepted in the system, maintaining the integrity of the feedback data.

Billing Details and Feedback Validation Rule

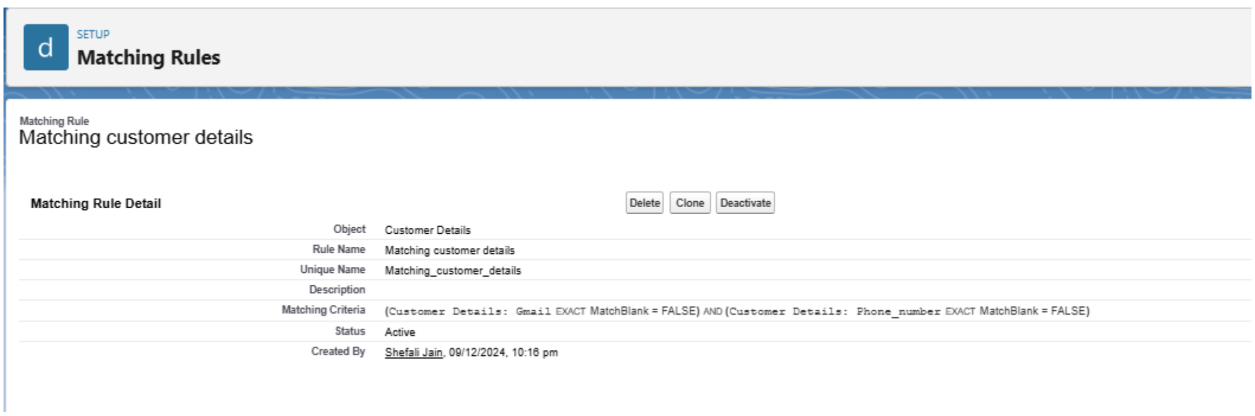
Define a validation rule by specifying an error condition and a corresponding error message. The error condition is written as a Boolean formula expression that returns true or fals



Task 7: Duplicate Rules

7.1 Defining a Matching Rule for the Customer Details Object

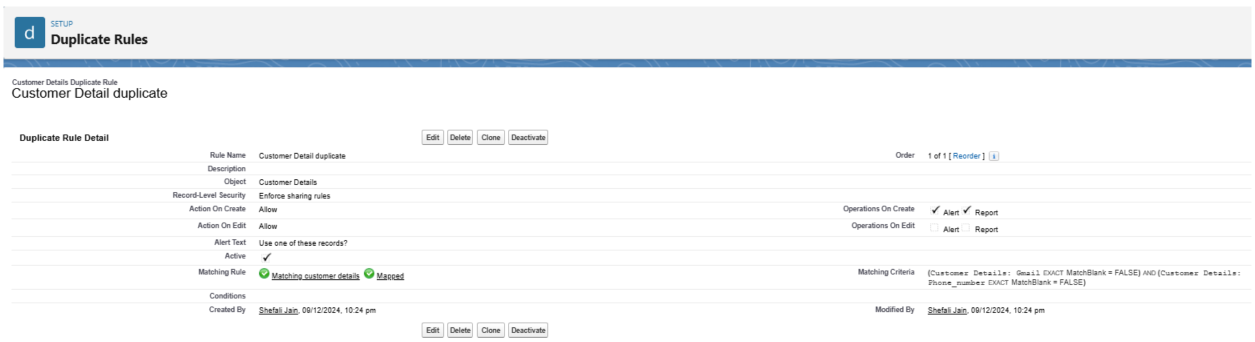
1. **Rule Title:***Matching Customer Details*
    - **Associated Object:** Customer Details
    - **Matching Parameters:**
        - **Email (Gmail):** Matches must be identical.
        - **Phone Number:** Exact value matching is required.
    - **Rule Activation:** The rule becomes active immediately upon saving, enabling it to identify duplicates in customer details based on the defined conditions.



7.2 Configuring a Duplicate Rule for the Customer Details Object

1. Rule Name:*Customer Detail Duplicate*

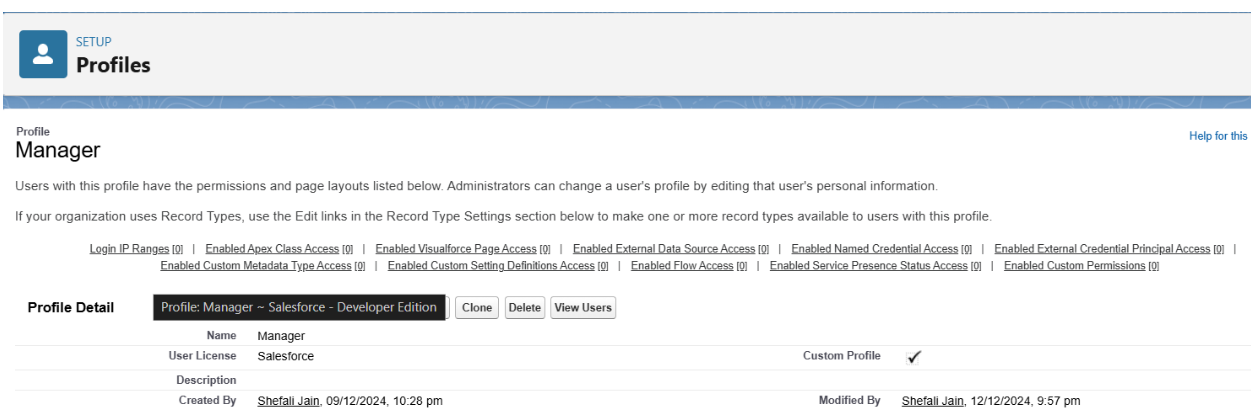
- **Associated Object:** Customer Details
- **Matching Rule Applied:** Leverages the pre-existing "Matching Customer Details" rule.
- **Activation Process:** Once the rule is saved, it is enabled to identify duplicate customer records according to the defined matching conditions.



