WhatNext Vision Motors – Salesforce CRM Implementation Documentation

Shaping the Future of Mobility with Innovation and Excellence

# Project Overview

WhatNext Vision Motors is a forward-thinking company in the automotive industry. The company has launched a Salesforce CRM initiative aimed at enhancing customer interaction and improving operational efficiency. This CRM system focuses on optimizing vehicle order management, automating dealer assignments, validating stock availability, and streamlining the customer experience.

Key Features:

* Automatic dealer assignment based on customer location.
* Stock validation before order placement.
* Scheduled bulk updates for order status.
* Email reminders for test drives and order confirmation.

# Objectives

The main objective of this CRM implementation is to automate and streamline the vehicle order lifecycle. It helps prevent customer frustration from ordering unavailable vehicles, automates dealer selection, improves transparency in order fulfillment, and minimizes manual effort for staff. This results in faster booking, accurate stock tracking, and efficient customer service, directly adding value to business growth.

# Phase 1: Requirement Analysis & Planning

Understanding Business Requirements:

* Customers need to find nearby dealers quickly.
* Vehicles should only be ordered if they are in stock.
* Bulk orders should automatically reflect status updates.
* Reduce manual dealer assignment and follow-up tasks.

Defining Project Scope and Objectives:

* Build automated dealer assignment via customer address.
* Restrict out-of-stock vehicle ordering.
* Use automation and Apex to reduce manual tasks.
* Track orders, stock levels, test drives, and service history.

Design Data Model and Security Model:

Data Model:

* Objects: Vehicle\_\_c, Order\_\_c, Dealer\_\_c, Customer\_\_c, TestDrive\_\_c
* Relationships: Vehicle → Order (Lookup), Dealer → Order (Lookup), Customer → Order/TestDrive (Master-Detail)

Security Model:

* Role Hierarchy: Sales Manager → Dealer Executives
* Profiles: Custom profiles with specific object permissions
* Permission Sets: Extended access for support staff
* Sharing Rules: Based on dealer territories

# Phase 2: Salesforce Development – Backend & Configurations

Setup Environment & DevOps Workflow:

* Sandbox configured for development and testing.
* Change Sets used for deployment from Sandbox to Production.

Customization of Objects, Fields, and Automation:

* Custom Objects: Vehicle\_\_c, Order\_\_c, Dealer\_\_c
* Validation Rules: Prevent order if stock = 0.
* Flows: Record-triggered Flows for dealer assignment.
* Approval Process: Used for test drive confirmations.
* Process Builder: Deprecated, logic migrated to Flows.

Apex Classes, Triggers, and Asynchronous Apex:

* Apex Trigger on Order\_\_c: Checks stock and assigns nearest dealer.
* Trigger Handler Pattern used for better code modularity.
* Batch Apex Job: Updates order status daily based on stock.
* Scheduled Apex: Sends automated reminders for test drives.

# Phase 3: UI/UX Development & Customization

Lightning App Setup:

* Created 'VisionMotors CRM' App via App Manager.

Page Layouts and Dynamic Forms:

* Customized layouts for Vehicle, Order, and Dealer records.
* Applied Dynamic Forms to show/hide fields conditionally.

User Management:

* Profiles created for Admin, Sales Rep, and Dealer.
* Role hierarchy implemented to maintain data visibility.

Reports and Dashboards:

* Pending Orders by Dealer
* Test Drive Status Report
* Stock vs Booking Dashboard

Lightning Pages and LWC Development:

* Lightning Record Pages with tabs and standard components used.
* No LWC developed in this scope (optional for future expansion).

# Phase 4: Data Migration, Testing & Security

Data Loading Process:

* Used Data Import Wizard for Customers and Dealers.
* Used Data Loader for bulk upload of Vehicle and Order records.

Security Features:

* Field History Tracking enabled on Vehicle\_\_c and Order\_\_c.
* Duplicate Rules set up for Customer object.
* Matching Rules configured to identify duplicate emails.

Profiles, Roles, and Permission Sets:

* Defined profiles with object-level and field-level permissions.
* Role Hierarchy established to reflect organization structure.
* Permission Sets provided for advanced report access.

Testing Approach:

* Test Classes written for each trigger and Apex class (85%+ coverage).
* Functional test cases prepared for key Salesforce features.
* Screenshots captured for input/output for booking, approval, automation, and email flows.

# Phase 5: Deployment, Documentation & Maintenance

Deployment Strategy:

* Change Sets used for code migration from Sandbox to Production.
* Test validations completed before deploying to Production.

Maintenance and Monitoring:

* Weekly review of batch jobs and scheduled flows.
* Admin dashboard configured to monitor order errors.
* Debug logs enabled for production support.

Troubleshooting Approach:

* Developer Console used to review logs and run tests.
* Field history tracking used to analyze changes in records.
* Error email alerts configured for failures in automation.

# Conclusion

Beyond just digitizing operations, the system now acts as a proactive partner—automatically guiding customers to nearby dealers, ensuring they never place orders for unavailable stock, and keeping them informed with real-time updates. The inclusion of automated flows, Apex logic, and batch processing has minimized manual intervention and maximized operational clarity.

This project not only addressed immediate business challenges but laid the groundwork for scalable innovation. With a solid architecture and clean automation in place, WhatNext Vision Motors is now better positioned to integrate AI-driven recommendations, chatbots, and customer engagement tools in the near future.