# Garage Management System

College Name: GOVERNMENT ARTS AND SCIENCE

COLLEGE FOR WOMEN

College Code: brubm

**TEAM ID: NM2025TMID26061** 

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# 1.INTRODUCTION

#### 1.1 Project Overview

This project manages customer, vehicle, and service details in a centralized Salesforce system. It helps track service records, billing, and feedback for each garage visit. Automation features reduce manual work and improve customer experience. Reports and dashboards provide insights into garage performance and sales.

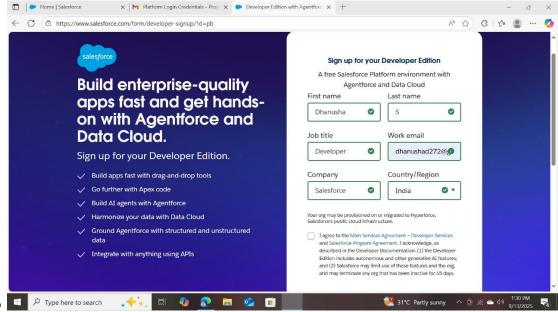
#### 1.2 Purpose

To maintain and organize customer, vehicle, and service records efficiently. To simplify billing, payment, and feedback collection through automation. 3. To provide reports and insights for improving garage operations and customer satisfaction.

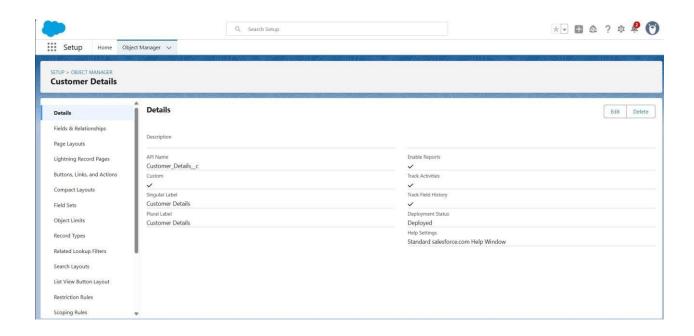
## 1. DEVELOPMENT PHASE

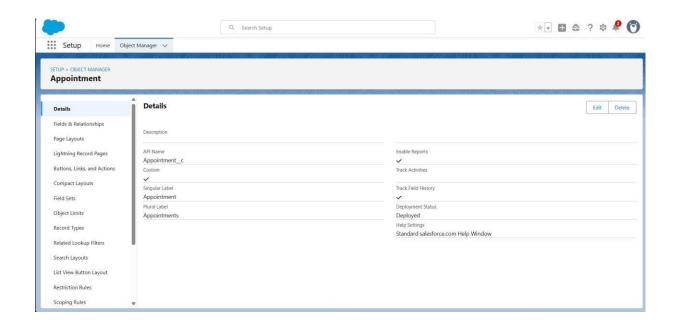
### > Creating Developer Account:

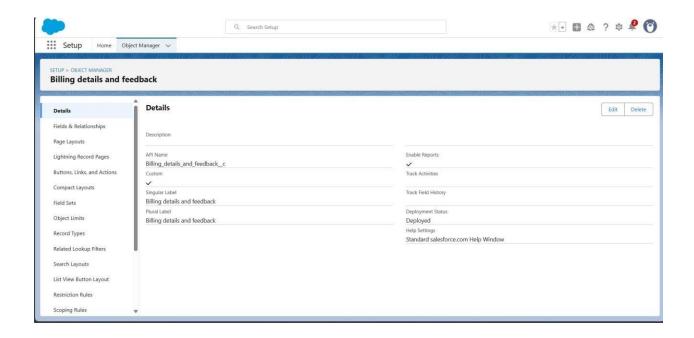
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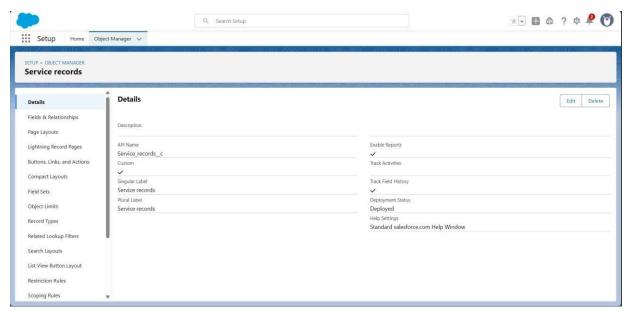


➤ Created <u>Objects</u>:Customer Details, Appointments, Service records, Billing details and feedback.

