Phase 10 – Final Presentation & Demo (Ashok Motors Capstone)

Objective:

Showcase the complete Ashok Motors Capstone project, demonstrate functionality, gather feedback, and document the project for portfolio.

Demo Video/ LINK -

Ashok Motors – Salesforce CRM Solution

📌 Project Overview

Ashok Motors is a growing automobile dealership facing challenges in managing leads, test drive bookings, service appointments, and customer interactions. To overcome these, a Salesforce CRM solution has been implemented with automation, dashboards, and Lightning Web Components (LWC).

This project covers the end-to-end Salesforce ecosystem: Admin configuration, automation, Apex coding, LWC, integration basics, and reporting.

🎯 Problem Statement & Objective

Problems Faced

- **Leads scattered across website forms, social media, and offline inquiries.**
- **No proper tracking for vehicle availability and test drives.**
- **Manual handling of service appointments and customer complaints.**
- **Lack of real-time sales insights for management.**

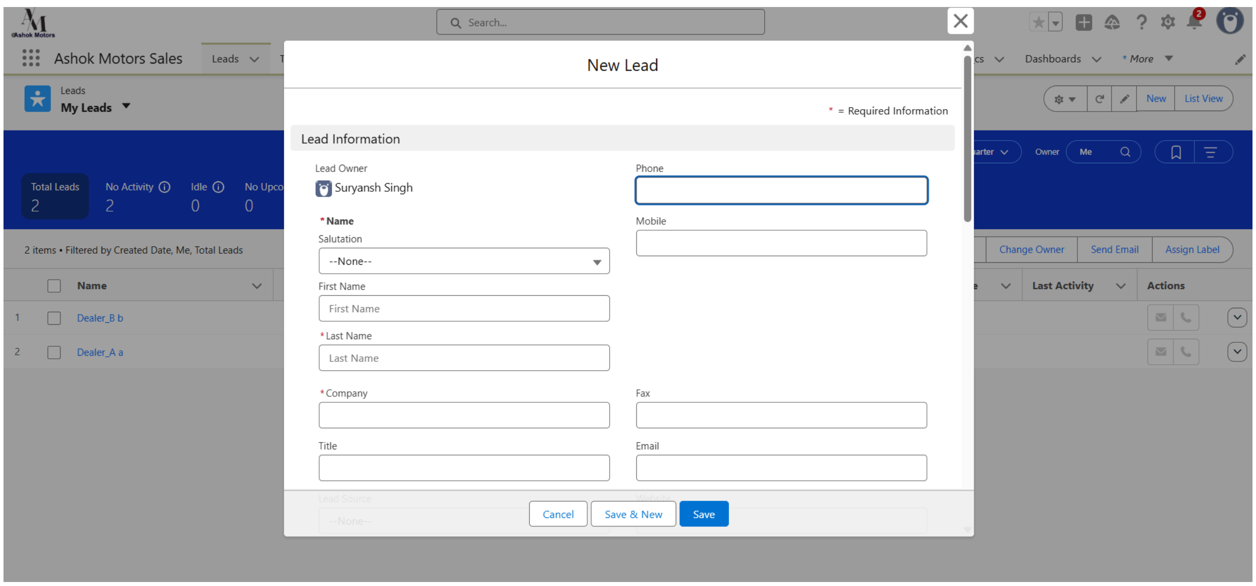
Objectives

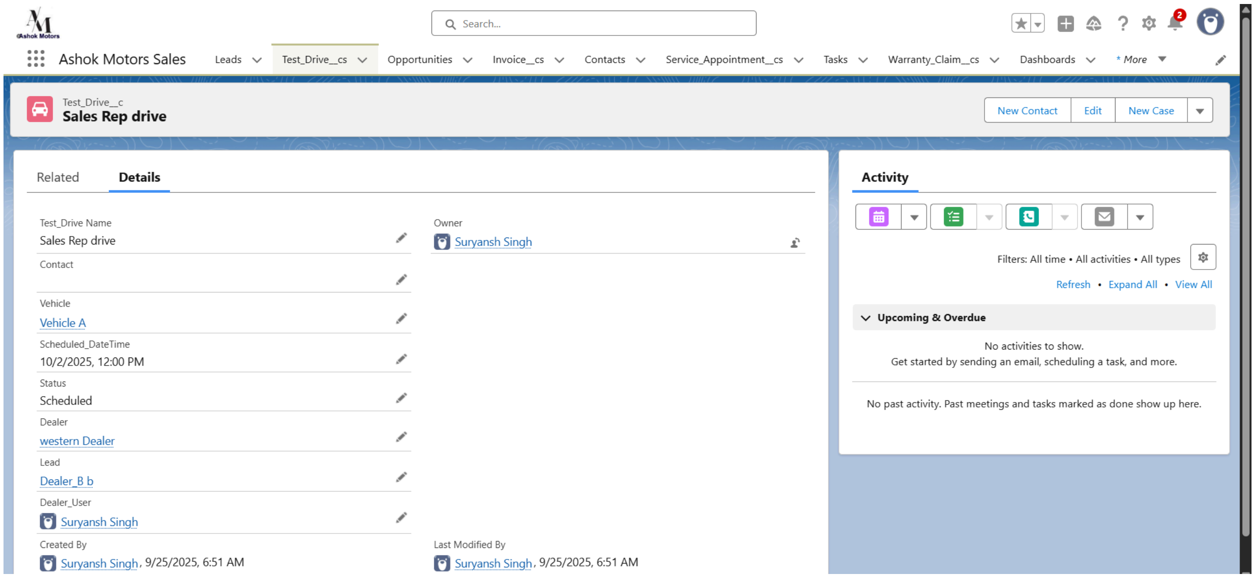
- **Automate lead capture, assignment, and qualification.**
- **Track vehicles, test drives, and service appointments.**
- **Provide self-service booking via LWC.**
- **Enable management with reports and dashboards.**

- Improve customer satisfaction and reduce manual effort.

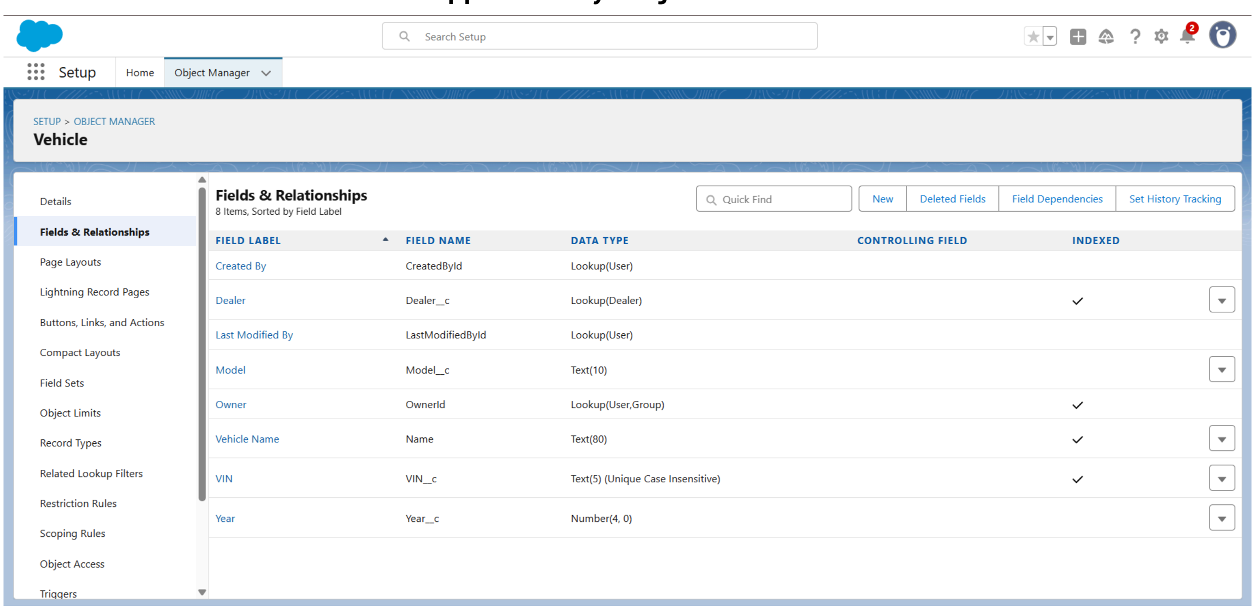
🛠️ Features & Modules Implemented

1. Lead & Opportunity Management

- Leads captured and assigned to sales reps.
- Qualification process automated (hot/warm/cold).
- Converted leads move into Opportunities for closure.
- 