Task 8: Profiles

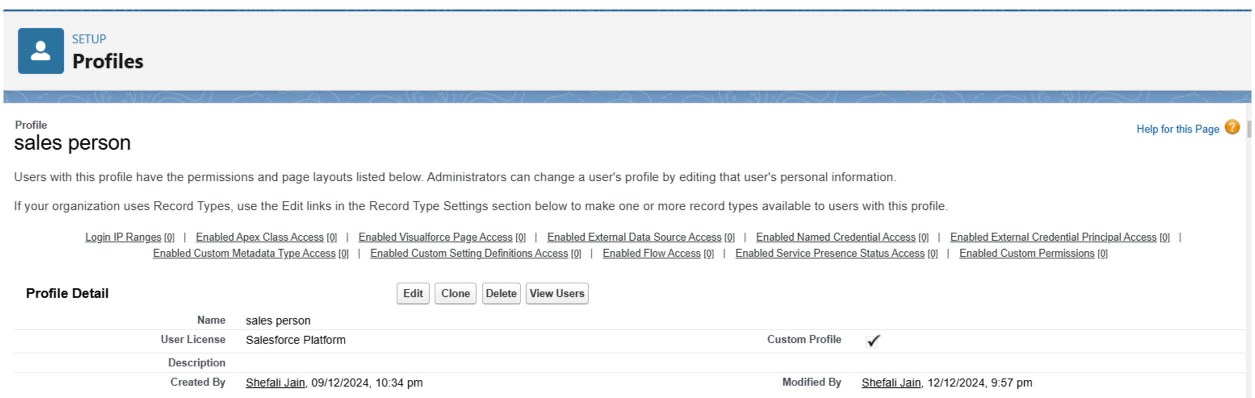
8.1 Manager Profile Creation

1. **Profile Cloning**
   - Start by duplicating the Standard User profile to develop a new profile titled "Manager."
2. **Default App Configuration**
   - Assign the Garage Management Application as the primary custom app for this profile.
3. **Object Access Permissions**
   - Enable access to the following objects for the Manager profile:
     - Appointments
     - Billing Details and Feedback
     - Service Records
     - Customer Details
4. **Session Timeout Settings**
   - Adjust the session timeout duration to 8 hours of inactivity.
5. **Password Policy Adjustments**
   - Ensure passwords do not expire.
   - Require a minimum password length of 8 characters.



8.2 Setting Up the Sales Person Profile

1. **Duplicating an Existing Profile**
   - Create a new profile named **"Sales Person"** by cloning the existing **Salesforce Platform User** profile.
2. **Default Application Configuration**
   - Configure the **Garage Management Application** as the default custom app for the Sales Person profile.
3. **Access Permissions for Custom Objects**
   - Provide appropriate access to the following custom objects:
     - **Appointments**
     - **Billing Details and Feedback**
     - **Service Records**
     - **Customer Details**

