

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

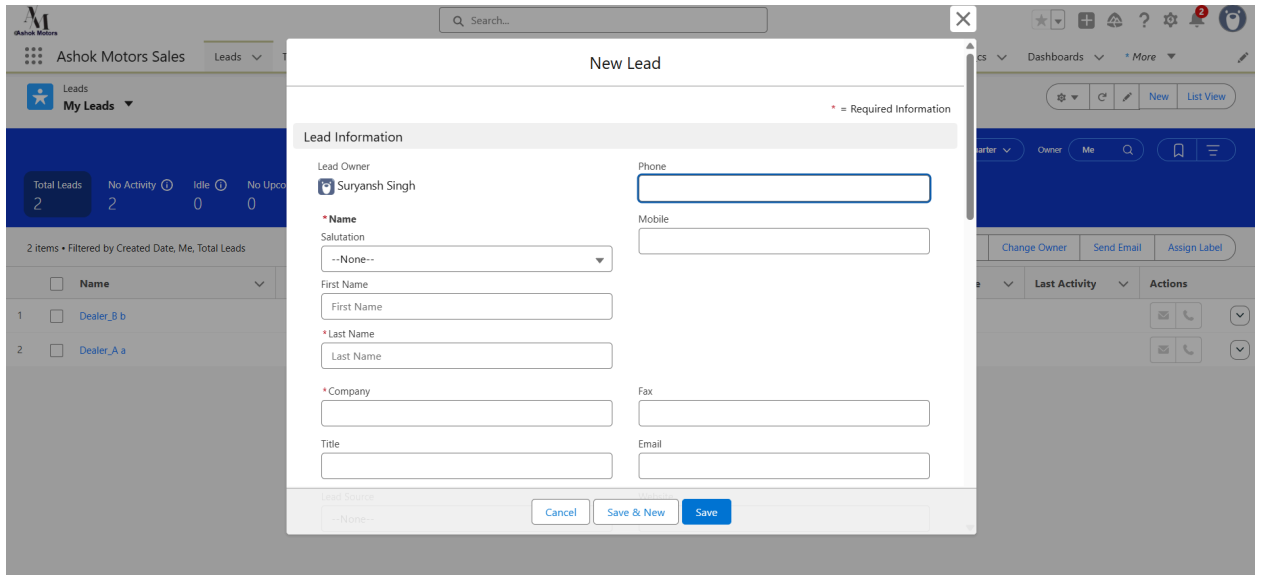
- Automate lead capture, assignment, and qualification.
- Track vehicles, test drives, and service appointments.
- Provide self-service booking via LWC.
- Enable management with reports and dashboards.

- 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.



Ashok Motors Sales Leads ▾

Leads
My Leads ▾

Total Leads: 2 No Activity: 2 Idle: 0 No Upcoming: 0


2 items • Filtered by Created Date, Me, Total Leads

	Name
1	Dealer_B b
2	Dealer_A a

New Lead

* = Required Information

Lead Information

Lead Owner:  Suryansh Singh

* Name

Salutation: --None--

First Name:

* Last Name:

* Company:

Title:

Phone:

Mobile:

Fax:

Email:

Lead Source: --None--

The screenshot shows the Ashok Motors Sales CRM interface. The top navigation bar includes a search bar and various menu items: Leads, Test_Drive_cs, Opportunities, Invoice_cs, Contacts, Service_Appointment_cs, Tasks, Warranty_Claim_cs, Dashboards, and More. The main header displays 'Test_Drive_c' and 'Sales Rep drive'. Below this, there are tabs for 'Related' and 'Details'. The 'Details' tab is active, showing a list of fields and their values:

- Test_Drive Name: Sales Rep drive
- Contact: [Link]
- Vehicle: [Link]
- Scheduled_DateTime: 10/2/2025, 12:00 PM
- Status: Scheduled
- Dealer: [Link]
- Lead: [Link]
- Dealer_User: [Link]
- Created By: [Link]
- Last Modified By: [Link]

On the right side, there is an 'Activity' section with filters for 'All time', 'All activities', and 'All types'. It also includes a 'Refresh' button and links for 'Expand All' and 'View All'. Below this, there is a section for 'Upcoming & Overdue' activities, which currently shows no activities.