- 

2. Vehicle Management (Custom Object)

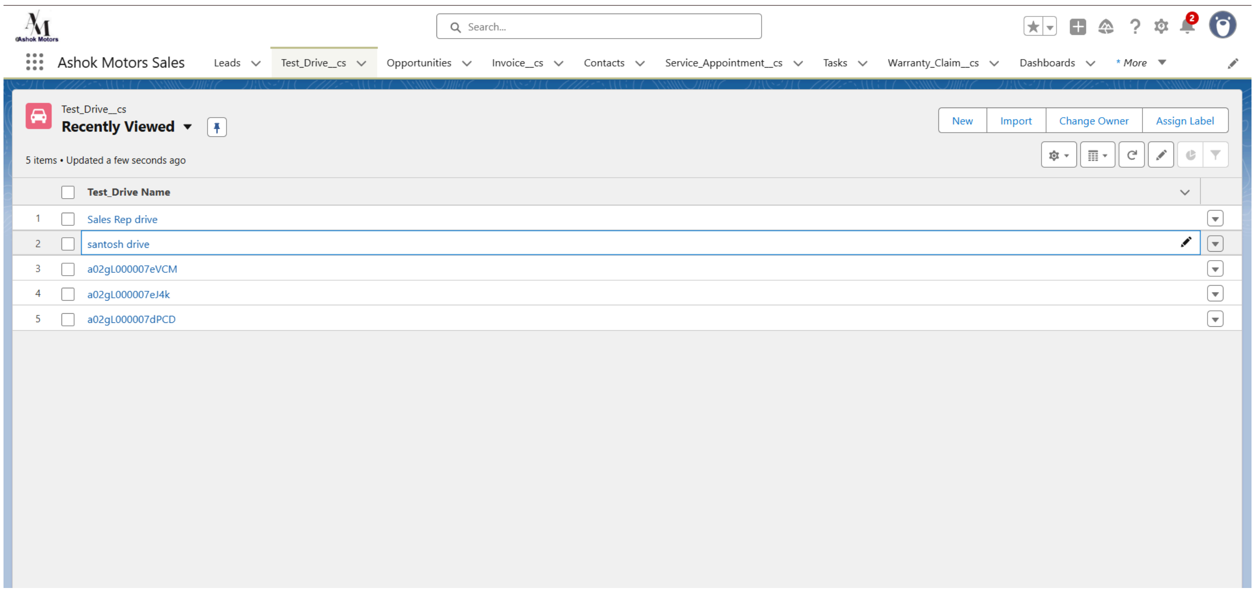
- **Custom object Vehicle__c created with fields: Model, Price, Status, Availability.**
- **Linked with Test Drive and Opportunity objects.**
- 

3. Test Drive Management (Custom Object + LWC)

- TestDrive__c custom object for booking details (Customer, Vehicle, Date, Status).

- Built Lightning Web Component (LWC) for real-time booking UI.

- Automated email/SMS alerts for customers and sales reps.

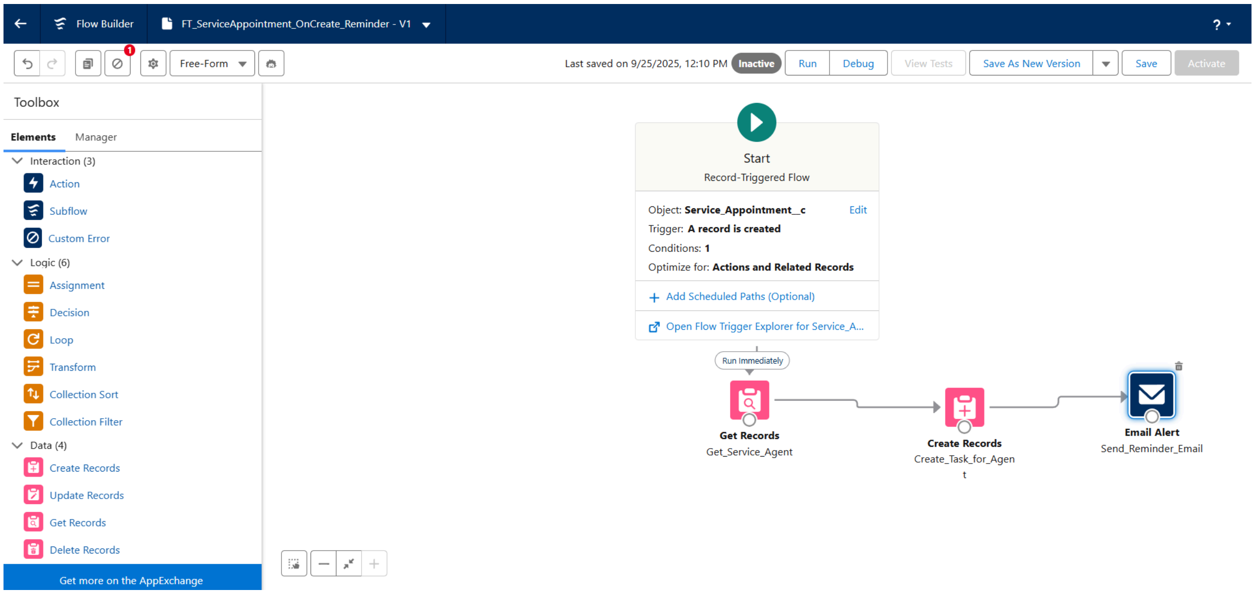


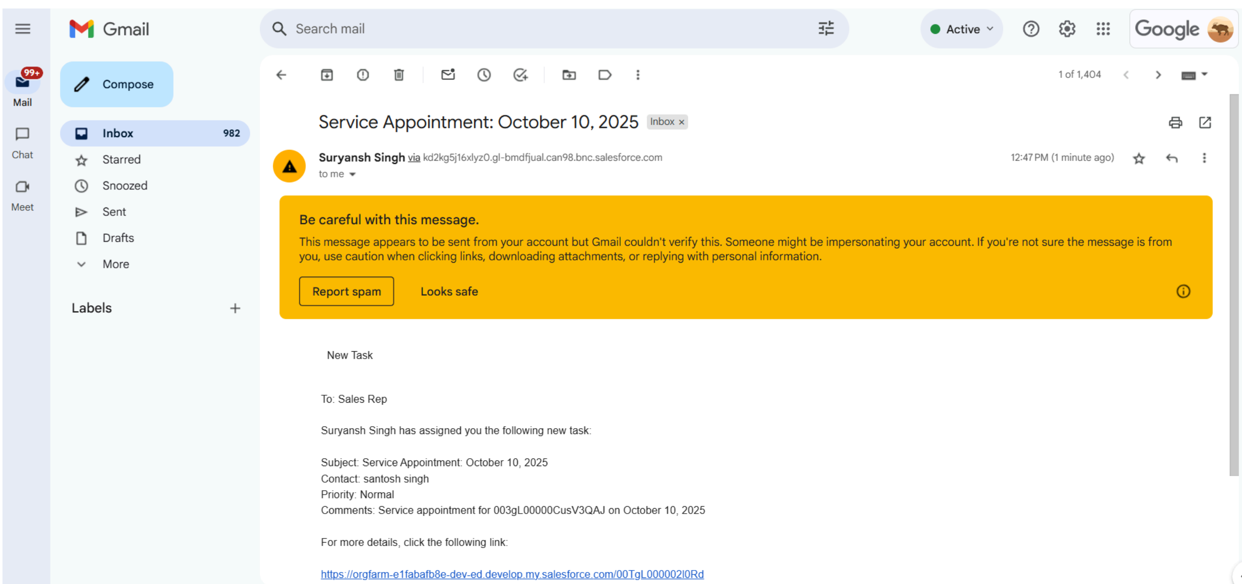
4. Service Appointment Tracking

- Service appointment requests logged in Salesforce.