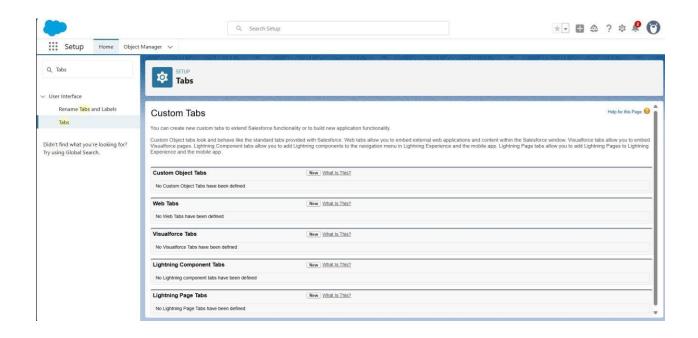


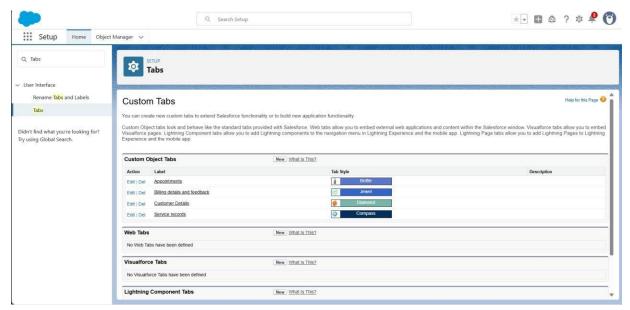




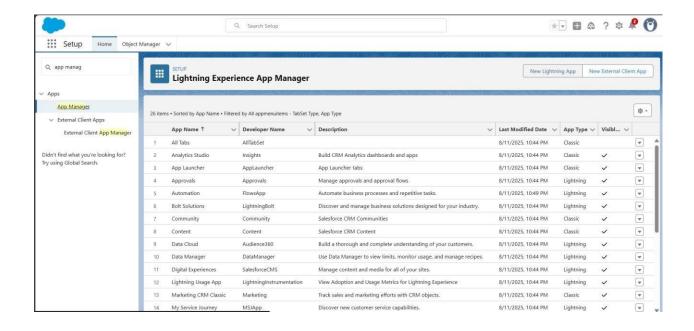


> Created Custom <u>Tabs</u> for all the Objects that is been Created

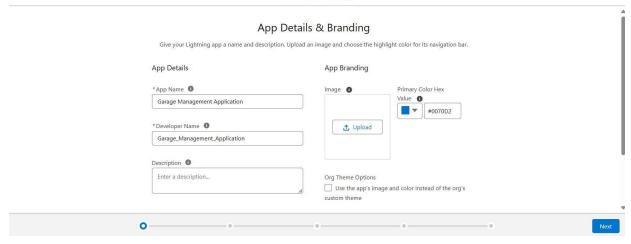


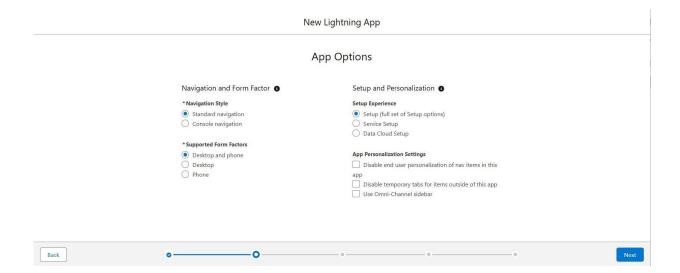


➤ Developed <u>Lightning App</u> with relevant tabs

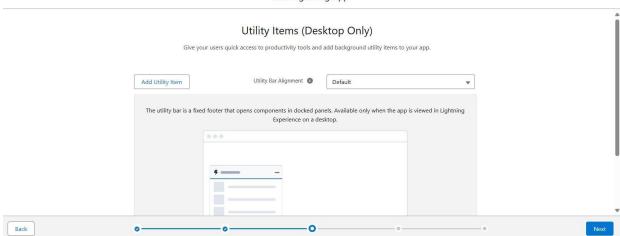


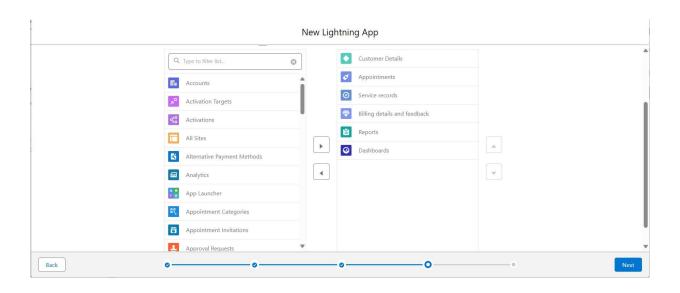