2. Vehicle Management (Custom Object)

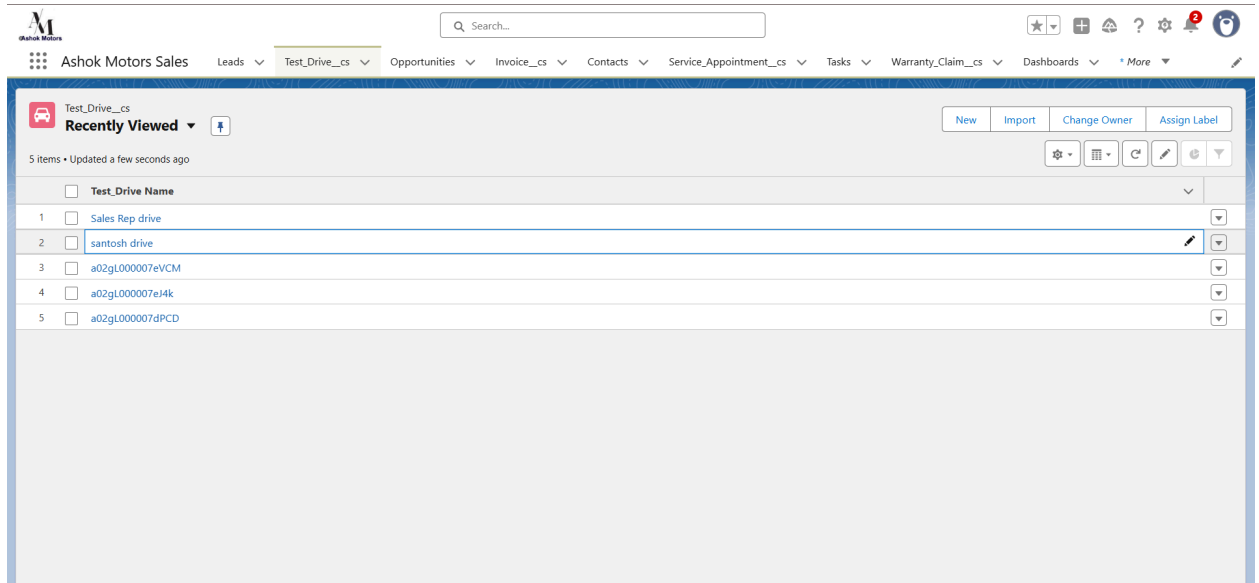
- Custom object **Vehicle__c** created with fields: **Model**, **Price**, **Status**, **Availability**.
- **Linked with Test Drive and Opportunity objects.**

The screenshot shows the Salesforce Setup interface, specifically the 'Object Manager' section for the 'Vehicle' custom object. The left sidebar contains a navigation menu with options like 'Details', 'Fields & Relationships', 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', 'Related Lookup Filters', 'Restriction Rules', 'Scoping Rules', 'Object Access', and 'Triggers'. The 'Fields & Relationships' section is selected, displaying a table of fields and their relationships:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Dealer	Dealer__c	Lookup(Dealer)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Model	Model__c	Text(10)		
Owner	OwnerId	Lookup(User,Group)		✓
Vehicle Name	Name	Text(80)		✓
VIN	VIN__c	Text(5) (Unique Case Insensitive)		✓
Year	Year__c	Number(4, 0)		

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.**

The top screenshot shows the Salesforce Flow Builder interface for a flow named 'FT_ServiceAppointment_OnCreate_Reminder - V1'. The flow is currently 'Inactive'. The left sidebar shows the 'Toolbox' with categories like 'Interaction (3)', 'Logic (6)', and 'Data (4)'. The main canvas displays a 'Record-Triggered Flow' starting with a 'Start' event, followed by a 'Get Records' action (Get_Service_Agent), a 'Create Records' action (Create_Task_for_Agen), and an 'Email Alert' action (Send_Reminder_Email). The bottom screenshot shows a Gmail inbox with a service appointment reminder email from 'Suryansh Singh' to 'me'. The email subject is 'Service Appointment: October 10, 2025'. The email body contains a warning about impersonation and a link to a new task: 'https://orgfarm-e1fabaf8e-dev-ed.develop.my.salesforce.com/00Tgt_0000020Rd'.

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.**

Setup

Home

Object Manager

Search Setup

Service Appointment__c

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Scoping Rules

Object Access

Triggers

Service Appointment__c Validation Rule

Validation Rule Detail

Rule Name

Validate_Appointment_Date

Active

✓

Error Condition Formula

DATEVALUE(Appointment_Date__c) < TODAY()

Error Message

Appointment Date cannot be in the past.