- Workflow to assign appointments to service agents.

- Dashboard for monitoring pending vs. completed services.

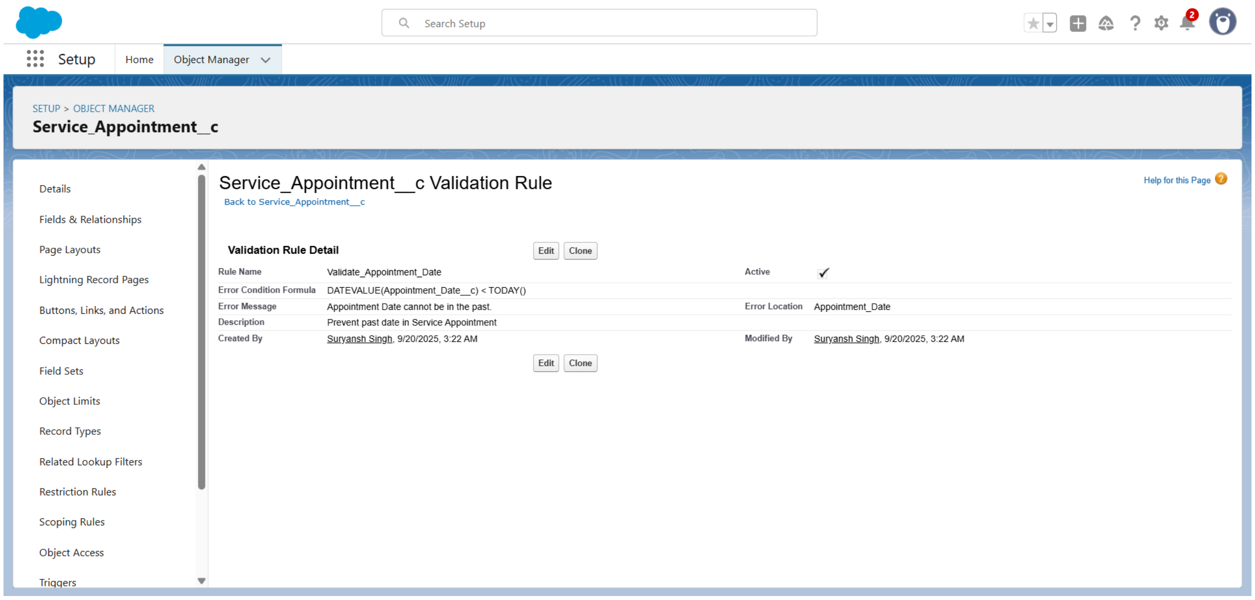




5. Process Automation

- Validation Rules: Ensure mandatory fields (e.g., Contact Info).
- Flows:
  - Lead assignment based on territory.
  - Automatic creation of Test Drive record when Opportunity is “Interested”.

- Approval Process: Discount requests approved by Manager.
- Email Alerts & Notifications: Test drive confirmation emails.



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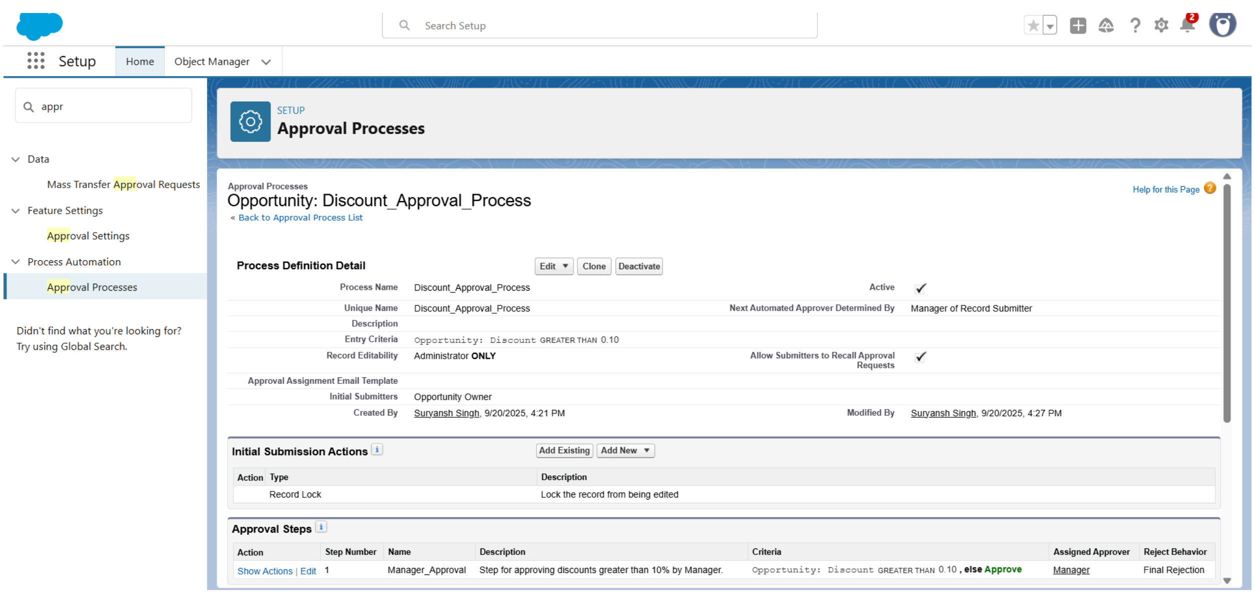

