Car Dealership CRM

Project Overview

The Car Dealership CRM project was developed in Salesforce to address the key challenges faced by automobile dealerships in managing their daily operations. Traditionally, car dealers struggle with maintaining accurate records of vehicles, handling customer details, and tracking test drive requests. Most of these tasks are handled manually, which leads to errors such as incorrect customer information, missed follow-ups, and confusion in scheduling test drives.

Our CRM brings all of these processes into a single, organized platform. The system is designed to store and manage **car details, customer records, and test drive schedules** efficiently. It enforces **business rules** through validation (for example, car VIN must be 17 characters, phone numbers must be 10 digits, and test drives cannot be scheduled for past dates). In addition, the CRM improves customer engagement by sending **automatic email alerts** when a test drive is booked and reminders before the scheduled time.

With dashboards and reports, managers can easily monitor sales activity, customer interactions, and test drive trends. This makes the CRM not only a record-keeping tool but also a **decision-making system** for better sales planning and customer relationship management.

Objectives

The primary objectives of the Car Dealership CRM are:

1. **Centralized Record Management** – To maintain all information about cars, customers, and test drives in one place for easy access and tracking.
2. **Error Prevention with Validation** – To reduce data entry mistakes by enforcing rules like correct VIN length, valid phone numbers, and valid test drive dates.
3. **Automation for Efficiency** – To save time and effort by sending automated emails for confirmations and reminders, reducing the need for manual communication.

4. **Better Customer Experience** – To ensure customers feel valued by receiving timely communication and reminders about their test drives.
5. **Managerial Insights** – To provide dealership managers with dashboards and reports that highlight sales performance, customer trends, and upcoming test drives for smarter decision-making.
6. **Security and Reliability** – To make sure customer data is protected with proper roles, profiles, and sharing settings, ensuring only authorized users can access or update records.

By meeting these objectives, the CRM transforms dealership operations from manual, error-prone processes into a **streamlined, automated, and customer-friendly system**.

Phase 1: Problem Understanding & Industry Analysis

- **Requirement Gathering:** Dealers needed a way to track cars, manage customer details, and schedule test drives.
- **Stakeholder Analysis:**
  - Dealership Owner – wants reports and dashboards.
  - Sales Team – needs customer records and test drive tracking.
  - Customers – should get reminders and emails on time.
- **Business Process Mapping:** Manual work was mapped → digital system was designed in Salesforce.
- **Industry-specific Use Case Analysis:** Compared with real dealership practices like car booking, test drive scheduling, customer follow-ups.
- **AppExchange Exploration:** Checked add-ons, but built custom solution for flexibility.

Phase 2: Org Setup & Configuration

- **Salesforce Edition:** Developer Edition was used for project work.
- **Company Profile Setup:** Set dealership name, address, and locale.

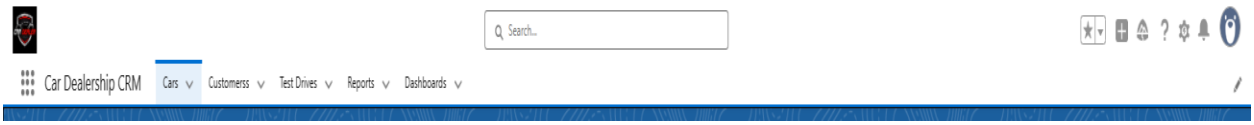
- **Business Hours & Holidays:** Added working hours for test drives.
- **Fiscal Year Settings:** Standard fiscal year.
- **User Setup & Licenses:** Created dealership users like Sales Manager and Sales Reps.
- **Profiles & Roles:** Different permissions for Manager vs Sales Rep.
- **Permission Sets:** Extra access for testing.
- **OWD & Sharing Rules:** Kept **private sharing** for security. Shared only where needed.
- **Login Access Policies:** Set for org access.
- **Dev Org & Sandbox:** Used Dev Org for building.
- **Deployment Basics:** Basic deployment setup was tested.

Phase 3: Data Modeling & Relationships

- **Custom Objects:**
    1. **Car__c** – Stores car details.
    2. **Customer__c** – Stores customer details.
    3. **TestDrive__c** – Stores test drive info.
- **Fields:**
    - Car: Price, VIN, Model.
    - Customer: Phone, Email.
    - Test Drive: Date, Car lookup, Customer lookup.
- **Record Types & Page Layouts:** Separate layouts for better record entry.
- **Compact Layouts:** Key info like Car Name, Price shown in list views.
- **Schema Builder:** Used for visual design.
- **Relationships:**