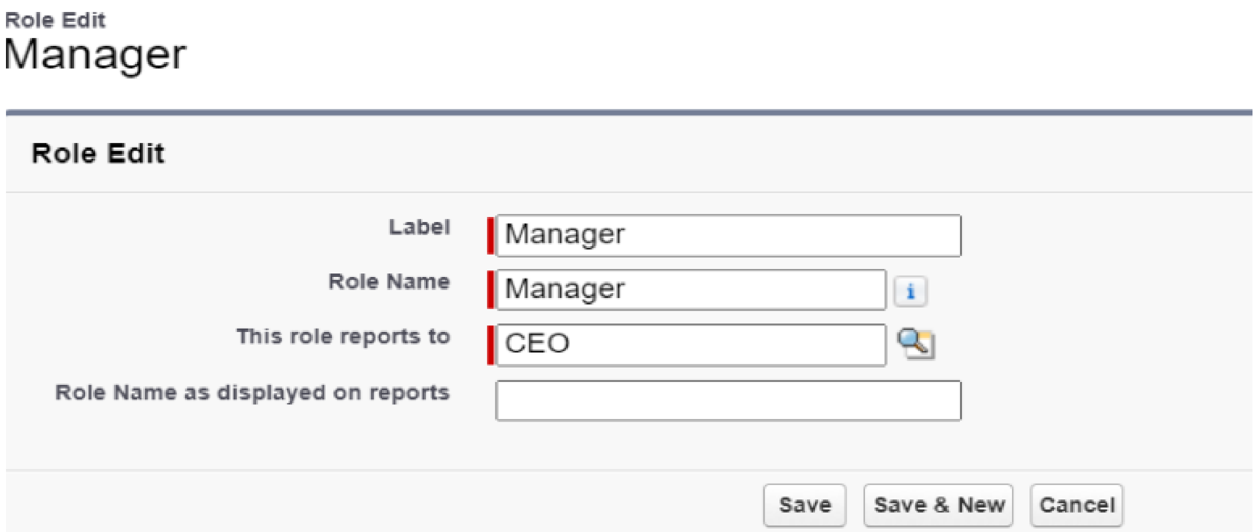


Here's a rephrased version of your content:

Task 9: Role and Role Hierarchy

9.1 Creating the Manager Role

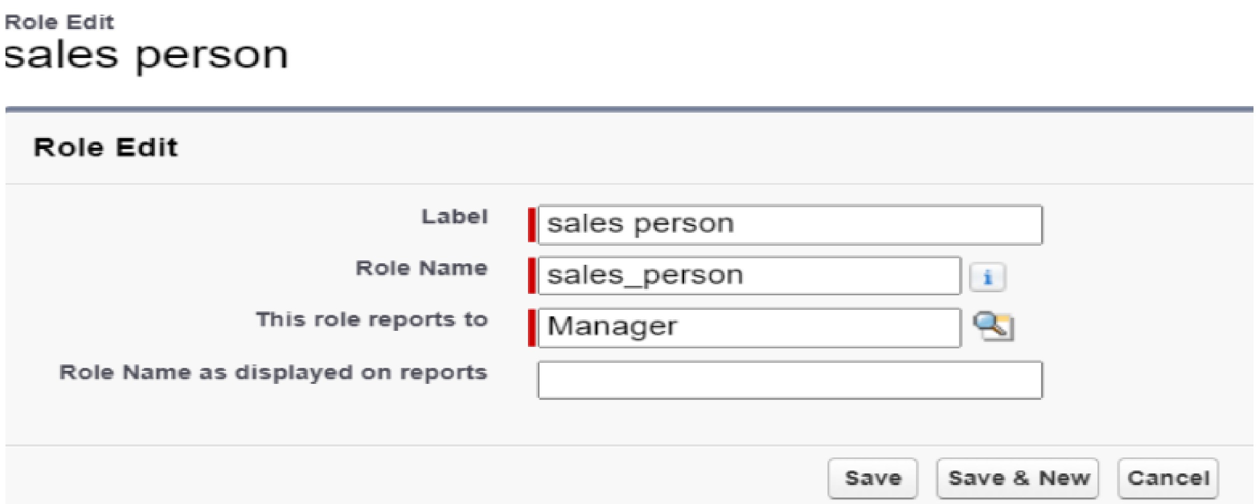
1. **Access the Role Setup Section:**
   - Go to the roles setup area within Salesforce.
2. **Expand the Role Hierarchy:**
   - Expand the list of existing roles and add the new "Manager" role under the relevant parent role.
3. **Set Role Details:**
   - Enter "Manager" as the role label and save the changes.



Here's a revised version of your content, written in a way that feels more original:

9.2 Defining the Sales Person Role

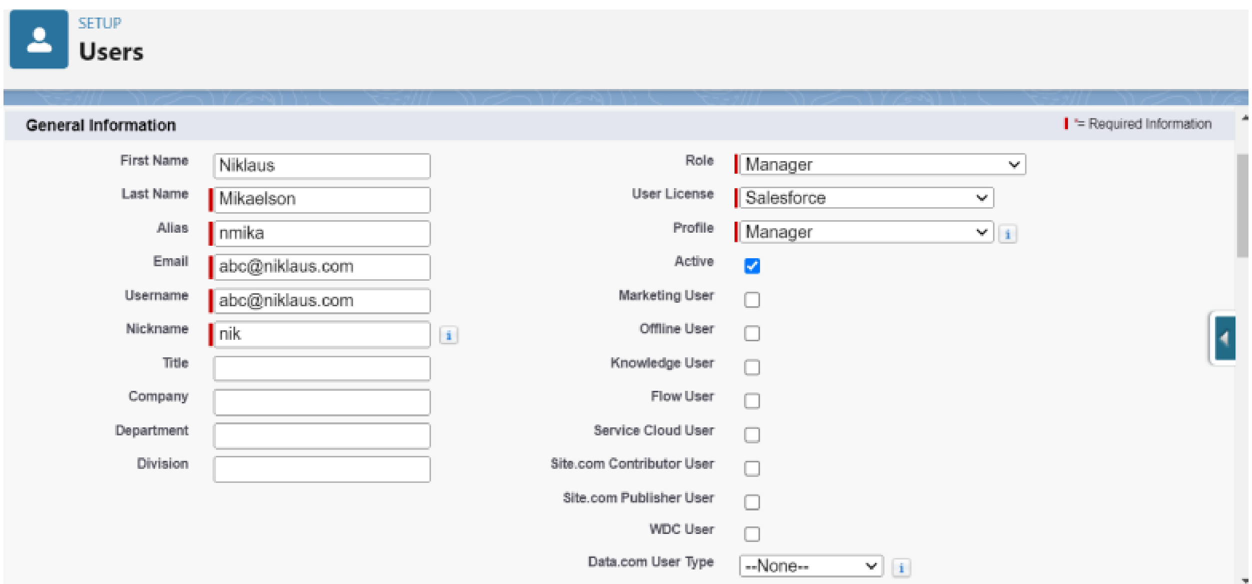
1. **Access the Role Setup Section:**
   - Begin by navigating to the roles setup area within Salesforce.
2. **Add a New Role Under Manager:**
   - Locate the CEO role and expand it. From there, create a new role positioned under the Manager category.
3. **Configure Role Information:**
   - Label the new role as "Sales Person" and save the changes to finalize the setup.