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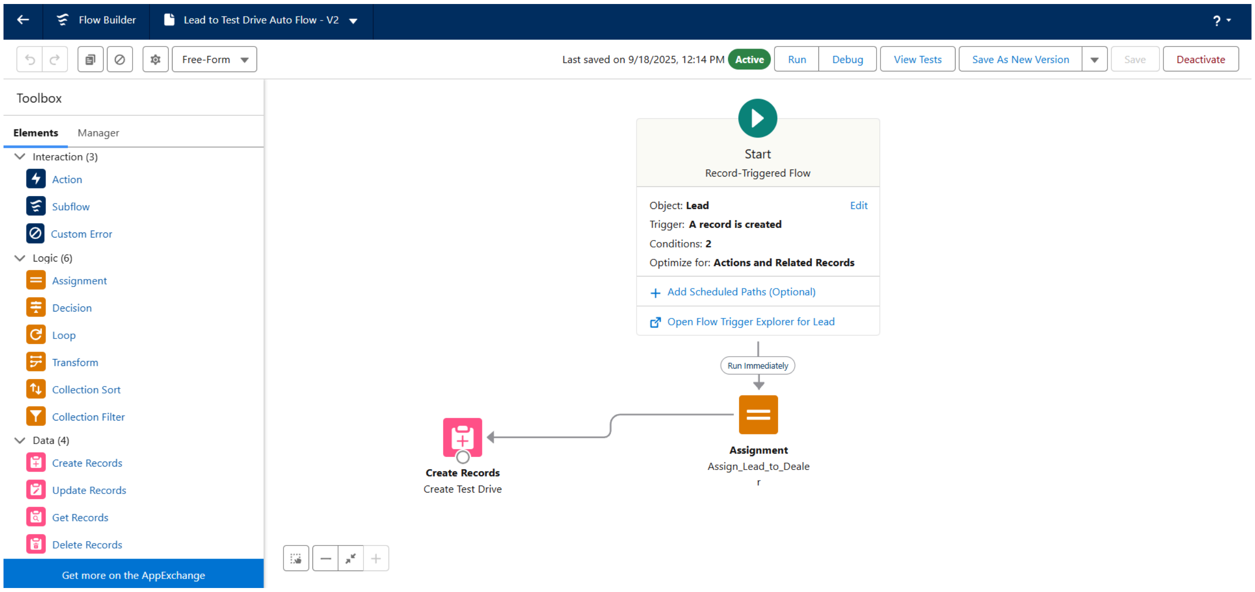
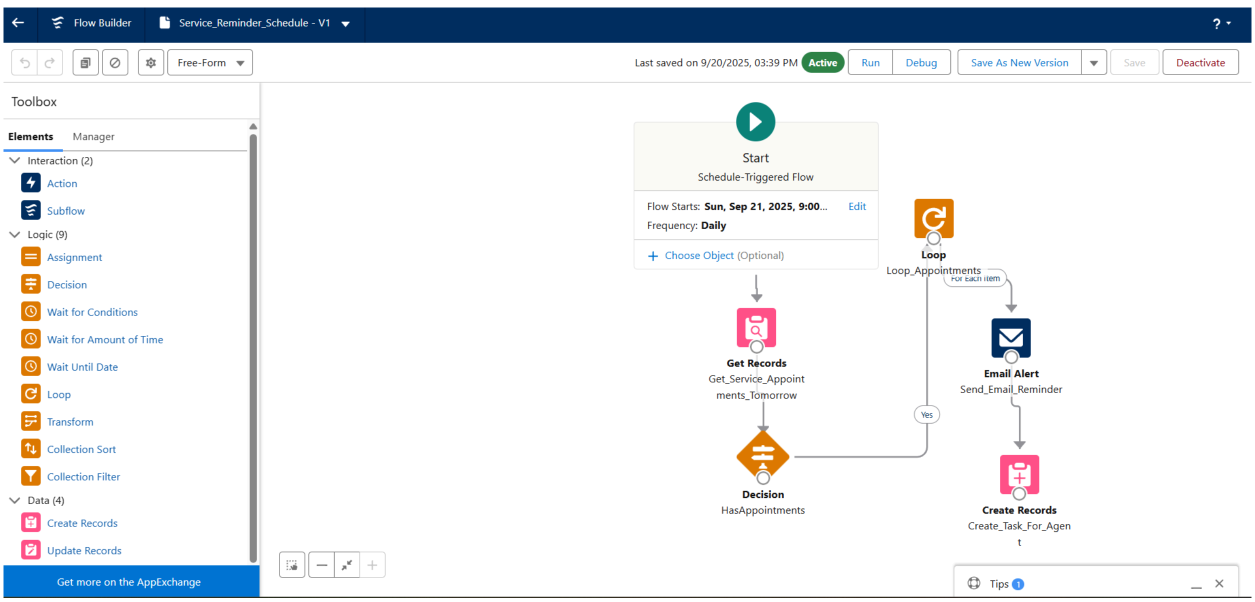
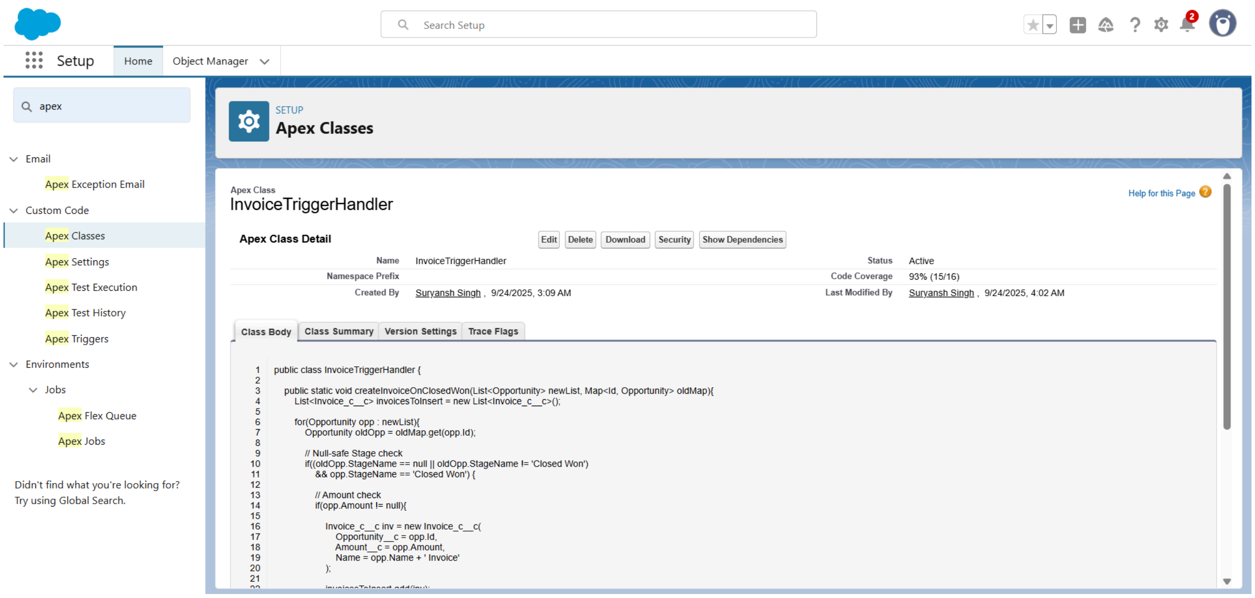
- 

- 

6. Apex Development

- Triggers: Auto-create Opportunity on Lead conversion.
- Batch Apex: Clean inactive leads weekly.
- Queueable Apex: Bulk email sending for campaigns.
- Test Classes for 85%+ code coverage.

- 

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SETUP
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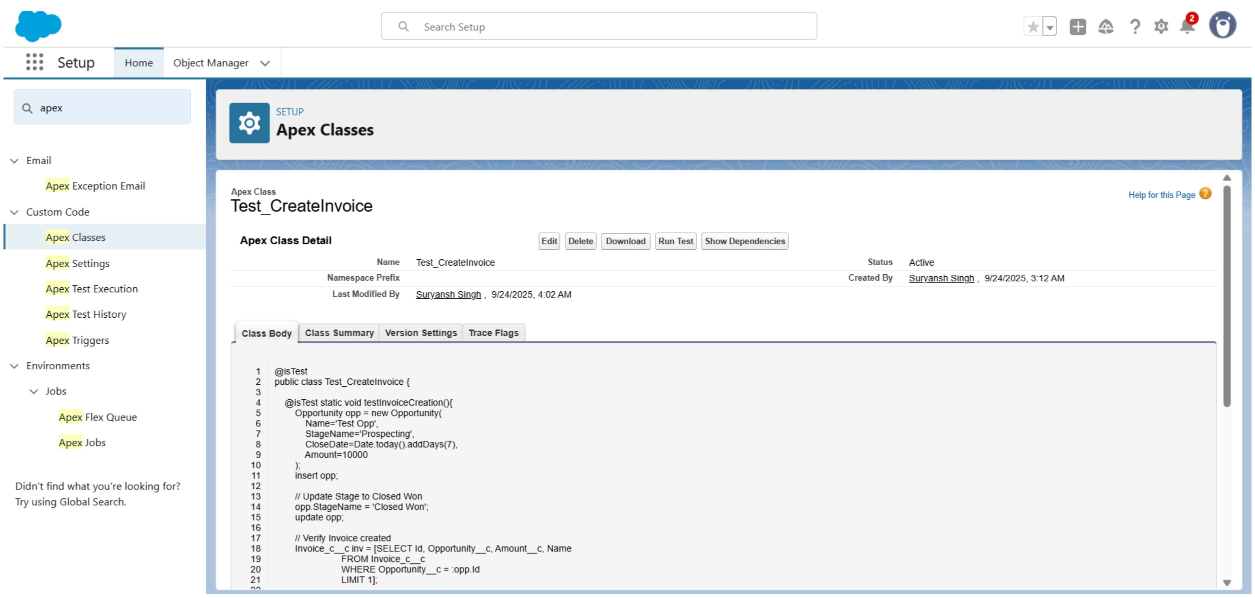
Apex Class
InvoiceTriggerHandler
Help for this Page
Apex Class Detail
Edit
Delete
Download
Security
Show Dependencies
Name InvoiceTriggerHandler
Status Active
Namespace Prefix
Code Coverage 93% (15/16)
Created By Suryansh Singh, 9/24/2025, 3:09 AM
Last Modified By Suryansh Singh, 9/24/2025, 4:02 AM
Class Body
Class Summary
Version Settings
Trace Flags
public class InvoiceTriggerHandler {
public static void createInvoiceOnClosedWon(List<Opportunity> newList, Map<Id, Opportunity> oldMap){
List<Invoice__c> invoicesToInsert = new List<Invoice__c>();
for(Opportunity opp : newList){
Opportunity oldOpp = oldMap.get(opp.Id);
// Null-safe Stage check
if((oldOpp.StageName == null || oldOpp.StageName != 'Closed Won')
&& opp.StageName == 'Closed Won') {
// Amount check
if(opp.Amount != null){
Invoice__c inv = new Invoice__c(
Opportunity__c = opp.Id,
Amount__c = opp.Amount,
Name = opp.Name + ' Invoice'
);