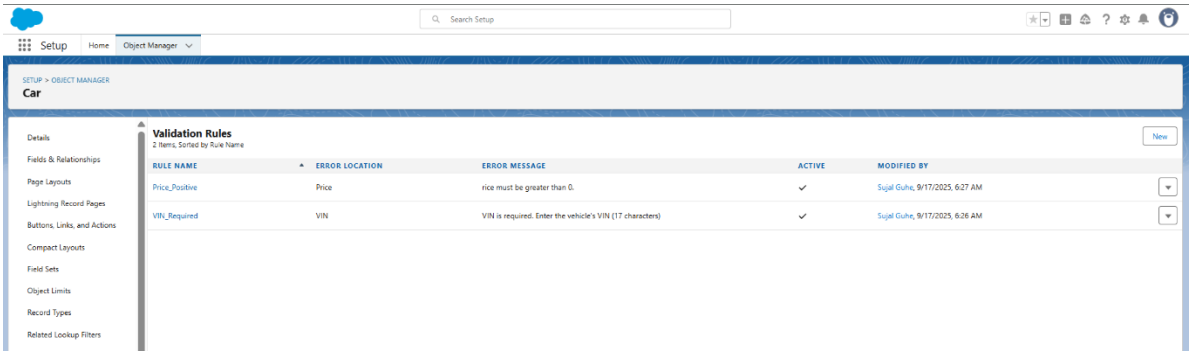
- Customer → Test Drive (Lookup).
- Car → Test Drive (Lookup).

- **No Junction Objects** needed here.

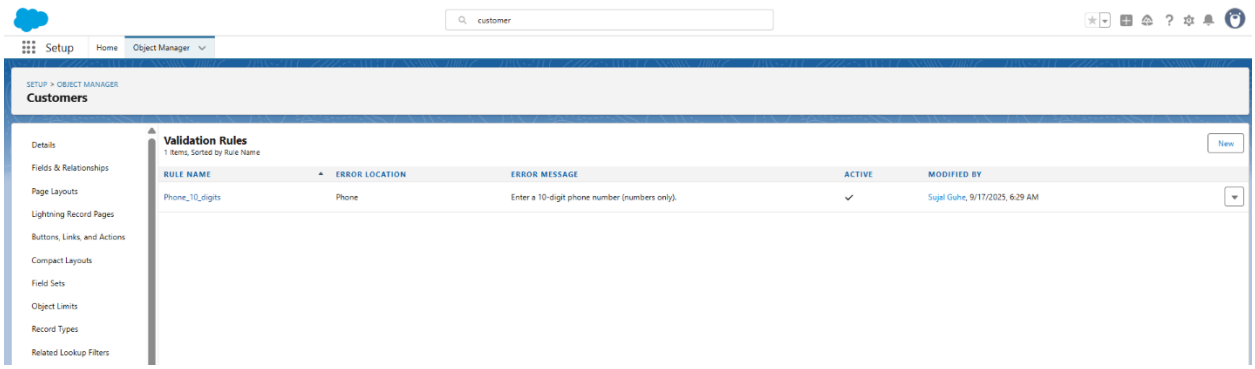


Phase 4: Process Automation (Admin)

- **Validation Rules:**
  - Car Price > 0.
  - Car VIN must be 17 characters.
  - Customer Phone = 10 digits.
  - Test Drive Date must be future date.

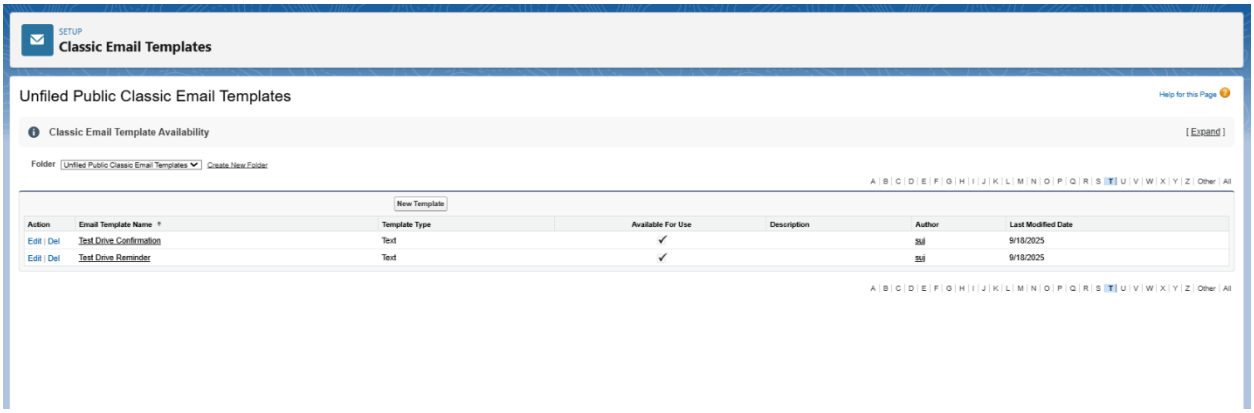


Car Validation Rules



Customer Validation Rules

- **Workflow Rules & Email Alerts:**
    - Email sent when **test drive is scheduled** (confirmation email).
    - Reminder email sent **1 day before test drive**.
- **Flows & Tasks:** Basic automation tested with email templates.