Error Location

Appointment_Date

Description

Prevent past date in Service Appointment

Created By

Suryansh Singh, 9/20/2025, 3:22 AM

Modified By

Suryansh Singh, 9/20/2025, 3:22 AM

Setup

Home

Object Manager

Search Setup

Approval Processes

Approval Processes

Opportunity: Discount_Approval_Process

Process Definition Detail

Process Name

Discount_Approval_Process

Active

✓

Unique Name

Discount_Approval_Process

Next Automated Approver Determined By

Manager of Record Submitter

Description

Entry Criteria

Opportunity: Discount GREATER THAN 0.10

Record Editability

Administrator ONLY

Allow Submitters to Recall Approval Requests

✓

Approval Assignment Email Template

Initial Submitters

Opportunity Owner

Created By

Suryansh Singh, 9/20/2025, 4:21 PM

Modified By

Suryansh Singh, 9/20/2025, 4:27 PM

Initial Submission Actions

Action Type

Description

Record Lock

Lock the record from being edited

Approval Steps

Action

Step Number

Name

Description

Criteria

Assigned Approver

Reject Behavior

Show Actions

Edit

1

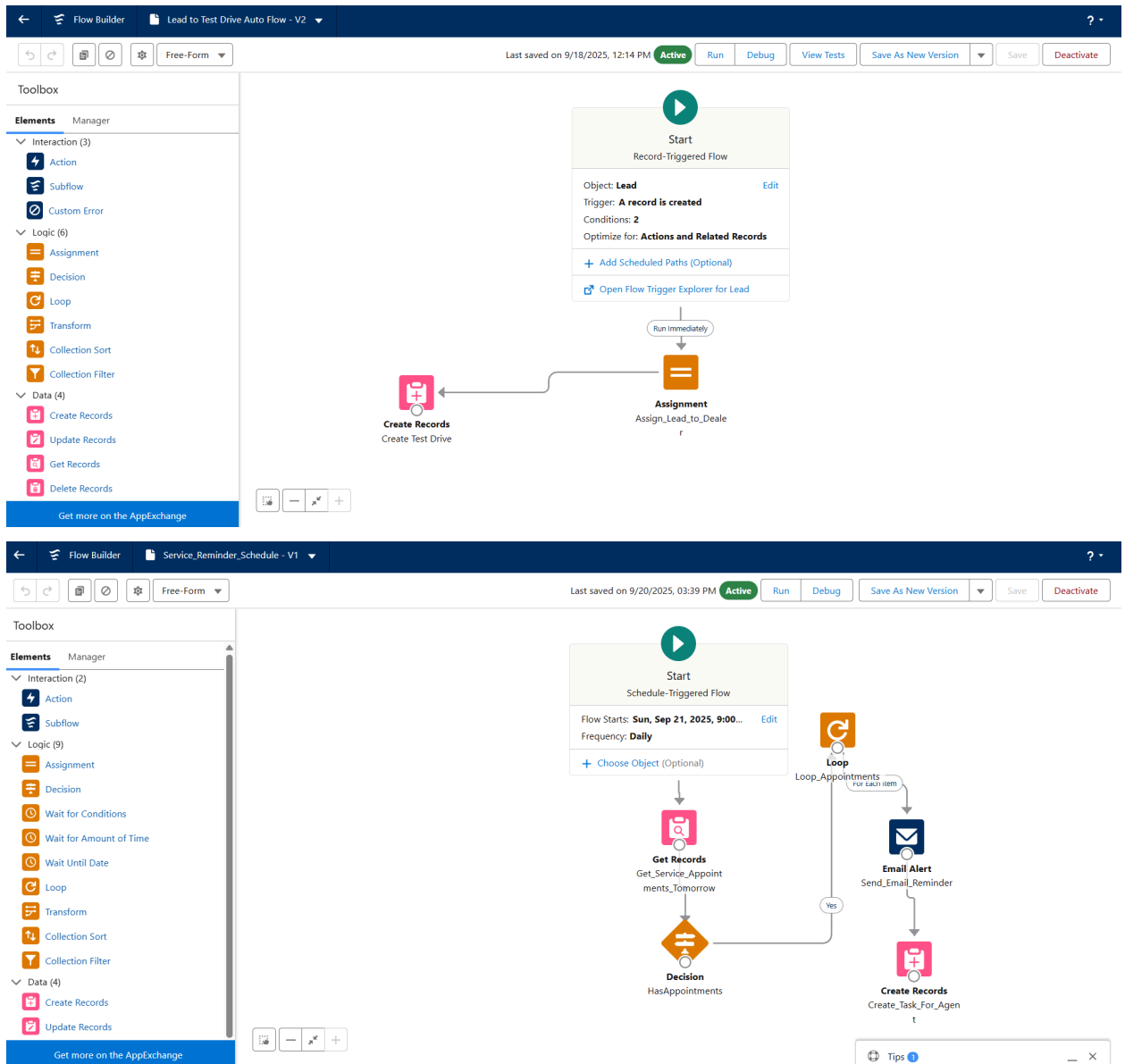
Manager_Approval

Step for approving discounts greater than 10% by Manager.