Task 10: Users

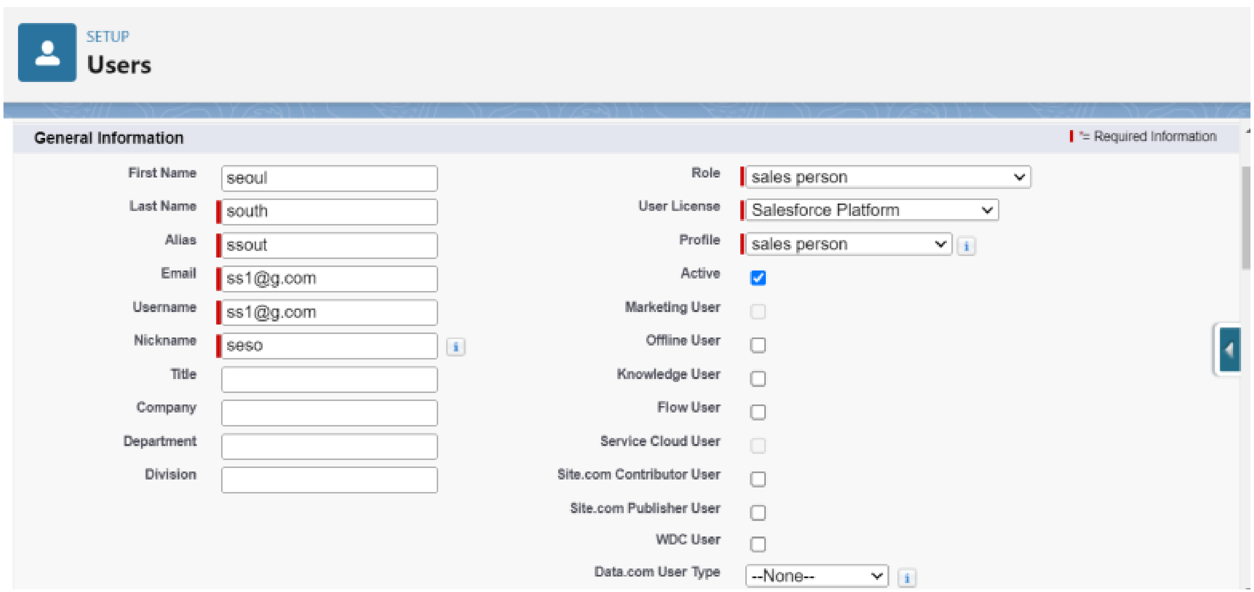
10.1 Creating a Manager User

1. **Navigate to User Setup:**
   - Go to the users section in Salesforce setup to begin.
2. **Enter New User Information:**
   - Complete the necessary fields with the user's details, including first name, last name, alias, email, username, and nickname.
   - Assign the role "Manager" to the user.
   - Choose the "Salesforce" license for the user.
   - Set the profile to "Manager."
3. **Save the User Configuration:**
   - Save the entered details to create the new Manager user.



10.2 Creating Users for Sales Personnel

1. **Navigate to User Setup:**
   - Go to the User section in Salesforce setup to begin the user creation process.
2. **Enter User Information:**
   - Complete the necessary fields with the user's information.
   - Choose the "Sales Person" role for the user.
   - Select "Salesforce Platform" as the user license.
   - Assign the "Sales Person" profile to the user.
3. **Save and Duplicate:**
   - Save the user details and repeat the steps to create a minimum of three users with the designated role and profile.