- 

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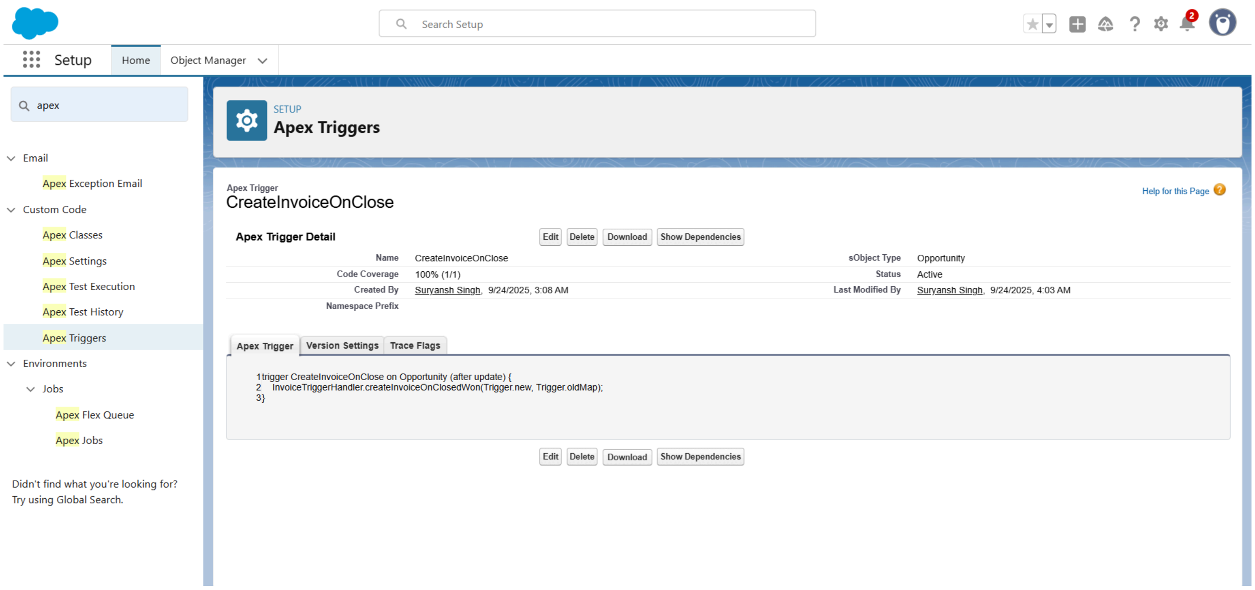
SETUP
Apex Classes
Apex Class
Test_CreateInvoice
Help for this Page
Apex Class Detail
Edit
Delete
Download
Run Test
Show Dependencies
Name Test_CreateInvoice
Status Active
Namespace Prefix
Created By Suryansh Singh, 9/24/2025, 3:12 AM
Last Modified By Suryansh Singh, 9/24/2025, 4:02 AM
Class Body
Class Summary
Version Settings
Trace Flags
@isTest
public class Test_CreateInvoice {
@isTest static void testInvoiceCreation(){
Opportunity opp = new Opportunity(
Name='Test Opp',
StageName='Prospecting',
CloseDate=Date.today().addDays(7),
Amount=10000
);
insert opp;
// Update Stage to Closed Won
opp.StageName = 'Closed Won';
update opp;
// Verify Invoice created
Invoice__c inv = [SELECT Id, Opportunity__c, Amount__c, Name
FROM Invoice__c
WHERE Opportunity__c = :opp.Id
LIMIT 1];



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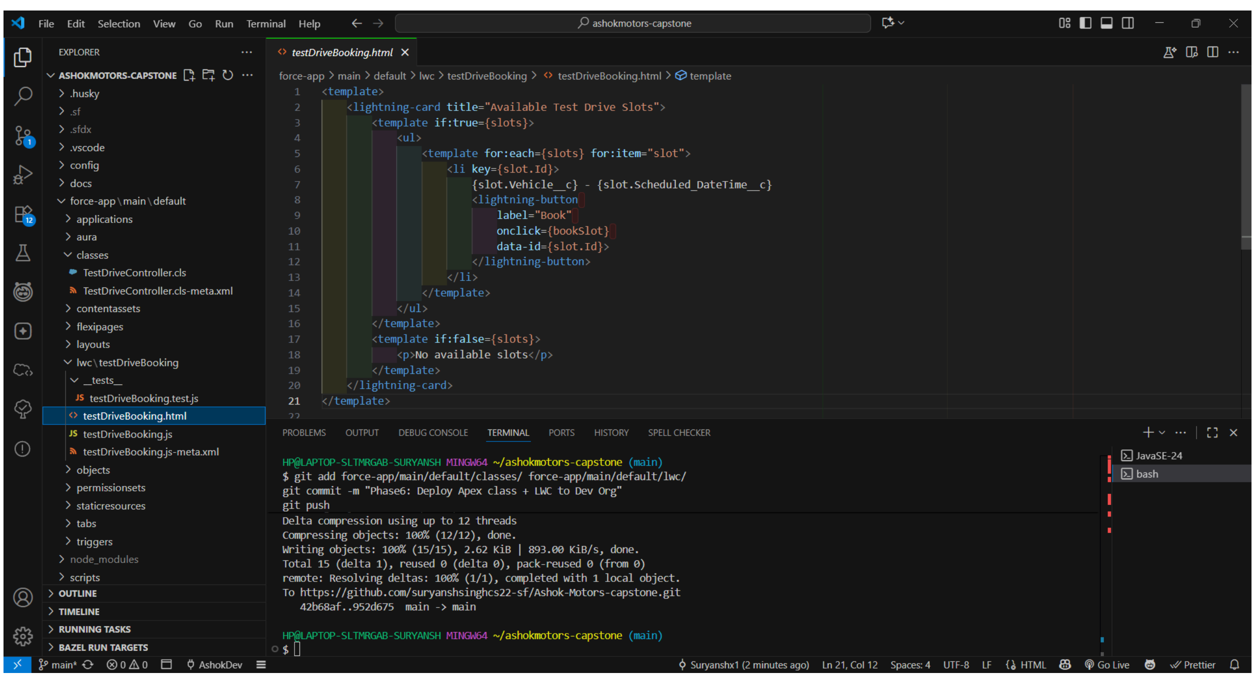
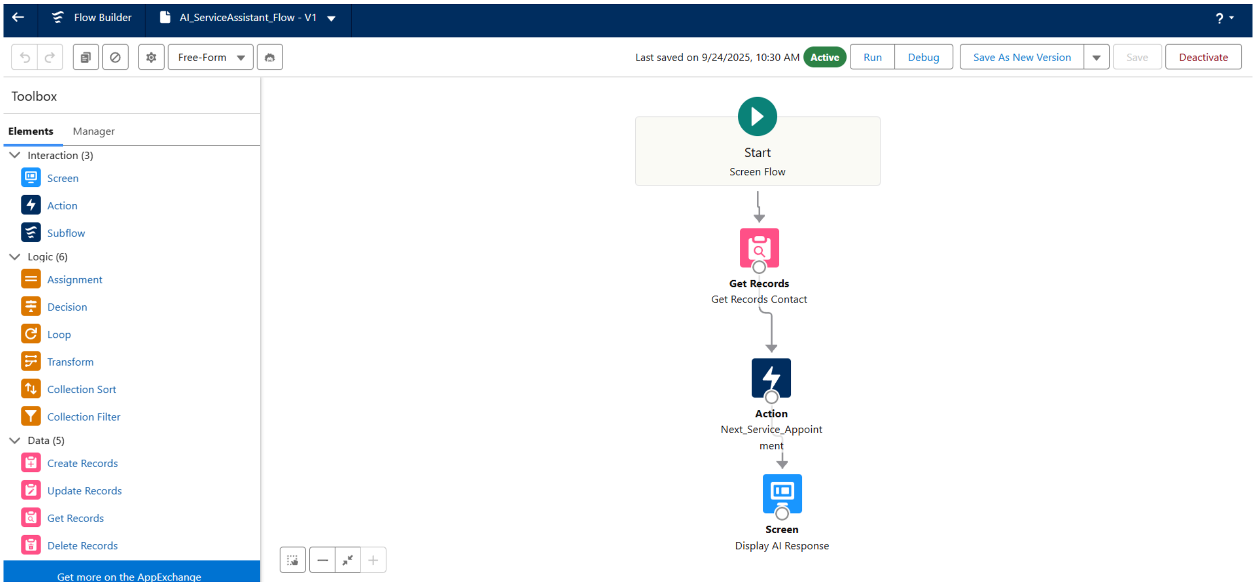
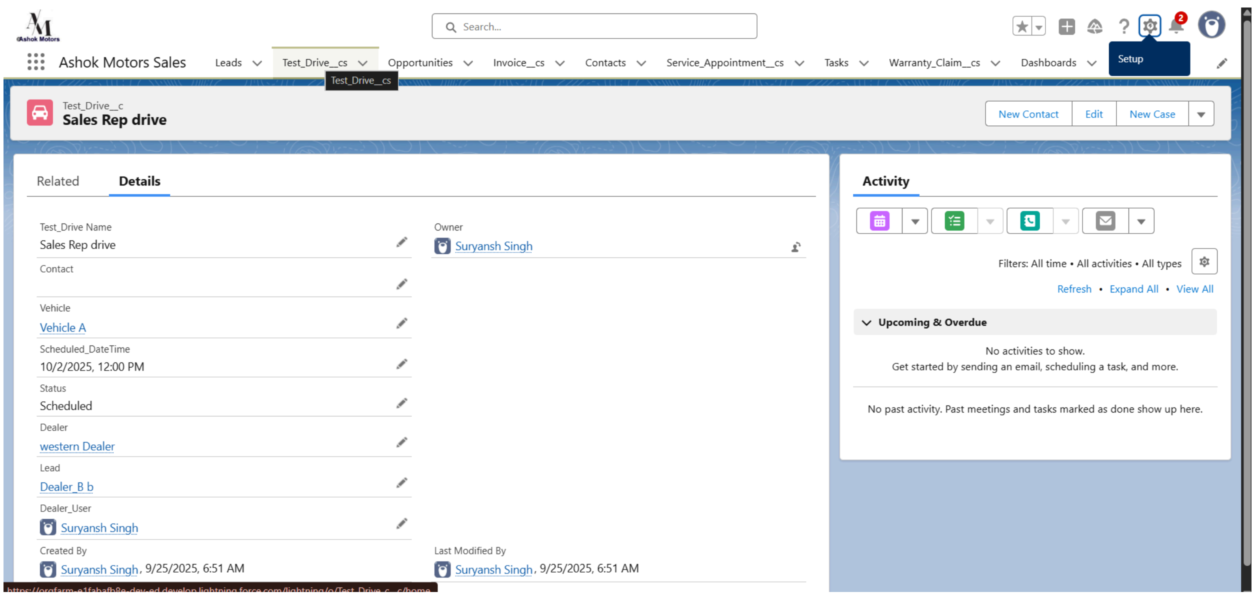
7. Lightning Web Components (LWC)