Opportunity: Discount GREATER THAN 0.10 , else Approve

Manager

Final Rejection

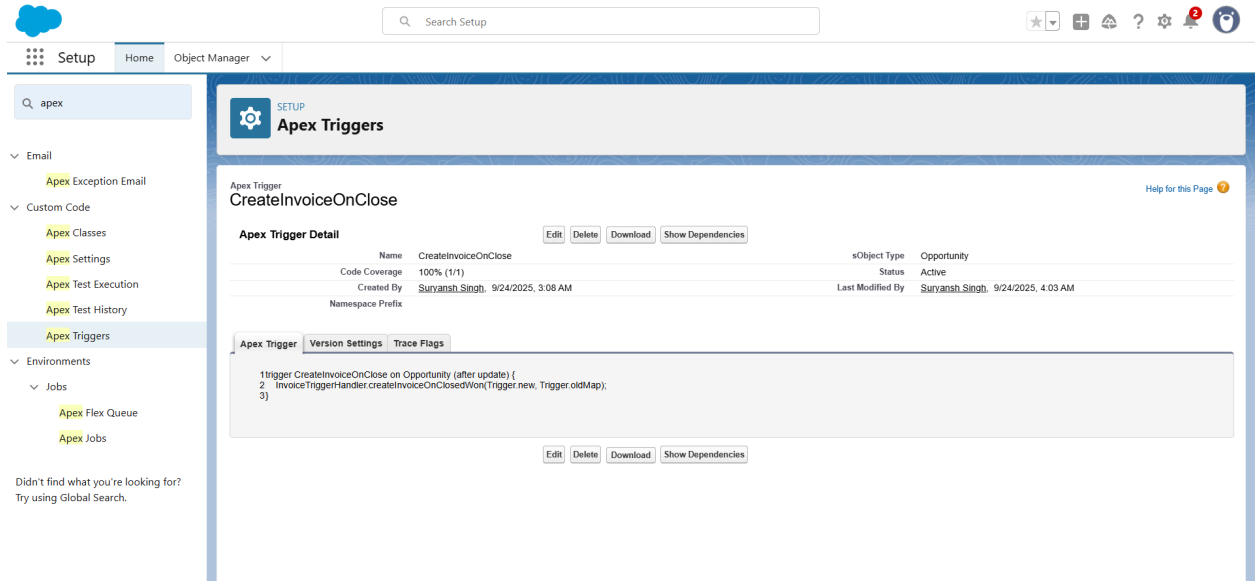


6. Apex Development

- **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.

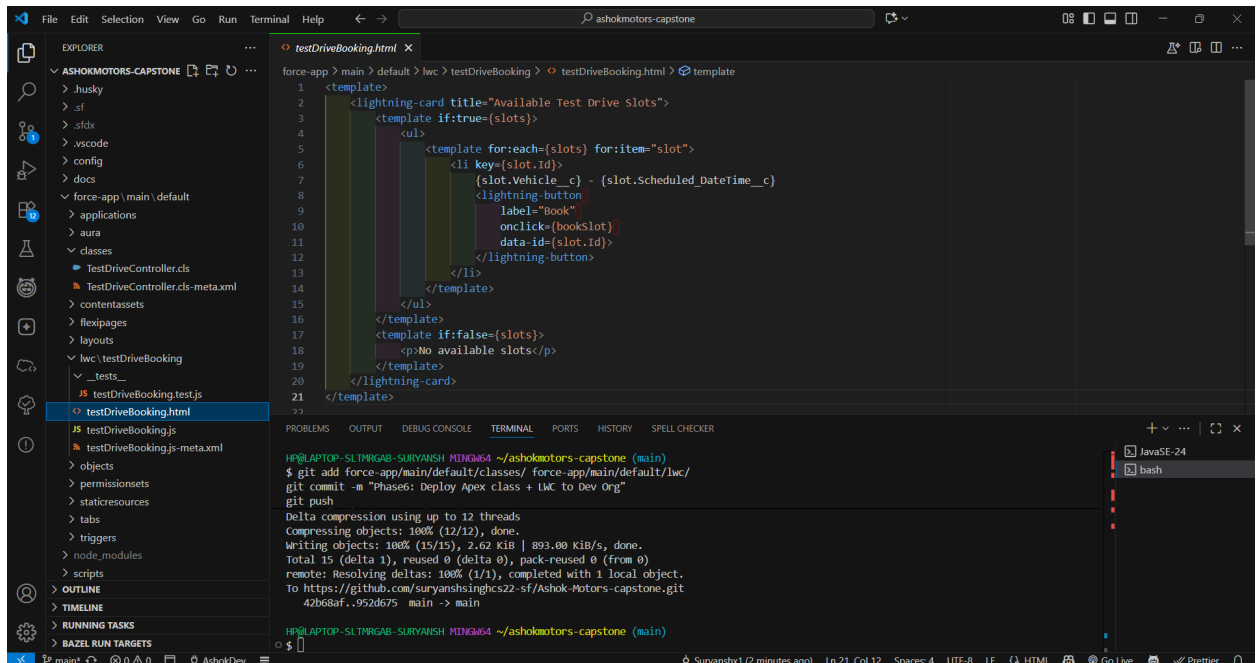
The screenshot shows the Salesforce Setup interface. On the left is a navigation sidebar with links like Email, Custom Code, Apex Classes (selected), Apex Settings, Apex Test Execution, Apex Test History, Apex Triggers, Environments, and Jobs. The main area displays the 'Apex Classes' section for the namespace 'Test'. It lists a class named 'Test_CreateInvoice' created by 'Suryansh Singh' on 9/24/2025 at 4:02 AM. Below this, there are tabs for 'Class Body', 'Class Summary', 'Version Settings', and 'Trace Flags'. The 'Class Body' tab is active, showing the following Apex code:

```
1 @isTest
2 public class Test_CreateInvoice {
3
4     @isTest static void testInvoiceCreation(){
5         Opportunity opp = new Opportunity(
6             Name='Test Opp',
7             StageName='Prospecting',
8             CloseDate=Date.today().addDays(7),
9             Amount=10000
10        );
11        insert opp;
12
13        // Update Stage to Closed Won
14        opp.StageName = 'Closed Won';
15        update opp;
16
17        // Verify Invoice created
18        Invoice_c__c inv = [SELECT Id, Opportunity__c, Amount__c, Name
19                           FROM Invoice_c__c
20                           WHERE Opportunity__c = :opp.Id
21                           LIMIT 1];
```