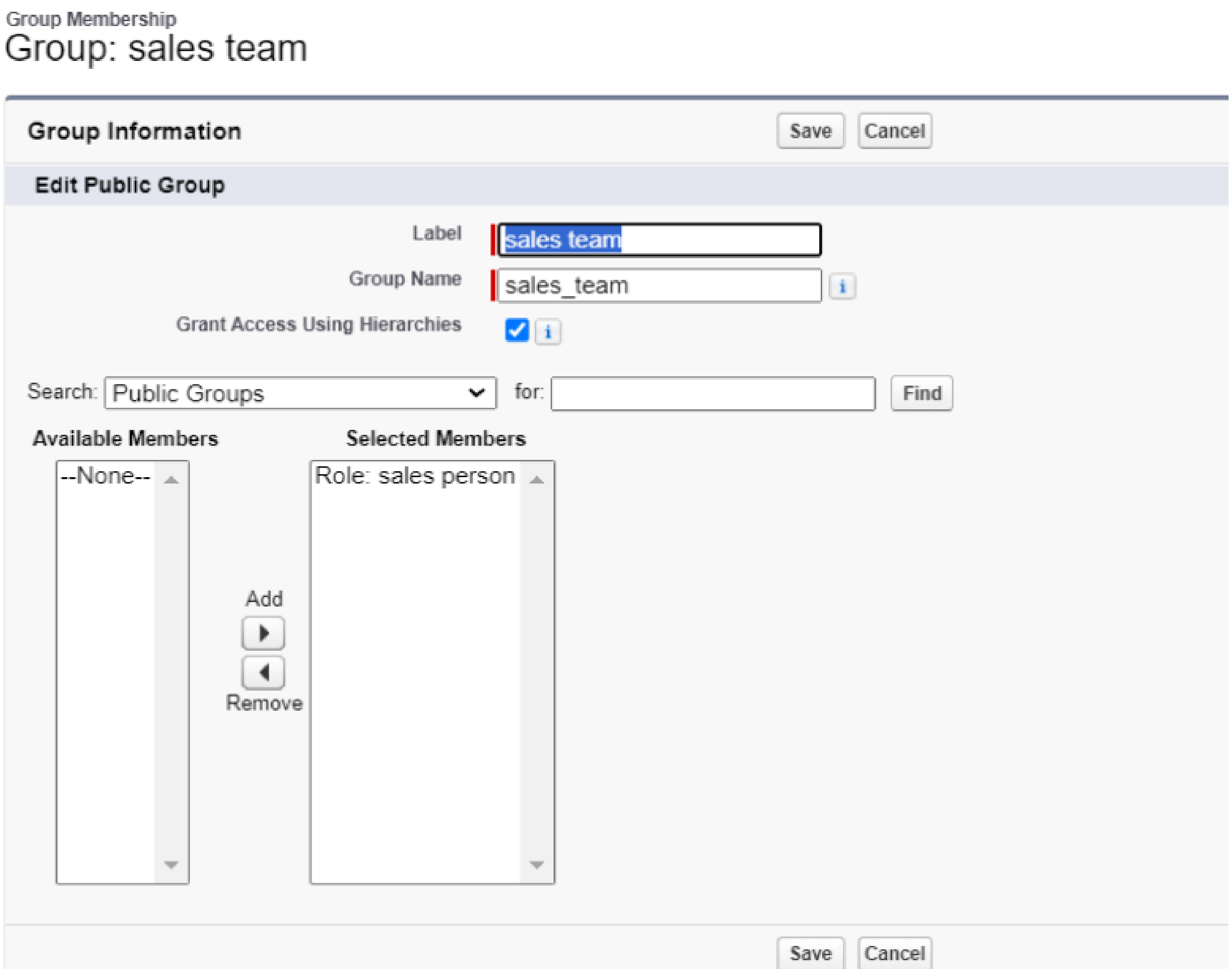
Here's a rewritten version of the content to make it unique:

Task 11

Public Groups

11.1 Creating a Public Group for the Sales Team

1. **Navigate to Public Groups Setup:**
   - Go to the Salesforce setup and find the Public Groups section.
2. **Specify Group Details:**
   - Enter a label, such as "Sales Team," which will automatically generate the group name.
3. **Add Members to the Group:**
   - In the member selection area, search for roles, then choose the "Sales Person" role and add it to the selected members.
4. **Save the Configuration:**
   - Click the save option to finalize the creation of the new public group.