#### New Lightning App

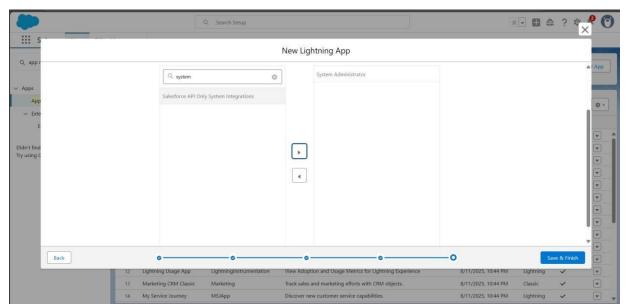




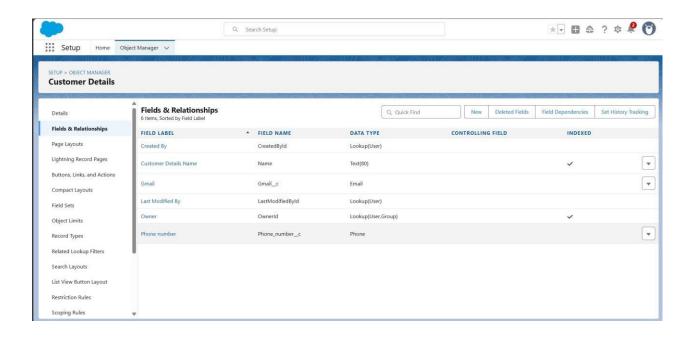
#### New Lightning App

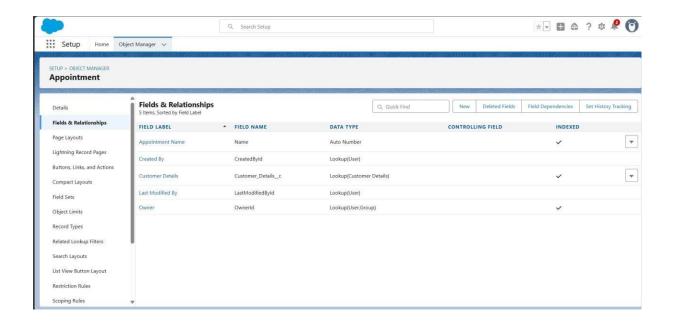


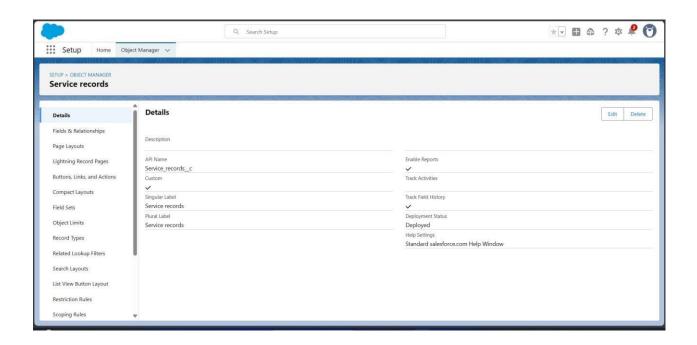


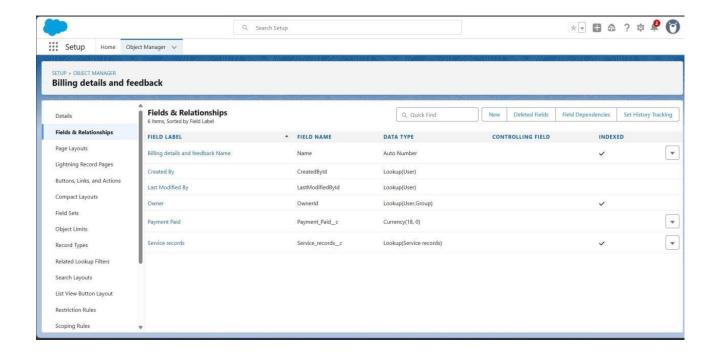


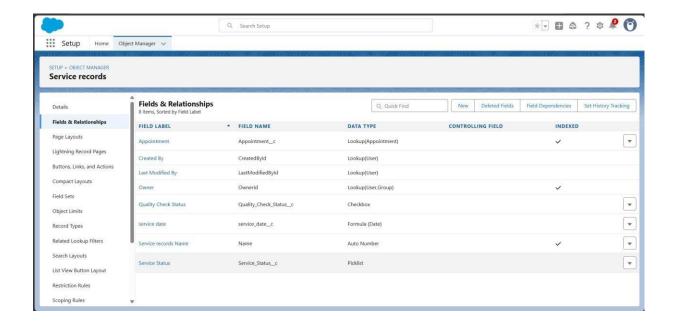
➤ Created the <u>fields</u> for: Customer Details Object, Lookup, Checkbox, Date Fields, Currency, Text, Picklist, Formula and Service Records Object



