

GMR Institute Of Technology

Title: Gas Filling Station CRM Application

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Project Title:

Application to Make the Gas Filling Station Easy Using CRM (Salesforce Developer)

Project Overview:

The Gas Filling Store CRM Application is a comprehensive solution developed on Salesforce to streamline and simplify the gas filling process for both customers and store owners. It enhances the customer experience, automates business operations, and centralizes data management. Through this CRM system, store owners can manage customer profiles, track orders, and generate reports, while customers can easily book refills, receive updates, and make secure payments.

Objectives:

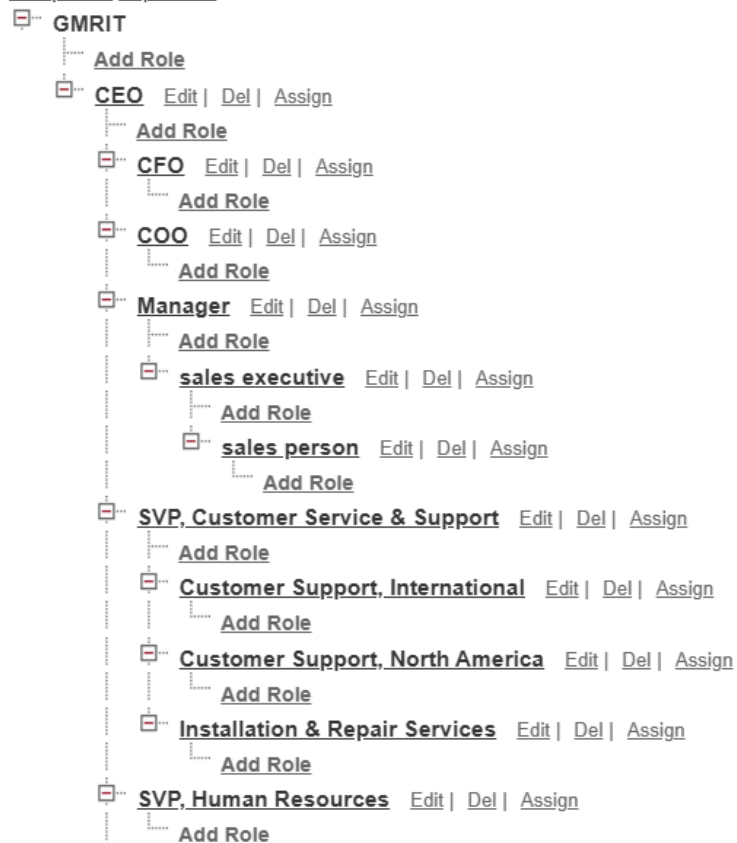
- To automate and digitize the gas refill process for customers and store owners.
- To ensure smooth booking, tracking, and delivery of gas cylinders.
- To centralize customer data for better relationship management.
- To improve operational efficiency through Salesforce automation tools.

Phase 1: Requirement Analysis & Planning

- Understanding Business Requirements:
- Reduce manual booking errors.
- Improve delivery tracking.

- Provide booking history and analytics.
- Defining Project Scope and Objectives:
- Manage Customers, Bookings, and Payments.
- Automate approvals and status changes.
- Notify users via emails.
- Data Model and Security Model:
- Custom objects: Customer, Booking, Cylinder, Payment.
- Role hierarchy: Admin, Manager, Delivery Agent.

[Collapse All](#) [Expand All](#)



- Profiles and Permission Sets defined.

Phase 2: Salesforce Development - Backend & Configurations

- Setup & DevOps:
- Created custom app via App Manager.
- Enabled Dev Hub and Scratch Org setup for development.
- Customization:
- Custom Objects and Fields created: Booking Date, Status, Delivery Agent.

The screenshot shows the Salesforce Setup interface, specifically the Object Manager for the 'Supplier' object. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main content area displays a table of fields for the 'Supplier' object, sorted by Field Label. The table includes columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed status.