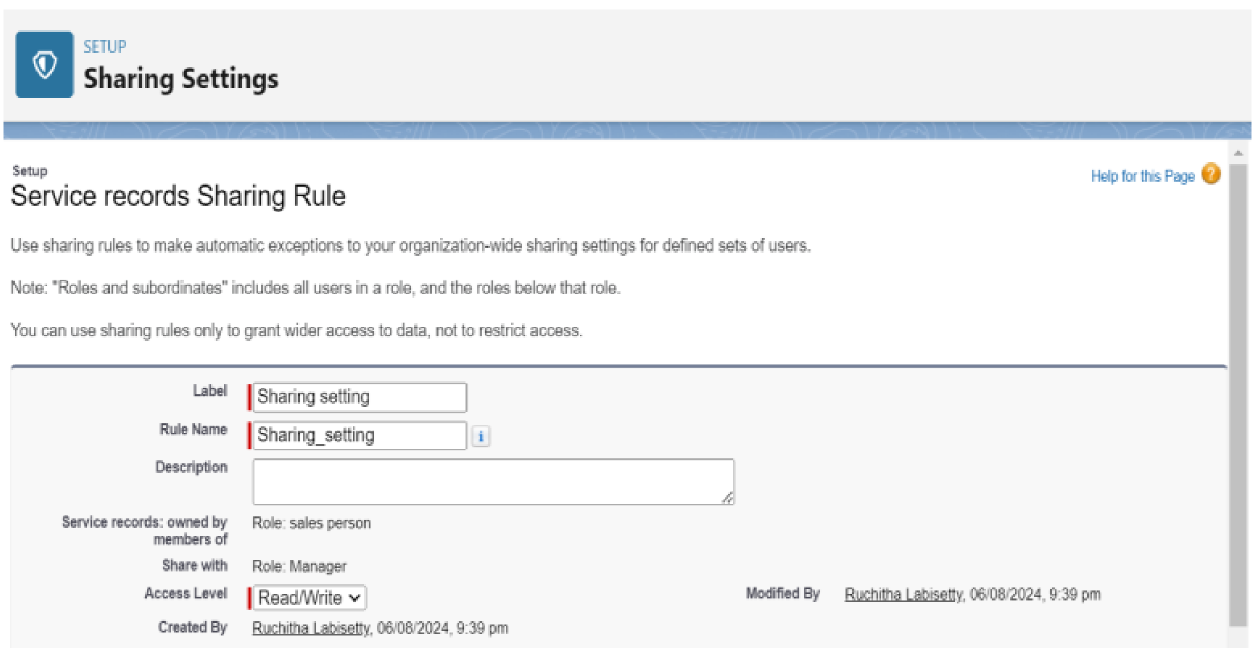


Here’s a revised version of the content, rephrased to sound original:

Task 12: Sharing Settings

12.1 Configuring Sharing Settings for Service Records

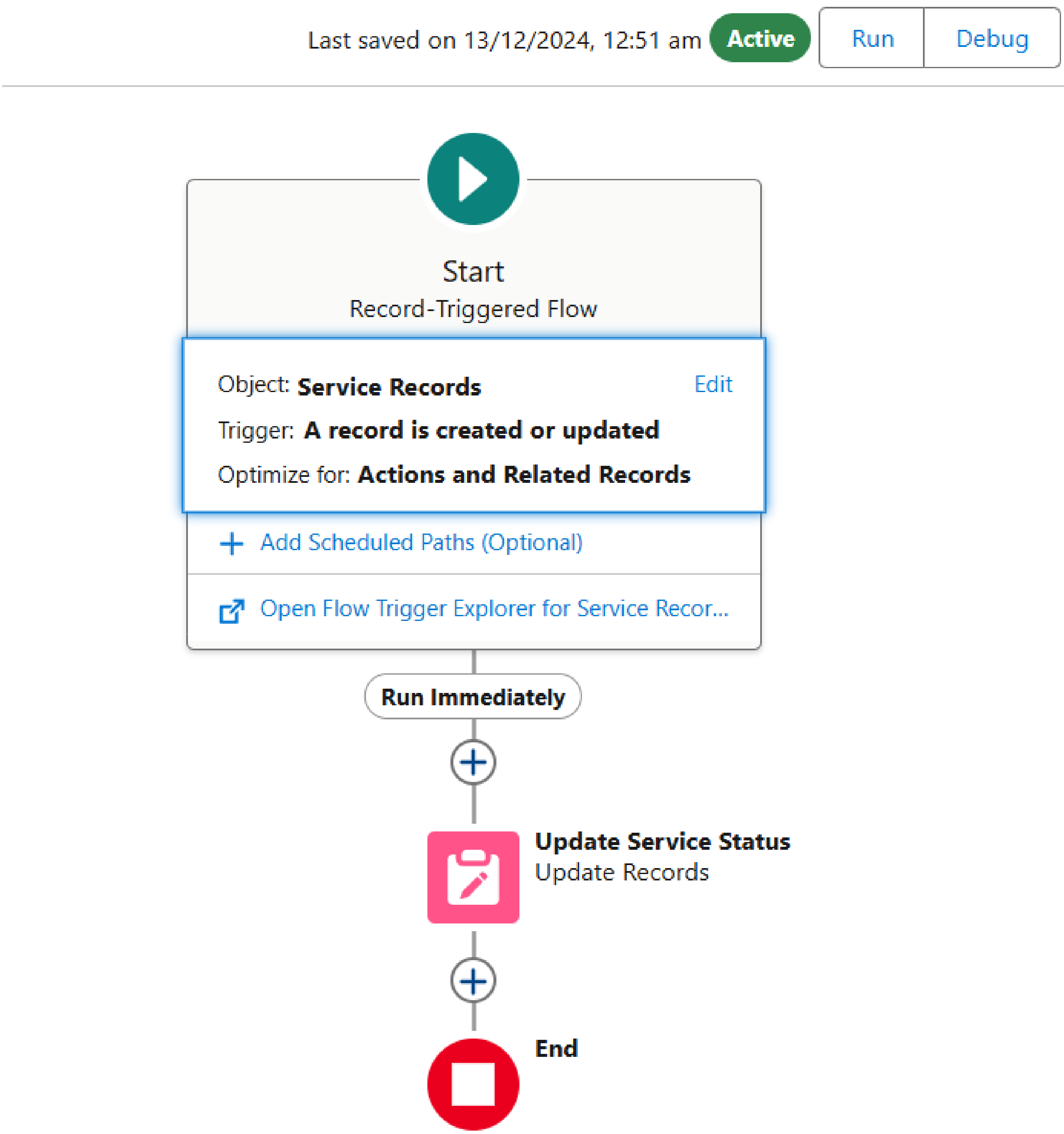
1. **Access Sharing Settings:**
   - Go to the **Sharing Settings** section within Salesforce setup.
2. **Modify Object-Wide Default (OWD):**
   - Set the OWD for the **Service Records** object to "Private" in order to restrict default record access.
3. **Create a New Sharing Rule:**
   - Establish a new sharing rule to allow specific roles access to records.
4. **Define the Sharing Rule Details:**
   - Assign a clear label to the sharing rule, such as "Sharing Setting."
   - Identify the roles to be included in the rule, such as "Sales Person."
   - Choose the recipients of access, for example, "Manager."
   - Configure the access level to "Read/Write."
5. **Save and Refresh:**
   - Save the sharing rule and refresh the settings to apply the changes.