- Test Drive Booking Component: Simple form for customers.
- Vehicle Search Component: Filter vehicles by price/model.
- Service Appointment Viewer: List upcoming appointments.
- Used @wire adapters + imperative Apex calls for real-time data.



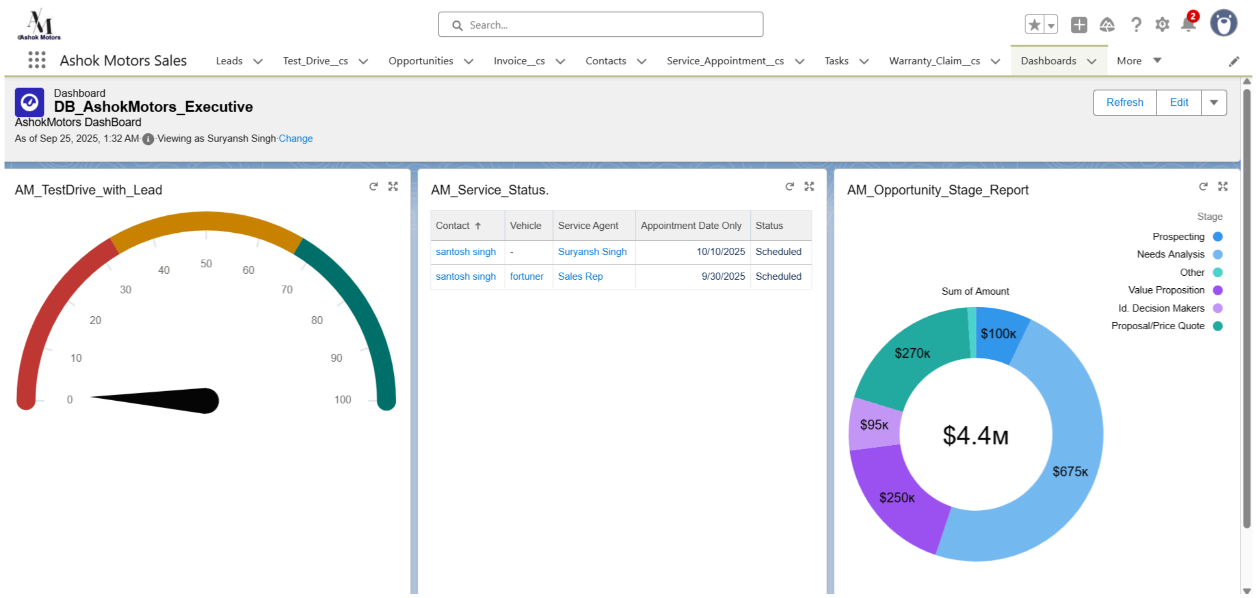
- 

- 

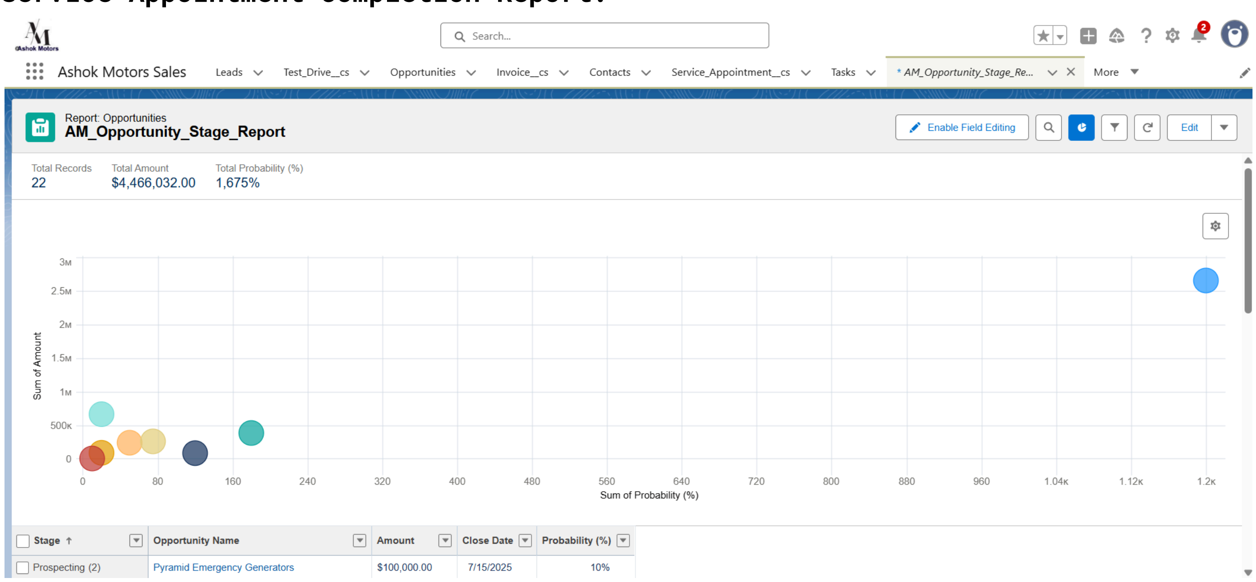
8. Integration (Basic)