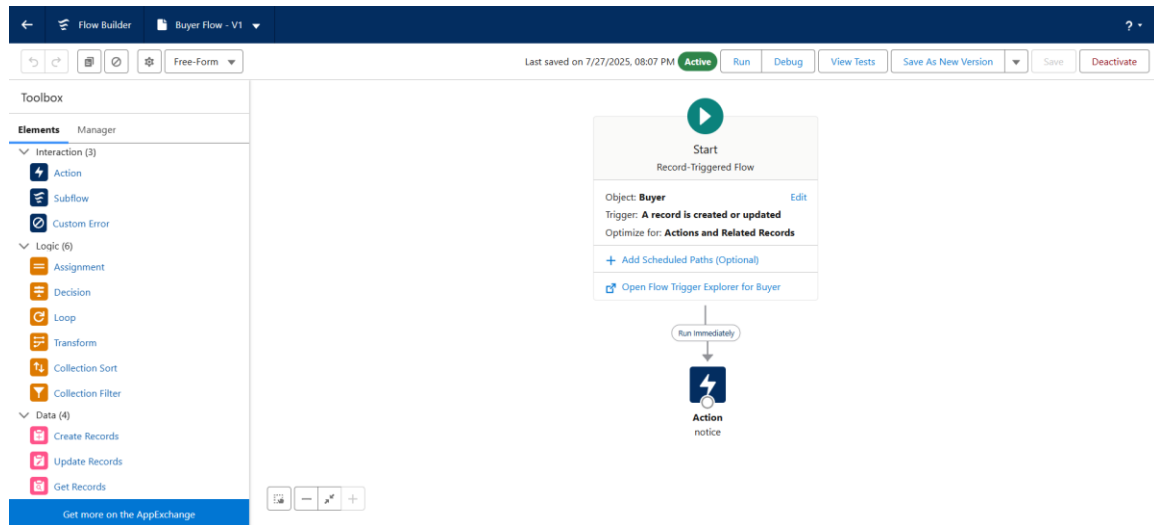
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
sum of Fuel supplied	sum_of_Fuel_supplied__c	Roll-Up Summary (SUM Fuel details)		
Supplier Name	Name	Text(80)		✓

- Validation Rules: Booking Date must be today or future.

The screenshot shows the Salesforce Setup interface, specifically the Object Manager for the 'Buyer' object. The left sidebar lists various setup options, with 'Validation Rules' selected. The main content area displays the 'Buyer Validation Rule' configuration page. The page includes a 'Validation Rule Detail' section with fields for Rule Name, Error Condition Formula, Error Message, Error Location, Description, Created By, and Modified By.

Validation Rule Detail		Active
Rule Name	Phone	✓
Error Condition Formula	NOT(REGEX(Phone_Number__c, '[6-9][0-9]{9}'))	
Error Message	Incorrect data	
Error Location	Phone Number	
Description		
Created By	Senapati, Krishnaveni	7/27/2025, 2:16 AM
Modified By	Senapati, Krishnaveni	7/27/2025, 2:16 AM

- Flows: Auto-create Task on booking creation.



- Process Builder: Auto-update booking status.

- Approval Process: Manager approval for high volume orders.

- Apex & Automation:

- Apex Trigger: Auto-calculate total cost.

- Asynchronous Apex: Future method for sending email notifications.

Phase 3: UI/UX Development & Customization

- Lightning App Setup: Done via App Manager.

- Page Layouts: Separate layouts for Customers, Bookings, and Payments.

- Dynamic Forms: Booking status and cost are visible only to the admin.

- User Management: Profiles - Admin, Manager, Delivery Agent.