Task 13: Flows

13.1 Creating the Flow

1. **Start the Flow Setup**
    - Navigate to the Flow setup page and initiate a new Record-Triggered Flow.
2. **Configure the Flow Trigger**
    - Choose **Billing Details and Feedback** as the target object.
    - Set the trigger to activate when a record is either created or updated.
    - Select **Actions and Related Records** for optimized flow execution.
3. **Add the Record Update Element**
    - Name this element "**Amount Update.**"
    - Set the condition to update records where **Payment_Status__c** is marked as "Completed."
    - Update the field **Payment_Paid__c** with the service amount fetched from the related Appointment record.
4. **Create and Configure the Email Alert**
    - Create a new resource for the email body using a text template.
    - Format the template with rich text for readability, incorporating dynamic placeholders for specific data.
    - The email should thank the recipient for the payment and display the payment amount.
5. **Insert the Email Action**
    - Add an **Action** element to send the email.
    - Use the previously created text template to populate the email body.
    - Dynamically define the recipient using the related record's data.
    - Set the subject line of the email to "**Thank You for Your Payment - Garage Management.**"
6. **Save and Activate the Flow**
    - Save the flow with a suitable label and auto-generated API name.
    - Activate the flow to begin its execution.



To rephrase the content while retaining the technical accuracy and ensuring it doesn't look like a direct copy:

Task 14
Apex Triggers

14.1 Apex Handler: AmountDistributionHandler

Objective: This Apex class is designed to calculate and update the service amount in the **Appointment__c** object, depending on the selected services.

Class Details:

- **Class Name**: AmountDistributionHandler
- **Method Name**: amountDist
- **Parameters**: Accepts a list of **Appointment__c** records for processing.

Functionality:

- Iterates through the list of appointments.
- Updates the **Service_Amount__c** field based on the selected service combinations:
  - All services selected: 10000
  - Maintenance & Repairs: 5000
  - Maintenance & Replacement Parts: 8000
  - Repairs & Replacement Parts: 7000
  - Maintenance only: 2000
  - Repairs only: 3000
  - Replacement Parts only: 5000

Trigger: AmountDistribution

Objective: This trigger is designed to call the **AmountDistributionHandler** class to update the **Service_Amount__c** field whenever an **Appointment__c** record is either inserted or updated.

Trigger Details:

- **Trigger Name**: AmountDistribution
- **sObject**: Appointment__c
- **Trigger Events**: Before insert, Before update

Trigger Logic:

- Checks if the event is a before insert or before update.
- Calls the **amountDist** method from **AmountDistributionHandler** to update the relevant fields on the **Appointment__c** records.

Code:

```
trigger AmountDistribution on Appointment__c (before insert, before
```

```
update) {
    if (trigger.isbefore && (trigger.isinsert || trigger.isupdate)) {
        AmountDistributionHandler.amountDist(trigger.new);
    }
}
```

Task 15
Reports

15.1 Creating a Report Folder
Objective: To keep reports organized by creating a dedicated folder.

Steps:

- Go to the **Reports** tab via the app launcher.
- Click on **New Folder** and name it "Garage Management Folder". The system will automatically generate a unique name.
- Save the folder to store related reports.