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.**

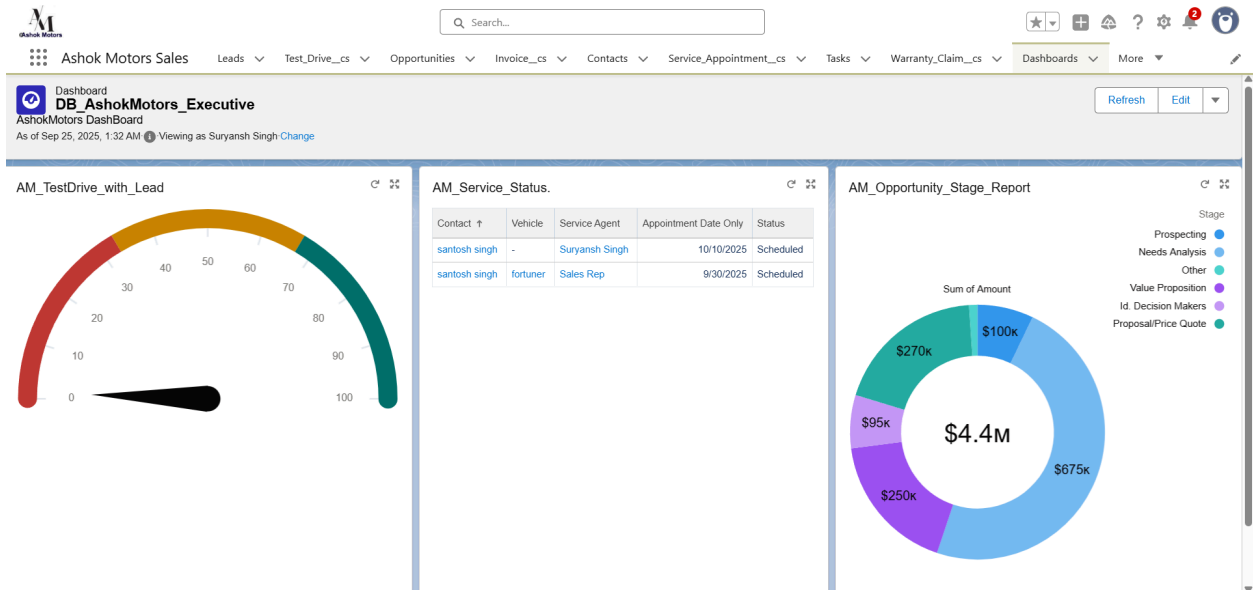


The image shows two screenshots from a Salesforce environment. The top screenshot is a screenshot of the Salesforce Flow Builder interface. The flow is titled 'AI_ServiceAssistant_Flow - V1' and is in 'Free-Form' mode. The flow steps are: 'Start Screen Flow' (a green play button icon), 'Get Records Get Records Contact' (a magnifying glass icon), 'Action Next_Service_Appointment' (a lightning bolt icon), and 'Screen Display AI Response' (a monitor icon). The left sidebar shows the 'Toolbox' with categories: Elements (Interaction, Logic, Data), and Manager. The bottom screenshot is a screenshot of a Salesforce record page for 'Test_Drive__c' (Sales Rep drive). The page shows a 'Details' tab with fields: Test_Drive Name (Sales Rep drive), Contact (Suryansh Singh), Vehicle (Vehicle A), Scheduled_DateTime (10/2/2025, 12:00 PM), Status (Scheduled), Dealer (western Dealer), Lead (Dealer B b), Dealer_User (Suryansh Singh), and Created By (Suryansh Singh, 9/25/2025, 6:51 AM). The right sidebar shows an 'Activity' section with filters and a message: 'No activities to show. Get started by sending an email, scheduling a task, and more. No past activity. Past meetings and tasks marked as done show up here.'