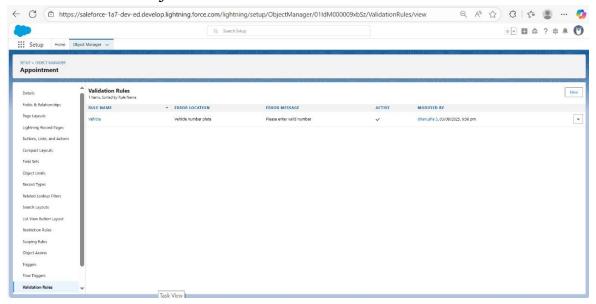


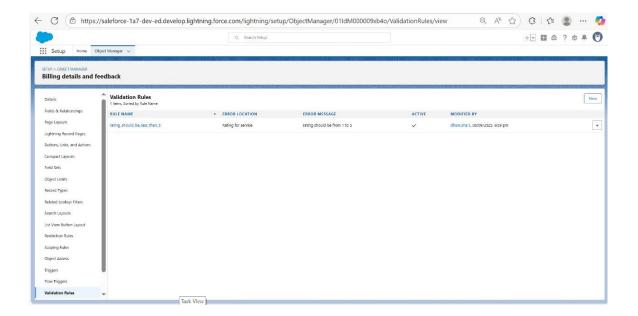




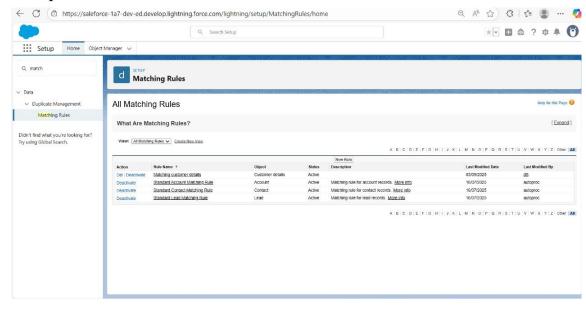


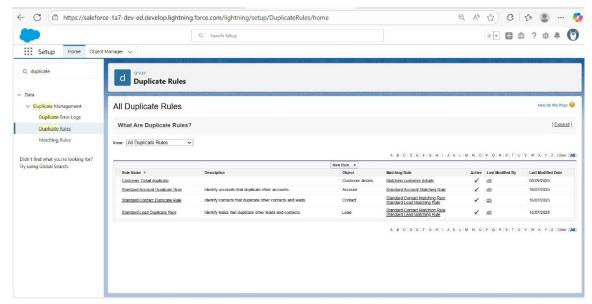
➤ Created the <u>Validation rule</u> for: Appointment object, Billing Details and Feedback objects.



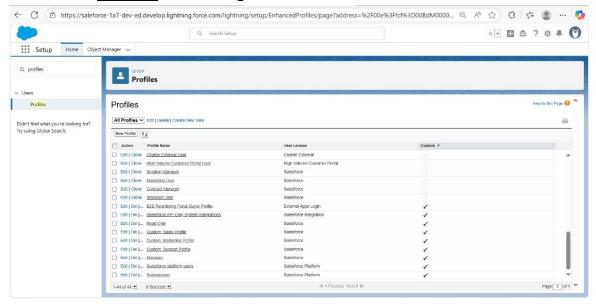


➤ Create <u>duplicate rules</u> to Customer details Object for: Matching and Duplicate.

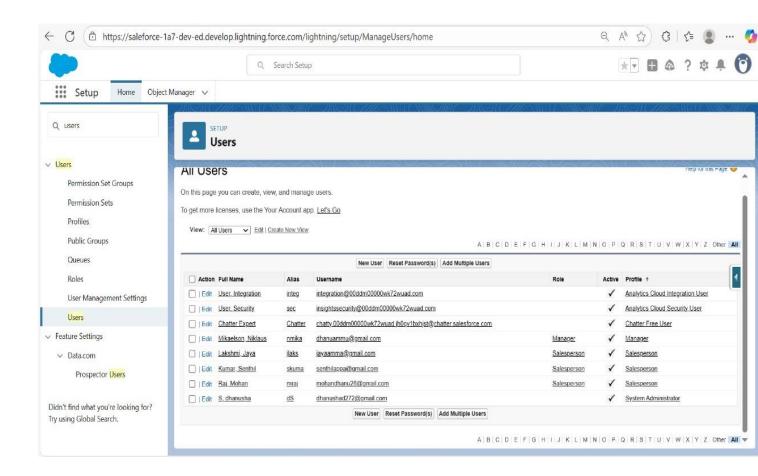


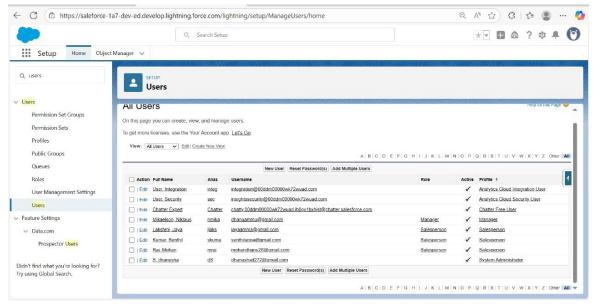


➤ Created **Profiles** for: Manager and Sales Person.