- Reports and Dashboards:

Report: Gas Stations with Buyers
Amount range

Total Records: 10 Total Fuel filled in vehicle: 53,569 Total Amount Paid: 6,197,504.00

Customer Name	Fuel Available in bunk	Fuel filled in vehicle	Amount Paid
<input type="checkbox"/> Hari Palaka (1)	284,500.00 (1)	9,000	1,044,000.00
Subtotal		9,000	1,044,000.00
<input type="checkbox"/> Hari Sengathi (1)	138,431.00 (1)	3,569	414,004.00
Subtotal		3,569	414,004.00
<input type="checkbox"/> Jaya Pallu (1)	138,431.00 (1)	3,000	348,000.00
Subtotal		3,000	348,000.00
<input type="checkbox"/> Jaya Pilla (1)	138,431.00 (1)	5,000	580,000.00
Subtotal		5,000	580,000.00
<input type="checkbox"/> Krishna Palaka (1)	284,500.00 (1)	8,000	928,000.00
Subtotal		8,000	928,000.00

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

- Booking Trends Report.

- Cylinder Stock Dashboard.

- Lightning Pages: Customized Home and Booking Record Pages.

- LWC (if any): Not implemented.

Phase 4: Data Migration, Testing & Security

- Data Loading: Used Data Import Wizard for initial customer upload.

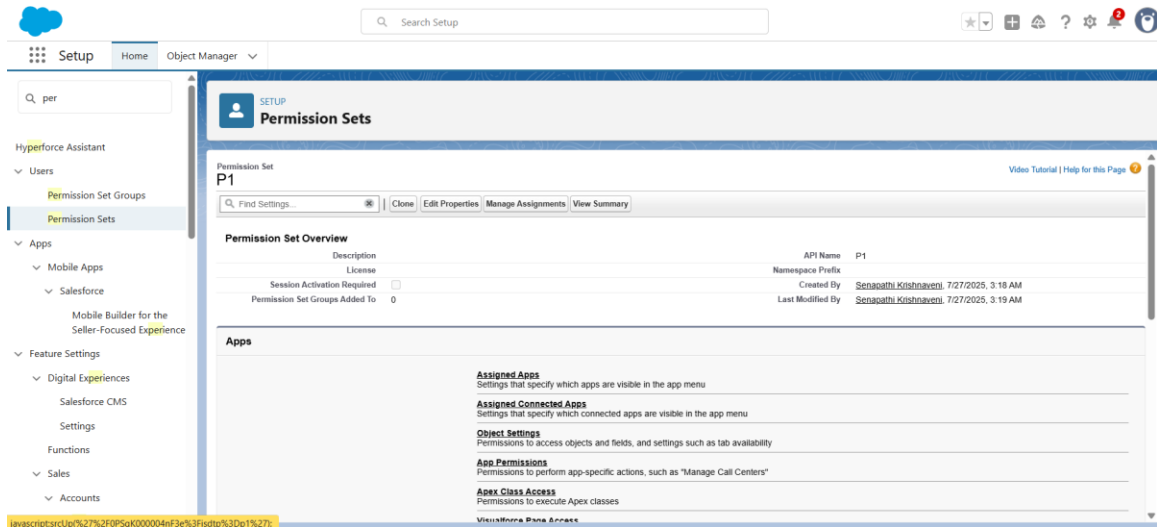
- Tracking & Rules:

- Field History Tracking enabled on Bookings.

- Duplicate Rules and Matching Rules configured for Customer object.

- Security:

- Profiles, Role Hierarchy, and Permission Sets configured.



- Sharing Rules: Booking visible to respective Delivery Agents only.
- Testing:
- Test Classes created for Apex logic.
- Manual test cases with screenshots for: Booking creation, Approval flow, Auto task, Validation triggers, Report generation.

Phase 5: Deployment, Documentation & Maintenance

- Deployment Strategy:
- Used Change Sets to move components from Sandbox to Production.
- Maintenance:
- Regular log monitoring.
- Weekly backup export.
- Troubleshooting Approach:
- Debug Logs.
- Validation failure messages.
- Field history to trace changes.

Conclusion:

This Salesforce-based CRM application for gas filling stations brings automation and ease of use to both users and admins. The project has been fully tested and documented with clear benefits including efficient booking, delivery tracking, user notifications, and centralized data reporting. Future enhancements can include mobile notifications, integration with payment gateways, and AI-based delivery route optimization.