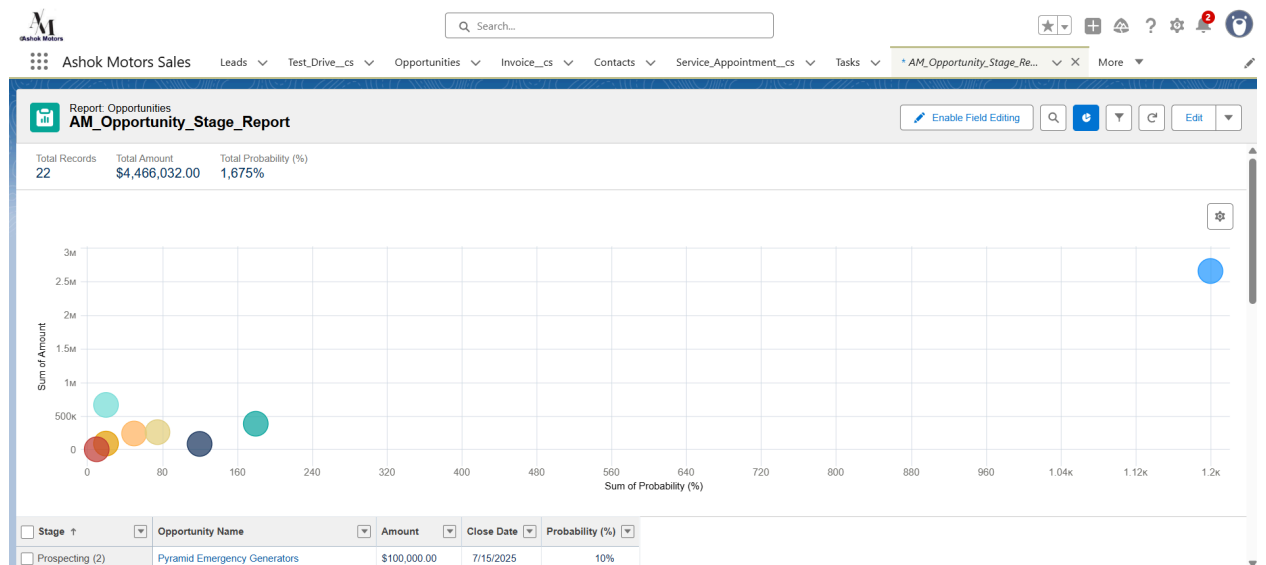
8. Integration (Basic)

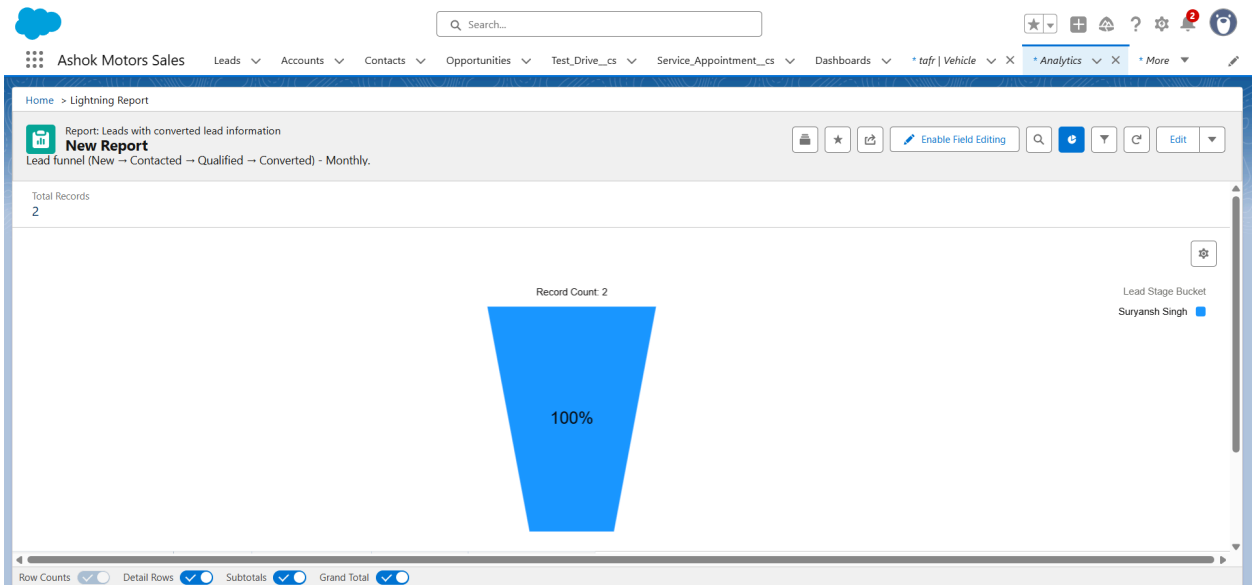
- REST API setup for future website integration.
- Named Credentials configured for secure external callouts.