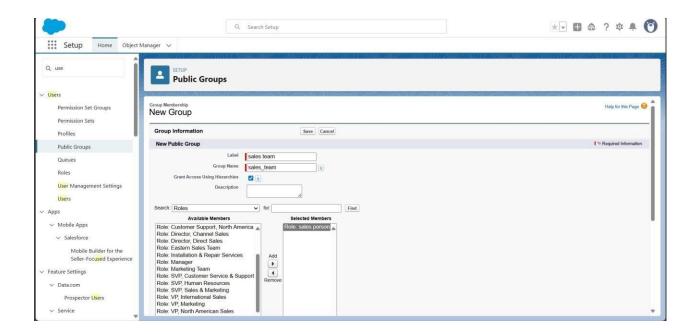


> Created **Users** and Another user

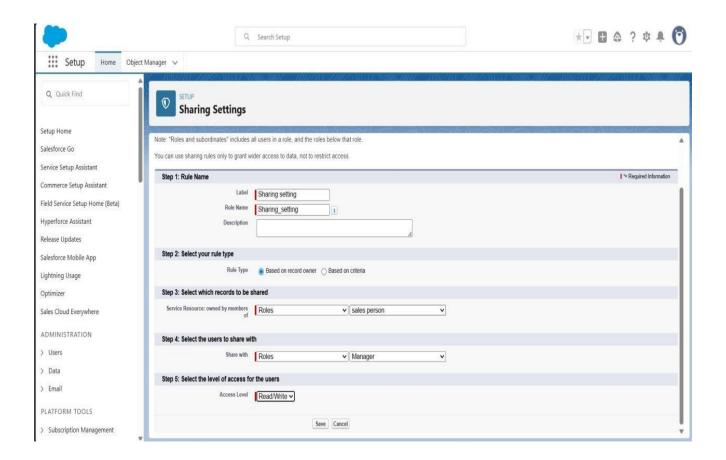




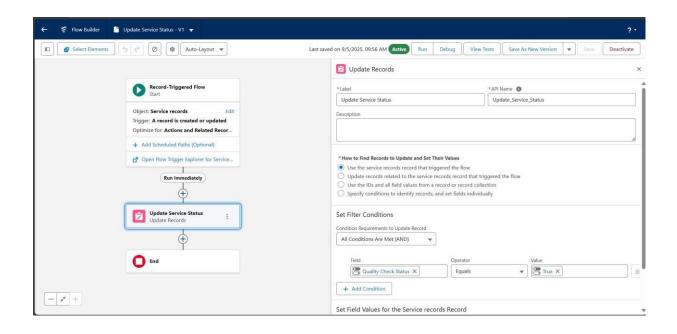
> Created new **Public Groups**.



> Created the **Sharing Setting**.



**Flow** - Billing amount flow.



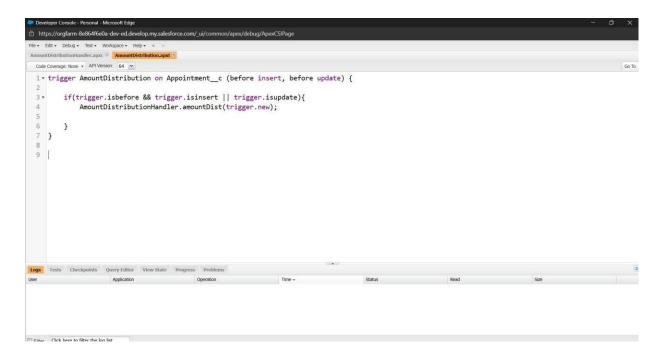
#### Developed **Apex Triggers**:

#### Created Apex Class called AmountDistribustionHandler.

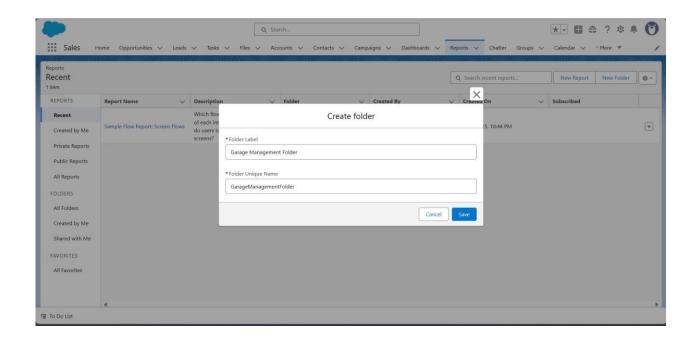
```
Developer Console - Personal - Microsoft Edge

Developer Console - Februaria - Console - Con
```

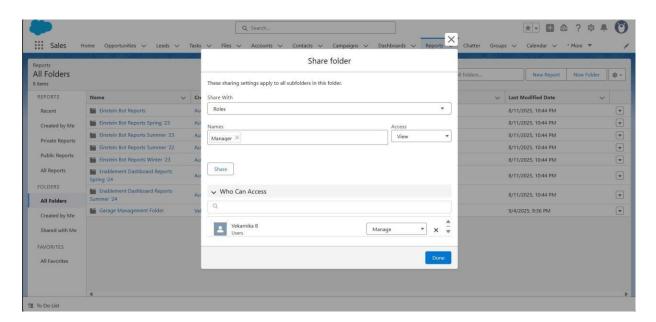
> Created an **Apex trigger** called **AmountDistribustion**.



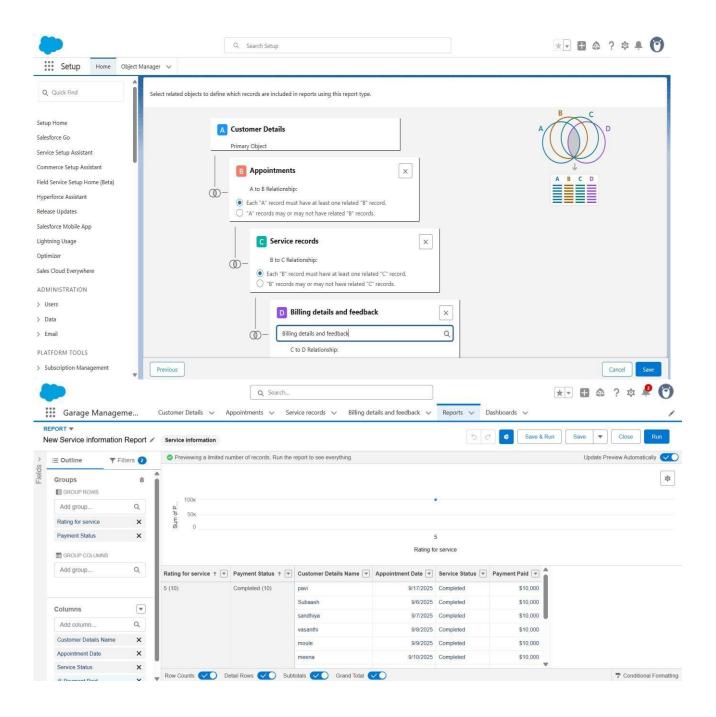
> Created **Report** folders, Report type, Report and shared Report folder.