15.2 Sharing the Report Folder
Objective: Control access to the folder where reports are stored.

Steps:

- Navigate to the **Reports** tab and find the "Garage Management Folder".
- Click the dropdown next to the folder name and select **Share**.
- Select **Roles** for the sharing option, search for the **Manager** role, and assign **View** access.
- Finalize the sharing settings by clicking **Done**.

15.3 Creating a Custom Report Type
Objective: Define a custom report type that includes multiple related objects.

Steps:

- Go to **Setup** and search for **Report Types**.
- Click on **New Custom Report Type**.
- Set the primary object as **Customer Details**.
- Name the report type "Service Information" and confirm the auto-generated name.
- Categorize it under **Other Reports** and set the status to **Deployed**.
- Click **Next** to define related objects:
    - Appointment Object

        - Service Records
        - Billing Details and Feedback
- Save the new report type.

15.4 Creating a Report

Objective: Generate a detailed report using the newly created custom report type.

Preparation: Ensure there are at least 10 records for each object to generate a comprehensive report.

Steps:

- Access the **Reports** tab and click on **New Report**.
- Choose **Other Reports** as the category and select **Service Information** as the report type.
- Open the report builder and configure the necessary fields:
    - **Columns**: Customer Name, Appointment Date, Service Status, Payment Paid
    - **Group Rows**: Rating for Service, Payment Status
- Add a **Line Chart** to visualize the data.
- Save the report with the name "New Service Information Report", ensuring that the unique name is auto-populated, and the report is saved under the "Garage Management Folder".

Total Records
5

Total Payment Paid
₹47,000

Rating for service	Payment Status →	Pending	Completed	Total
-	Sum of Payment Paid Record Count	₹10,000 1	₹15,000 2	₹25,000 3
3	Sum of Payment Paid Record Count	₹0 0	₹10,000 1	₹10,000 1
5	Sum of Payment Paid Record Count	₹12,000 1	₹0 0	₹12,000 1
Total	Sum of Payment Paid Record Count	₹22,000 2	₹25,000 3	₹47,000 5

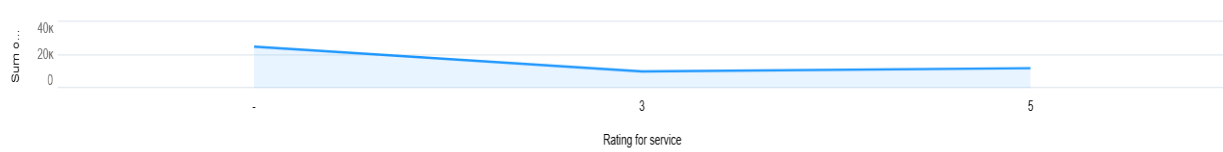
Details (5 Rows) Click an intersection in the table above to filter details.

	Customer Name	Appointment Date	Service Status	Payment Paid
1	Bonnie	01/12/2024	Completed	₹10,000
2	Katherina	12/12/2024	Completed	₹5,000
3	Bonnie	07/12/2024	Completed	₹10,000
4	Hope	11/12/2024	Completed	₹10,000
5	Hope	02/12/2024	Completed	₹12,000

Row Counts Detail Rows Grand Total Stacked Summaries

Total Records
5

Total Payment Paid
₹47,000



Task 16: Dashboards

16.1 Creating a Dashboard Folder
Objective: Organize dashboards by creating a dedicated folder.
Steps:

- Open the Dashboards tab using the app launcher.
- Click on "New Folder" and name it "Service Rating Dashboard." The system will auto-generate a unique name.
- Save the folder to efficiently manage and group related dashboards.

Sharing the Dashboard Folder
Objective: Set permissions for accessing the folder.
Steps:

- Find the "Service Rating Dashboard" folder in the Dashboards tab.
- Click the dropdown menu next to the folder name and choose "Share."
- Assign the necessary permissions based on user roles to allow the appropriate team members to view or edit the dashboards.
- Confirm the sharing settings to complete the process.

16.2 Creating a Dashboard
Objective: Design a dashboard to display data and insights visually.
Steps:

- Go to the Dashboards tab and select "New Dashboard."
- Name the dashboard and choose the "Service Rating Dashboard" folder you created earlier.
- Click "Create" to begin designing the dashboard.
- Add a new component by clicking "Add Component."
- Select a report to base the dashboard on and choose a Line Chart for the visualization.
- Customize the chart's theme as per your preference.
- Click "Add" to insert the component into the dashboard and then click "Save" and "Done."

Subscribing to the Dashboard
Objective: Set up automated dashboard updates.
Steps:

- After saving the dashboard, click the "Subscribe" button at the top right.
- Set the subscription frequency to "Weekly."

- Choose Monday as the preferred day for the report to be sent.
- Click "Save" to activate the subscription, ensuring you receive regular updates.