

Salesforce Project - Very Detailed Phase Report

Phase 1: Problem Understanding & Industry Analysis

- **Requirement Gathering:** We identified the primary need for a Car Dealership CRM system. The system should manage Cars, Customers, and Test Drives. Requirements included storing car details (Name, Model, Color, Price, VIN), managing customer details (Name, Phone, Email), and scheduling test drives with proper validations.
- **Stakeholder Analysis:** Stakeholders included dealership sales managers, customers, test drive coordinators, and administrators. Sales managers need dashboards and reports, customers need timely communication (emails), and admins need configuration control.
- **Business Process Mapping:** We mapped the flow of operations - adding new cars, capturing customer details, scheduling test drives, and sending automated notifications. This ensured a clear picture of how data flows within the dealership business.
- **Industry-specific Use Case Analysis:** Car dealerships often need efficient tracking of available cars, customer preferences, and scheduled test drives. We tailored the CRM to these use cases.
- **AppExchange Exploration:** While we explored existing dealership apps, we chose to build a custom CRM solution for learning and flexibility.

Phase 2: Org Setup & Configuration

- **Salesforce Editions:** We worked in a Salesforce Developer Edition, which provides enterprise features free for practice.
- **Company Profile Setup:** Configured company details, fiscal year, business hours, and time zone to align with dealership operations.
- **Business Hours & Holidays:** Though not directly required, these settings can support escalation rules for customer service in future expansion.
- **User Setup & Licenses:** Created the default admin user. Additional users (sales, customer service) can be added with roles.
- **Profiles & Roles:** Used standard profiles to assign permissions. Role hierarchy designed to allow dealership managers access to all records while limiting regular sales users.
- **Permission Sets:** Could be used to grant special permissions, e.g., running reports.
- **OWD & Sharing Rules:** Configured basic sharing settings with private OWD, ensuring that managers can see subordinate data.
- **Login Access Policies & Dev Org Setup:** Ensured admin has complete access. No sandbox needed at this stage.

Phase 3: Data Modeling & Relationships

- **Custom Objects:** Created three key objects - Car__c, Customer__c, and TestDrive__c.

- Fields: Car__c fields (Car Name, Model, Price, Color, VIN). Customer__c fields (Customer Name, Phone, Email). TestDrive__c fields (Status, Test Drive Date, Lookup to Car, Lookup to Customer).
- Relationships: TestDrive__c has lookups to Car__c and Customer__c, forming a junction object between them.
- Page Layouts & Record Types: Basic record layouts defined to show relevant fields per object.
- Compact Layouts: Configured so key fields like Car Name and Price show in highlights.
- Schema Builder: Used to visualize relationships between objects.
- Lookup vs Master-Detail: Lookup chosen for Car and Customer in TestDrive to allow independent management of records.

Phase 4: Process Automation (Admin)

- Validation Rules: Enforced clean data entry. Car price must be greater than 0, VIN must be exactly 17 characters, Customer phone must be 10 digits, Test Drive date must be in the future.
- Workflow Rules & Email Alerts: Created two workflows - one to send confirmation emails when a test drive is scheduled, another to send a reminder email 1 day before the test drive.
- Classic Email Templates: Designed with merge fields for customer name, car name, and test drive date to personalize communication.
- Process Builder/Flows: Not heavily used in this project to keep things simple.

Phase 5: Apex Programming (Developer)

- Although Apex was not deeply implemented, we laid the foundation for extending the project with Triggers, Classes, and Test Classes if needed. The CRM can later include automation such as updating car availability status after a test drive.

Phase 6: User Interface Development

- Lightning App Builder: Created a custom app named Car Dealership CRM.
- Tabs: Added tabs for Car, Customer, and Test Drive objects.
- Home Page: Added a welcome text message and dashboards for quick insights.
- LWC Component: Designed a component with three tabs (Cars, Customers, Test Drives). Initially displayed only names but later extended to show full details. Provided ability for admins to add new records through standard actions.
- Record Pages: Configured record detail pages for each object to display related lists and fields.

Phase 8: Data Management & Deployment

- Data Import Wizard: Used for uploading sample car and customer data.
- Data Export: Could be used for backup, though not performed in this phase.
- Change Sets & Deployment: Since this was in a Developer Org, deployment was not required. Future phases could migrate to sandbox or production.
- Duplicate Rules: Could be implemented to prevent duplicate customers.

Phase 9: Reporting, Dashboards & Security Review

- Reports: Created custom reports for Car inventory, Customer database, and scheduled Test Drives.
- Dashboards: Designed dashboards showing key dealership metrics, such as number of cars, upcoming test drives, and customer registrations.
- Dynamic Dashboards: Can be configured later for role-based visibility.
- Security Review: Basic security ensured with field-level security and validation rules.

Phase 10: Final Presentation & Demo Day

- Pitch Presentation: Prepared a structured explanation of the dealership CRM.
- Demo Walkthrough: Showed how users can add cars, customers, and schedule test drives.
- Feedback Collection: Highlighted improvements like adding Apex automation and integration in the future.
- Portfolio Showcase: This project can be added to LinkedIn or GitHub as a full-featured Salesforce CRM demo.