WhatNext Vision Motors – CRM & Service Management System

Salesforce Internship Project Documentation

1. Project Overview

WhatNext Vision Motors is a Salesforce CRM solution designed to revolutionize the operations of an automobile dealership. The system streamlines vehicle sales, service management, and customer interactions by automating the complete lifecycle of operations including test drive bookings, vehicle orders, and service requests. It ensures that orders are auto-assigned to the nearest dealer based on customer location, prevents orders for out-of-stock vehicles, and triggers dynamic updates to order status.

The system enhances operational efficiency by implementing automation through Flows, Process Builder, Approval Processes, and Apex triggers. Test drive reminders are automated via scheduled flows, while batch jobs and scheduled Apex handle bulk stock updates and automatic order processing. By centralizing all customer, vehicle, and service data, the system improves accuracy, enables actionable analytics through dashboards and reports, and ensures a superior customer experience.

2. Project Objectives

The primary objectives of the WhatNext Vision Motors CRM system are:
1. Automate the vehicle sales and service workflow, minimizing manual intervention and human errors.
2. Enhance customer engagement with timely reminders, status updates, and a seamless booking experience.
3. Enable real-time tracking of orders, services, test drives, and stock availability.
4. Provide actionable insights to management through dashboards and custom reports.
5. Improve operational efficiency and ensure data-driven decision-making for business growth.

3. Phase 1: Requirement Analysis & Planning

• Understanding Business Requirements:
The dealership required a solution to manage vehicle orders, automate test drives, track service requests, and handle stock management. Manual processes were leading to delayed follow-ups and missed opportunities.

• Defining Project Scope and Objectives:
The scope included vehicle booking, automated dealer assignment, workflow automation, and analytics via dashboards. Future integrations such as chatbots and mobile apps were considered out of scope initially.

• Designing Data Model & Security Model:
Custom objects like Vehicle, Vehicle Dealer, Service Request, and Test Drive were created. Standard objects like Accounts, Contacts, and Opportunities were used for core CRM functionality. Roles, Profiles, and Permission Sets were implemented to ensure data security and controlled access for Sales, Service, and Admin teams.

4. Phase 2: Salesforce Development – Backend & Configurations

In this phase, the backend functionality and automation of WhatNext Vision Motors CRM were implemented.

• Customization of Objects and Fields:
- Vehicle Object: Vehicle Model, Fuel Type, Transmission, Stock Quantity.
- Dealer Object: Dealer Name, Dealer Location.
- Test Drive & Service Request Objects: Status fields, Customer lookup, Feedback.

• Automation Implementations:
- Record-triggered flows to auto-assign orders to the nearest dealer based on location.
- Scheduled flow to send automated test drive reminders 1 day before the appointment.
- Validation rules to prevent scheduling past test drives or completing service without assignment.
- Approval process for vehicle order confirmation.

• Apex and Batch Implementations:
- Apex Trigger Handler: Prevents orders for out-of-stock vehicles and updates stock upon confirmation.
- Batch Apex: Processes pending orders automatically when new stock is added.
- Scheduled Apex: Executes nightly to process pending vehicle orders.

• DevOps Workflow:
All development was completed in the Developer Sandbox, with deployment handled via Change Sets.

5. Phase 3: UI/UX Development & Customization

The user interface was developed using Salesforce Lightning App Builder to ensure a seamless user experience.

• Lightning App Setup:
  - Created the Lightning App named 'WhatNext Vision Motors' with navigation items for Vehicle, Dealer, Test Drive, Service Request, Reports, and Dashboards.
• Page Layouts & Dynamic Forms:
  - Customized layouts for Vehicle and Service Request objects with dynamic visibility rules.
• Tabs and Navigation:
  - Created custom tabs for all custom objects to simplify access.
• Reports and Dashboards:
  - Created dashboards for Sales Performance, Stock Availability, and Service Completion Rate.
• User Management:
  - Configured Profiles and Permission Sets to restrict and assign access appropriately.

6. Phase 4: Data Migration, Testing & Security

• Data Migration:
Historical vehicle and service data were imported using the Data Loader tool.

• Security Implementation:
Roles, Profiles, Permission Sets, and Sharing Rules were configured. Field History Tracking and Duplicate Management were also implemented to ensure data integrity.

• Testing Approach:
Test cases were prepared and executed for:
  - Test Drive creation and automated reminders.
  - Vehicle order placement and stock update triggers.
  - Service request workflow and completion notifications.
All features were validated with input/output screenshots (to be attached in final report).

7. Phase 5: Deployment, Documentation & Maintenance

• Deployment Strategy:
The project was deployed to the Production environment using Change Sets.

• Documentation & Troubleshooting:
All configurations, flows, and Apex classes were documented for future reference. A troubleshooting guide was included for error resolution and monitoring.

• Maintenance:

Scheduled Apex ensures nightly processing. Future maintenance will include performance monitoring and enhancement of workflows based on user feedback.

8. Conclusion

The WhatNext Vision Motors CRM successfully automated vehicle sales, service operations, and customer engagement. It minimized manual work, prevented stock errors, and improved lead conversion and service efficiency. With real-time dashboards and automated flows, the dealership now operates with greater accuracy and speed.

9. Future Enhancements

- Integration of an AI-based chatbot for instant customer interaction.
- Mobile app support for on-the-go vehicle bookings and service requests.
- Predictive analytics for stock management and customer behavior analysis.
- Enhanced workflow automation with real-time notifications and third-party integrations.