Email Templates

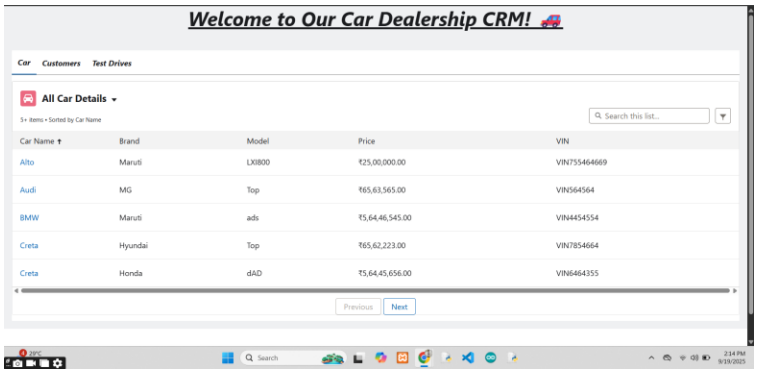
Phase 5: Apex Programming (Developer)

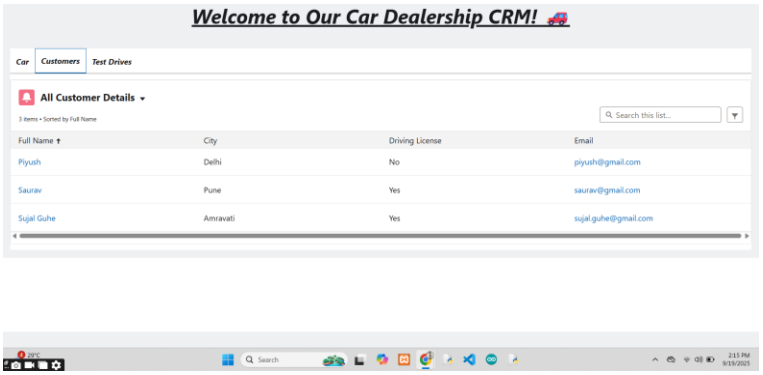
- No advanced Apex coding was required because most use cases were solved with **declarative tools** like Flows and Validation Rules.
- Future plan: Create Apex Triggers for special logic (e.g., notify sales manager when a test drive is booked).

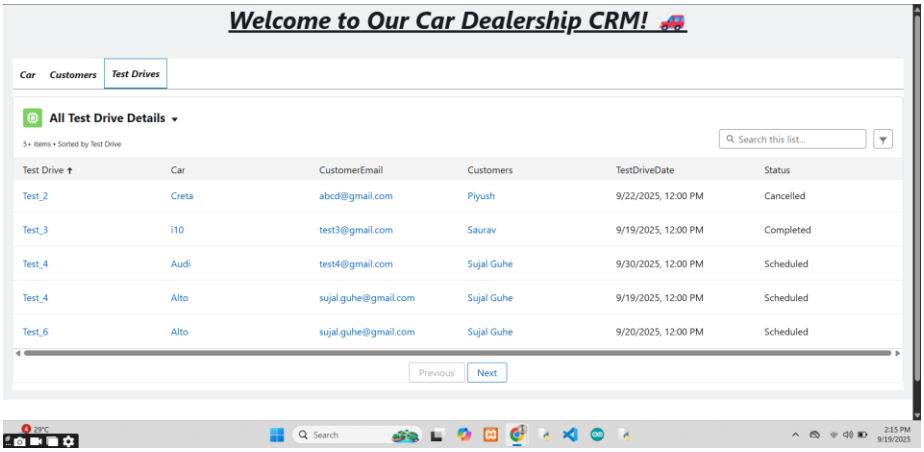
Phase 6: User Interface Development

- **Lightning App Builder:** Custom app "Car Dealership CRM" created.
- **Record Pages:** Car, Customer, Test Drive record pages designed.
- **Tabs:** Added tabs for Cars, Customers, and Test Drives.
- **Home Page Layouts:** Dashboard and report charts added.

- **LWC Component:** Built for better data display (Phase tested).