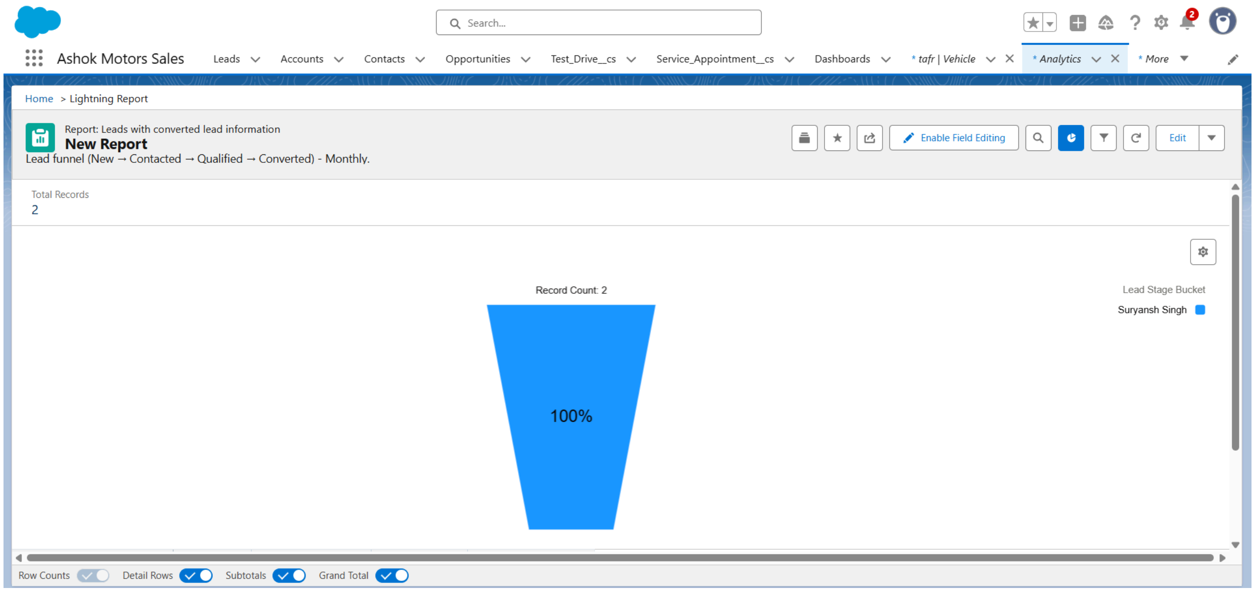
- REST API setup for future website integration.
- Named Credentials configured for secure external callouts.

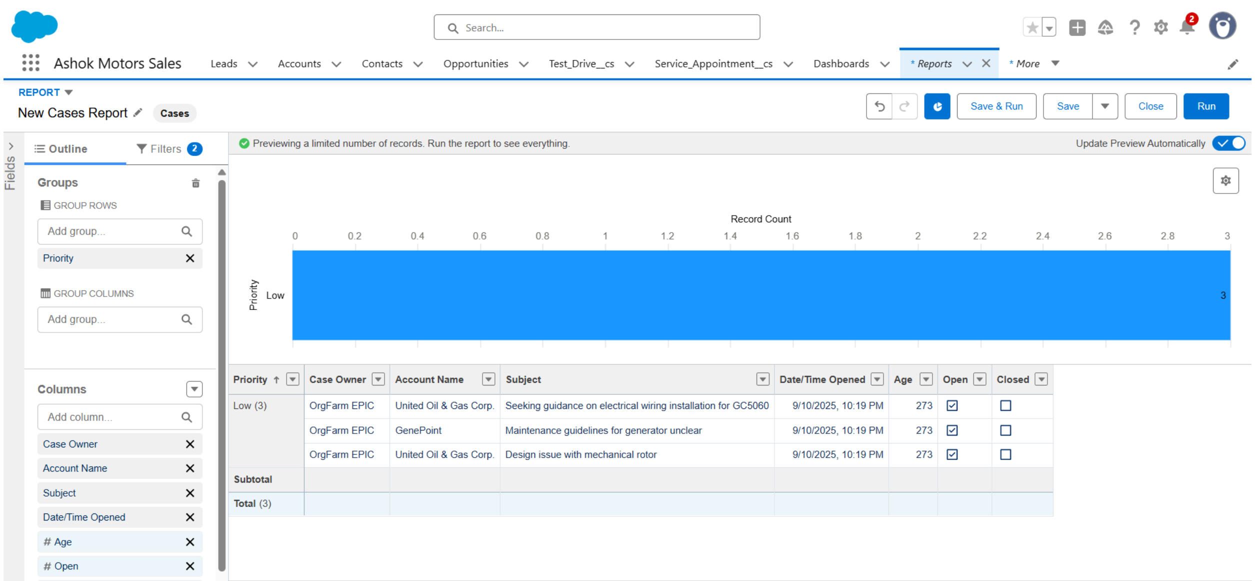
9. Reporting & Dashboards



- **Lead Funnel Report: Hot/Warm/Cold distribution.**
- **Test Drive Tracking Dashboard.**
- **Monthly Sales Performance Dashboard (Dynamic).**
- **Service Appointment Completion Report.**