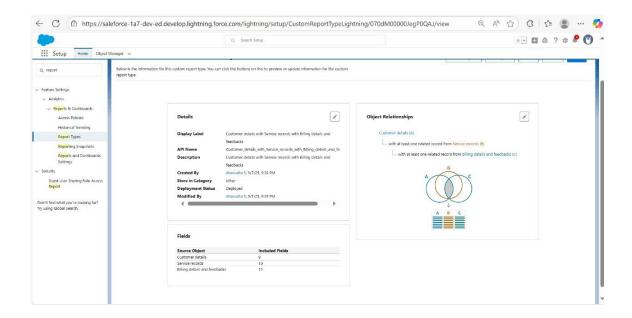


**Report** folders, Report type, Report and shared Report folder.

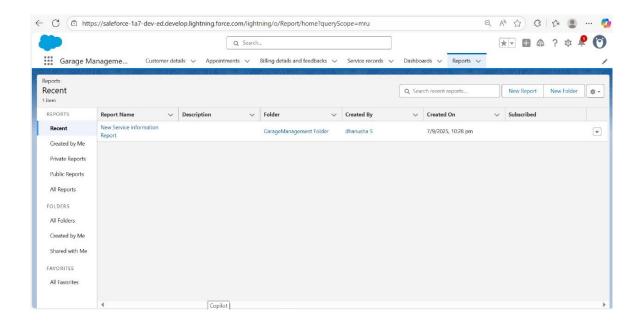


#### Created

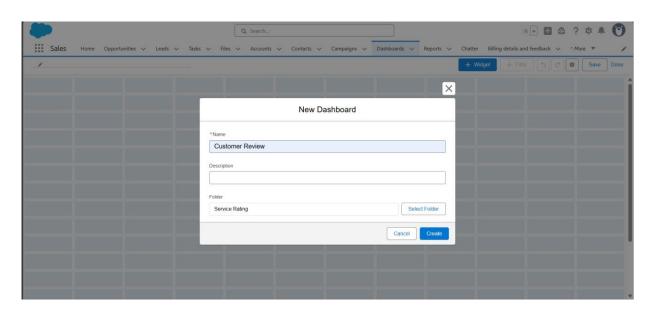


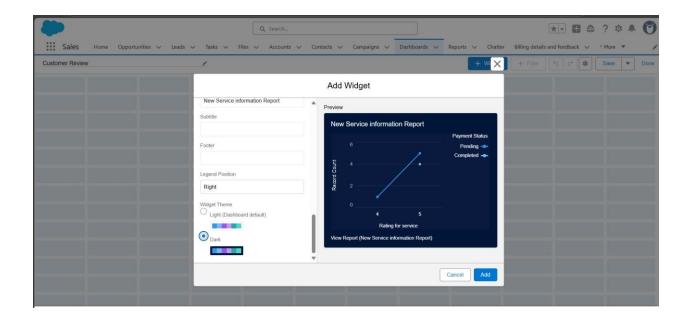


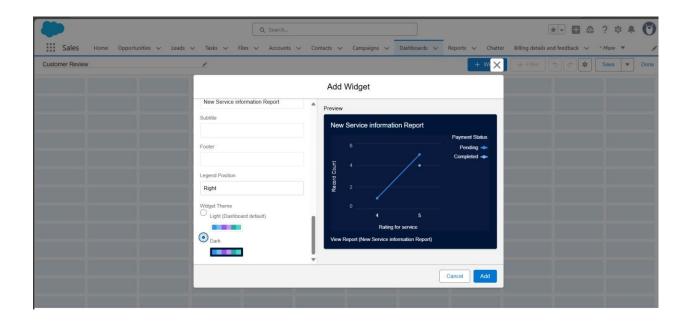
### <u>Dashboards</u> and Dashboard folders

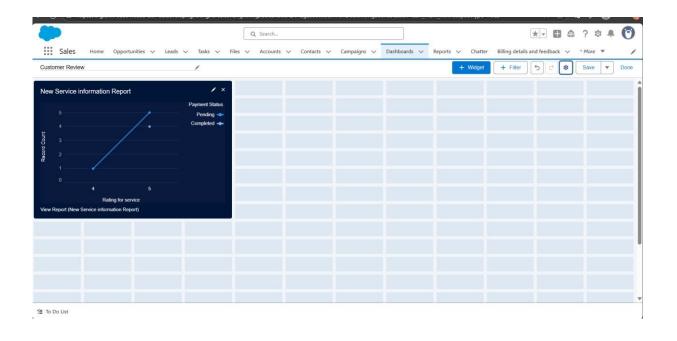


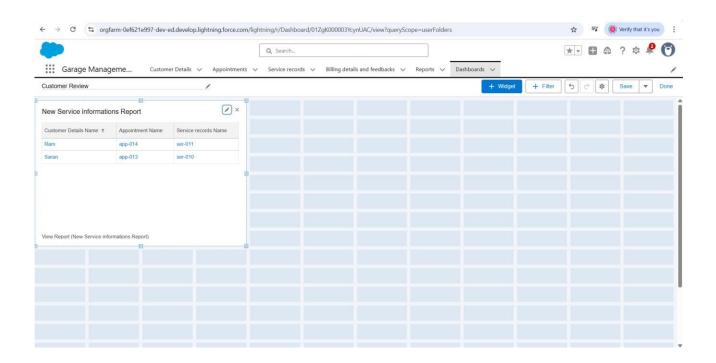
#### Created











### 2. ADVANTAGES & DISADVANTAGES

#### Advantages of Garage Management System:

- 1. <u>Centralized Data Management</u> All customer, vehicle, and service records are stored in one place, improving accessibility and reducing data duplication.
- 2. <u>Improved Customer Experience</u> Automated service reminders, transparent billing, and quick updates enhance customer trust and satisfaction.
- 3. <u>Operational Efficiency</u> Streamlines job scheduling, inventory tracking, and billing, reducing manual effort and errors.
- 4. <u>Scalability</u> Built on Salesforce, the system can easily expand with additional modules or features as the business grows.
- 5. <u>Integration Capabilities</u> Seamlessly integrates with CRM, payment systems, and other Salesforce apps for smooth workflows.
- 6. **Analytics & Reporting** Real-time dashboards and reports help managers track performance, revenue, and customer trends.