9. Reporting & Dashboards



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





REPORT
 New Cases Report **Cases**

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

Update Preview Automatically: ☒

Record Count: 3

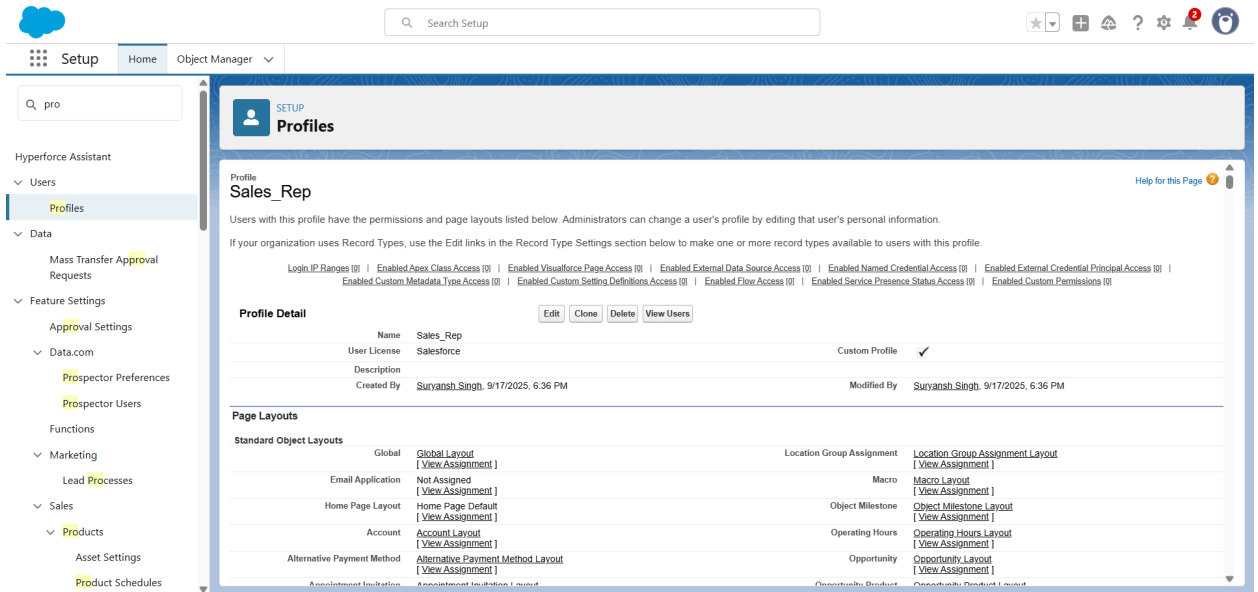
Priority: Low

Priority	Case Owner	Account Name	Subject	Date/Time Opened	Age	Open	Closed
Low (3)	OrgFarm EPIC	United Oil & Gas Corp.	Seeking guidance on electrical wiring installation for GC5060	9/10/2025, 10:19 PM	273	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	OrgFarm EPIC	GenePoint	Maintenance guidelines for generator unclear	9/10/2025, 10:19 PM	273	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	OrgFarm EPIC	United Oil & Gas Corp.	Design issue with mechanical rotor	9/10/2025, 10:19 PM	273	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Subtotal							
Total (3)							

Row Counts: ☒ Detail Rows: ☒ Subtotals: ☒ Grand Total: ☒

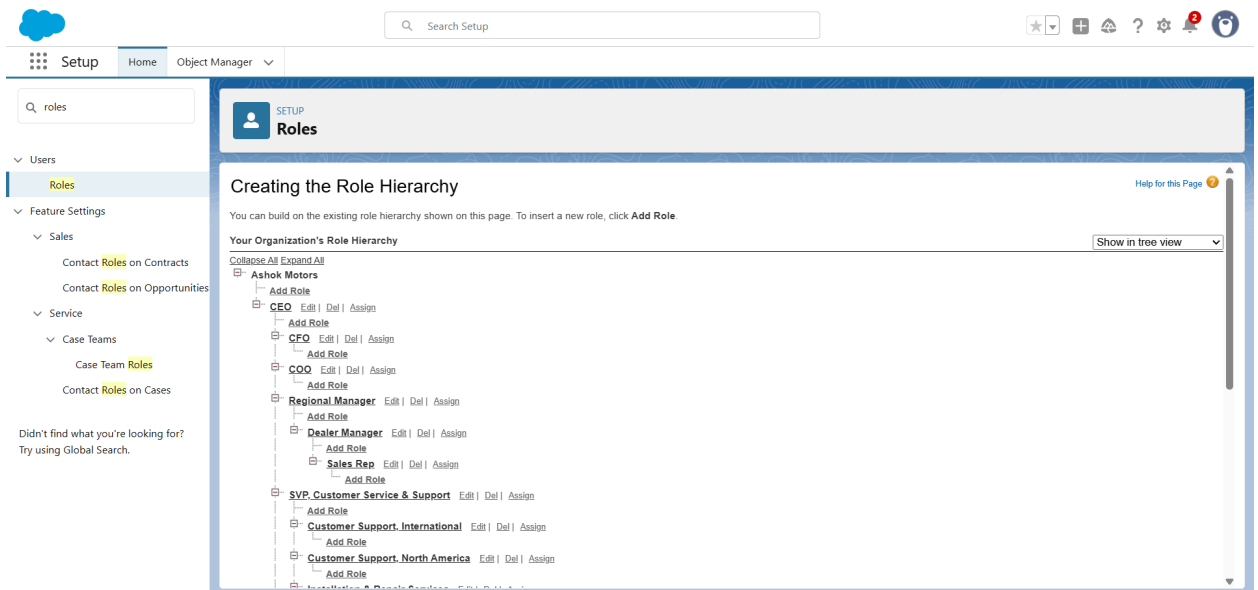
10. Security & Access

- Profiles: Sales Rep, Service Agent, Manager.