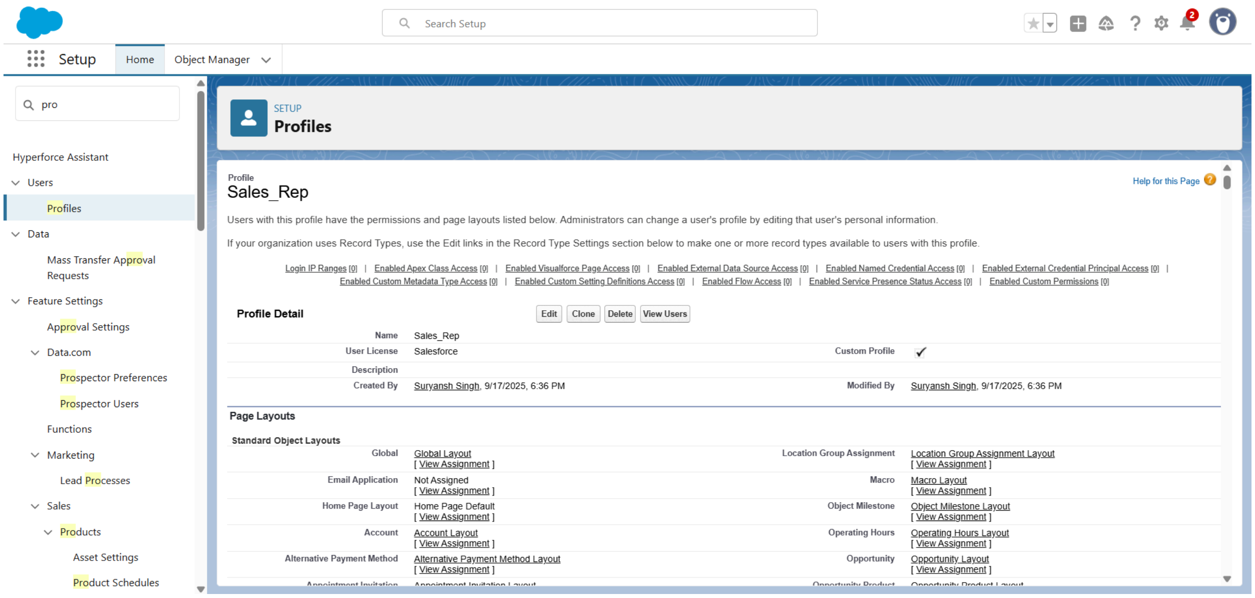


- 

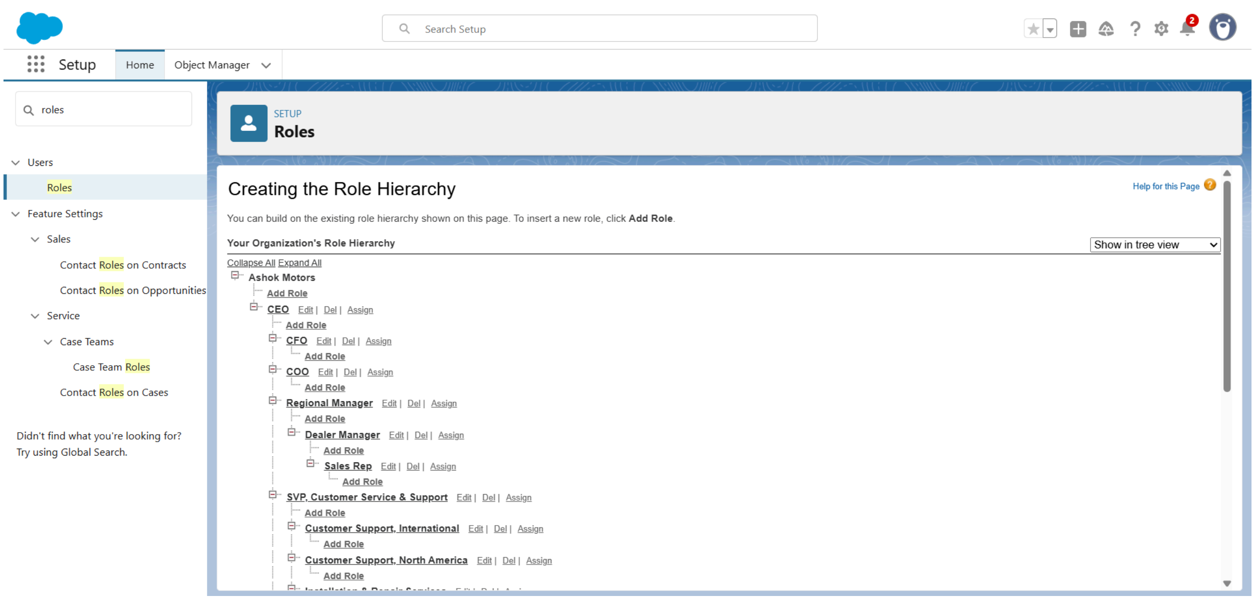
- 

10. Security & Access

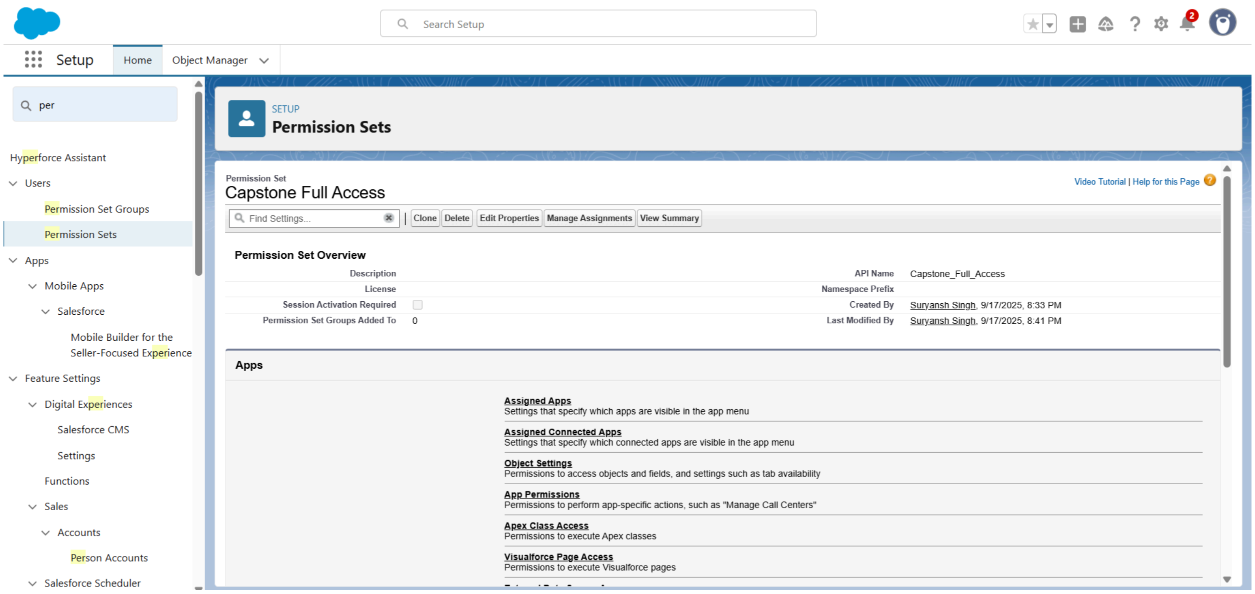
- Profiles: Sales Rep, Service Agent, Manager.

- 

- **Roles: Hierarchy → Agent → Manager → Admin.**

- 

- **Permission Sets for advanced access.**



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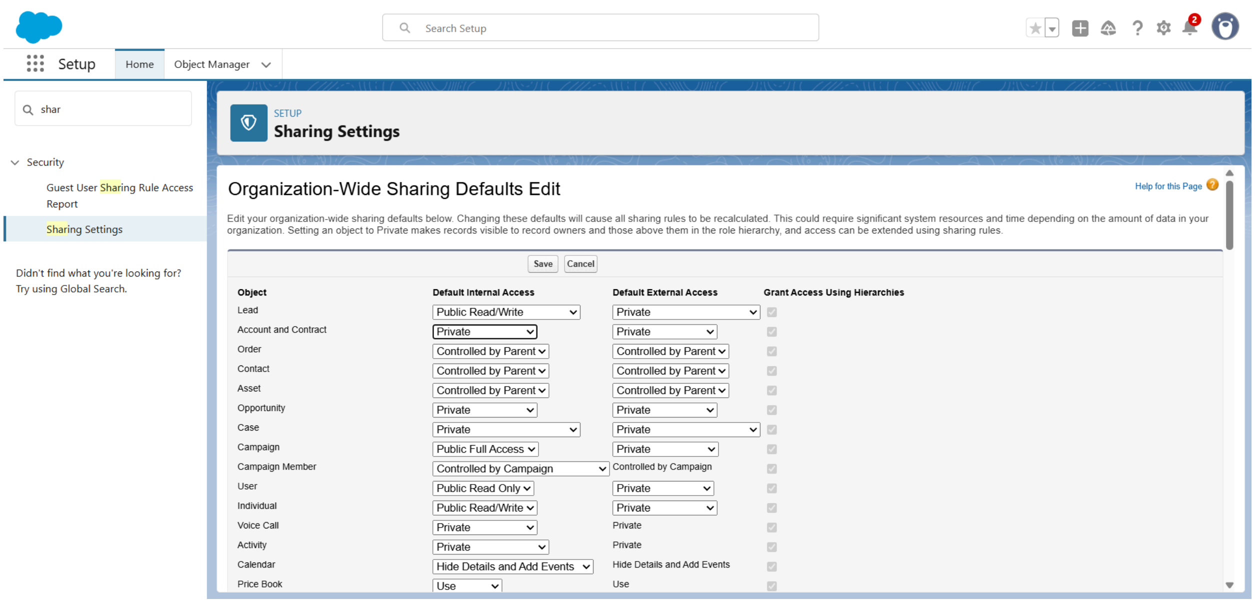
- **OWD: Private for Leads & Opportunities, Controlled Sharing Rules.**



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2. Demo Video

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