#### **Disadvantages of Garage Management System:**

- 1. <u>Cost of Implementation</u> Licensing, customization, and ongoing Salesforce subscription costs may be high for small garages.
- 2. <u>Learning Curve</u> Staff may require training to adapt to Salesforce's interface and features.
- 3. <u>Customization Dependency</u> Advanced requirements often need Salesforce developers/consultants, increasing dependency.
- 4. <u>Internet Reliance</u> Being a cloud-based system, uninterrupted internet is essential for smooth operations.

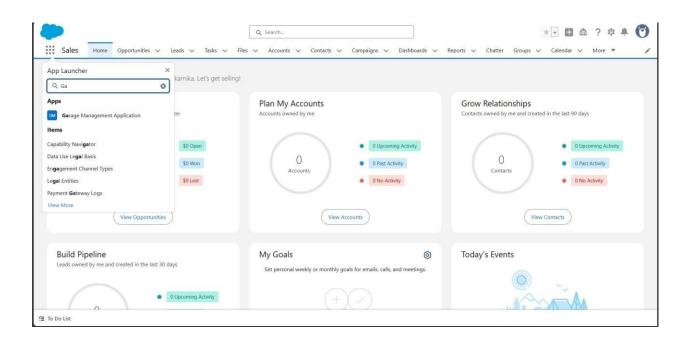
5. <u>Overhead for Small Businesses</u> – Smaller repair shops may find the system more complex than needed for basic operations.

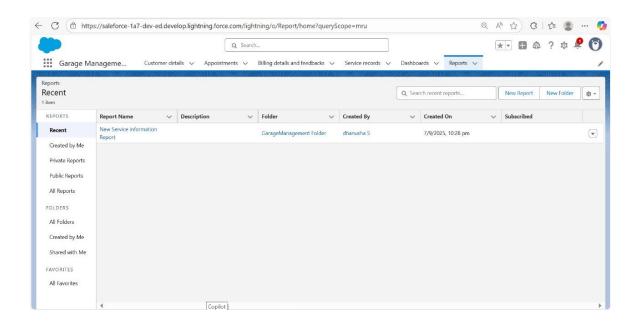
# 3. CONCLUSION

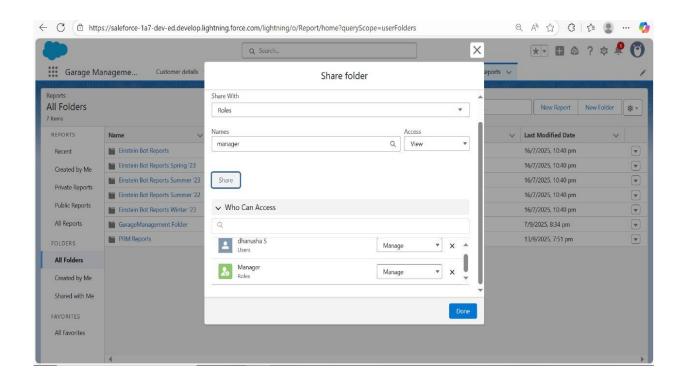
The Garage Management System streamlines operations, enhances customer satisfaction, and supports business growth, making it a reliable solution for modern automotive repair facilities.

# 4. RESULTS

# **Output Screenshots**







# 5. APPENDIX

**Source Code**: Provided in Apex Classes and Triggers

#### To create apex class (AmountDistributionHandler)

```
public class AmountDistributionHandler {
    public static void amountDist(list<Appointment__c> listApp){
        list<Service_records_c> serList = new list <Service_records_c>();

    for(Appointment_c app : listApp){
        if(app.Maintenance_service_c == true && app.Repairsc == true && app.Replacement_Parts_c == true){
        app.Service Amount__ c = 10000;
    }
}
```

```
}
                else if(app.Maintenance service c == true && app.Repairs c ==
     true){
app. Service Amount c = 5000;
             }
                                  else if(app.Maintenance service c == true &&
     app.Replacement Parts c == true){
app.Service Amount_c = 8000;
             }
                  else if(app.Repairs c == true && app.Replacement Parts c ==
     true){
app.Service_Amount___c = 7000;
            }
            else if(app.Maintenance service_c == true){ app.Service Amount
               \underline{\phantom{a}}c = 2000;
             }
            else if(app.Repairs_c == true){ app.Service Amount_c
               =3000;
             }
```

```
else if(app.Replacement_Parts_c == true){ app.Service_Amount
                 \underline{\phantom{a}}c = 5000;
              }
AmountDistribution - Apex Trigger:
      trigger AmountDistribution on Appointment_c (before insert, before update) {
         if(trigger.isbefore && trigger.isinsert || trigger.isupdate){
            AmountDistributionHandler.amountDist(trigger.new);
```