Phase 7: Integration & External Access

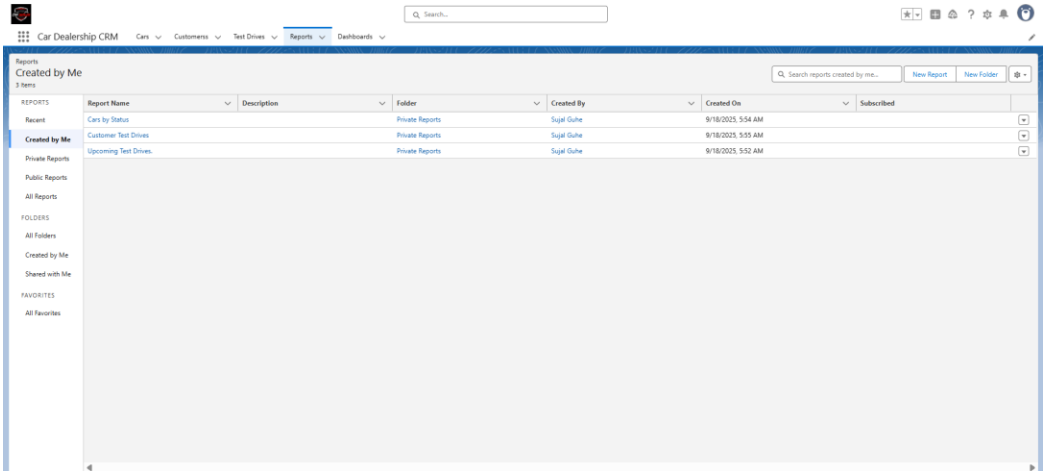
(Not implemented – kept simple CRM without integration).

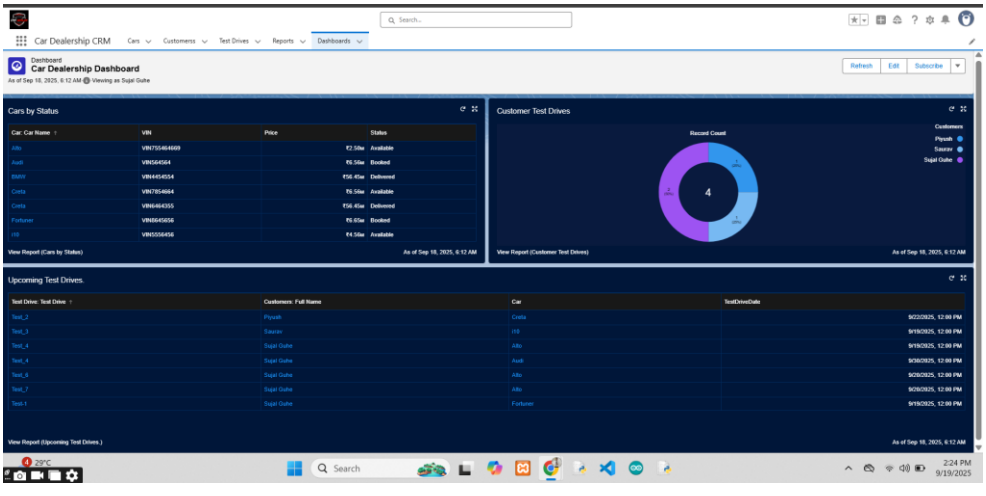
Phase 8: Data Management & Deployment

- **Data Import Wizard:** Used for uploading car and customer data.
- **Duplicate Rules:** Prevented duplicate customers.
- **Data Export:** Data backup enabled.
- **Change Sets:** Used for deploying changes between environments.

Phase 9: Reporting, Dashboards & Security Review

- **Reports:**
  - Cars by Price.
  - Customers by City.
  - Scheduled Test Drives.
- **Dashboards:**
  - Sales Manager Dashboard with charts.
  - Test Drive Tracking Dashboard.
- **Security:**
  - Profiles & Roles assigned.
  - Field Level Security applied.
  - OWD set to Private.
  - Audit Trail enabled.





Phase 10: Quality Assurance Testing

- **Test Cases Covered:**
    - Car creation with valid/invalid VIN.
    - Customer with invalid phone rejected.
    - Test Drive in past not allowed.
    - Email sent to customer after booking.
    - Reminder email before test drive.
- **Result:** All tested successfully with screenshots.

Conclusion

The Car Dealership CRM successfully delivers a complete solution for managing dealership operations within Salesforce. It solves real business challenges by creating a structured way to store data, enforcing validation rules to avoid mistakes, and using automation to improve efficiency.

With features like **email alerts, validation rules, custom objects, reports, and dashboards**, the system ensures that both dealership staff and customers benefit. Sales representatives can focus on selling cars instead of worrying about manual follow-ups, while customers enjoy better communication and timely service.

The project also lays a strong foundation for **future enhancements**. Features such as chatbot integration, mobile app support, or advanced AI-based recommendations can be added later to make the CRM even more powerful.

In short, the Car Dealership CRM makes dealership operations **faster, smarter, and more reliable**, helping the business grow while keeping customers satisfied.