The screenshot shows the Salesforce Setup interface with the 'Profiles' page selected. The left sidebar contains a navigation menu with 'Setup' at the top, followed by 'Home' and 'Object Manager'. Below these are sections for 'Hyperforce Assistant', 'Users', 'Profiles' (highlighted), 'Data', 'Feature Settings', 'Approval Settings', 'Data.com', 'Prospector Preferences', 'Prospector Users', 'Functions', 'Marketing', 'Lead Processes', 'Sales', 'Products', 'Asset Settings', and 'Product Schedules'. The main content area is titled 'Profiles' and shows the 'Sales_Rep' profile. It includes a search bar at the top with 'pro' entered. The profile details section shows the name 'Sales_Rep', user license 'Salesforce', and a description 'Salesforce'. Below this is a table of 'Page Layouts' with columns for 'Standard Object Layouts' and 'Location Group Assignment'. The table lists various layouts such as 'Global Layout', 'Email Application', 'Home Page Layout', 'Account Layout', 'Alternative Payment Method', 'Appointment Invitation', 'Location Group Assignment Layout', 'Macro Layout', 'Object Milestone Layout', 'Operating Hours Layout', 'Opportunity Layout', and 'Consolidated Product Layout'. Each layout has a link to 'View Assignment'.

- Roles: Hierarchy → Agent → Manager → Admin.



The screenshot shows the Salesforce Setup interface with the 'Roles' page selected. The left sidebar contains a navigation menu with 'Setup' at the top, followed by 'Home' and 'Object Manager'. Below these are sections for 'Hyperforce Assistant', 'Users', 'Roles' (highlighted), 'Feature Settings', 'Sales', 'Service', 'Case Teams', 'Contact Roles on Contracts', 'Contact Roles on Opportunities', 'Contact Roles on Cases', and 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Roles' and shows the 'Creating the Role Hierarchy' page. It includes a search bar at the top with 'roles' entered. The page displays a tree view of the role hierarchy for 'Ashok Motors'. The hierarchy starts with 'Ashok Motors' at the top, followed by 'CEO', 'CFO', 'COO', 'Regional Manager', 'Dealer Manager', 'Sales Rep', 'SVP Customer Service & Support', 'Customer Support International', and 'Customer Support North America'. Each role has a link to 'Add Role'.

- Permission Sets for advanced access.

Permission Sets

Permission Set: **Capstone Full Access**

Find Settings... Clone Delete Edit Properties Manage Assignments View Summary

Permission Set Overview

Field	Value
Description	Capstone_Full_Access
API Name	Capstone_Full_Access
Namespace Prefix	
Session Activation Required	<input type="checkbox"/>
Created By	Suryansh Singh, 9/17/2025, 8:33 PM
Last Modified By	Suryansh Singh, 9/17/2025, 8:41 PM
Permission Set Groups Added To	0

Apps

- Assigned Apps**
Settings that specify which apps are visible in the app menu
- Assigned Connected Apps**
Settings that specify which connected apps are visible in the app menu
- Object Settings**
Permissions to access objects and fields, and settings such as tab availability
- App Permissions**
Permissions to perform app-specific actions, such as "Manage Call Centers"
- Apex Class Access**
Permissions to execute Apex classes
- Visualforce Page Access**
Permissions to execute Visualforce pages

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

Sharing Settings

Organization-Wide Sharing Defaults Edit

Help for this Page

Save Cancel

Object	Default Internal Access	Default External Access	Grant Access Using Hierarchies
Lead	Public Read/Write	Private	<input checked="" type="checkbox"/>
Account and Contract	Private	Private	<input checked="" type="checkbox"/>
Order	Controlled by Parent	Controlled by Parent	<input checked="" type="checkbox"/>
Contact	Controlled by Parent	Controlled by Parent	<input checked="" type="checkbox"/>
Asset	Controlled by Parent	Controlled by Parent	<input checked="" type="checkbox"/>
Opportunity	Private	Private	<input checked="" type="checkbox"/>
Case	Private	Private	<input checked="" type="checkbox"/>
Campaign	Public Full Access	Private	<input checked="" type="checkbox"/>
Campaign Member	Controlled by Campaign	Controlled by Campaign	<input checked="" type="checkbox"/>
User	Public Read Only	Private	<input checked="" type="checkbox"/>
Individual	Public Read/Write	Private	<input checked="" type="checkbox"/>
Voice Call	Private	Private	<input checked="" type="checkbox"/>
Activity	Private	Private	<input checked="" type="checkbox"/>
Calendar	Hide Details and Add Events	Hide Details and Add Events	<input checked="" type="checkbox"/>
Price Book	Use	Use	<input checked="" type="checkbox"/>

2. Demo Video

LINK -