WhatNext Vision Motors: Shaping the Future of Mobility with Innovation and Excellence

Abstract

WhatsNext Vision Motors is redefining customer engagement and operational excellence through a strategic Salesforce CRM transformation. This initiative focuses on creating an intelligent, scalable, and automated CRM system designed to meet the complex needs of vehicle sales, service, and customer lifecycle management. By leveraging Salesforce's advanced capabilities—including custom objects, Lightning Apps, record-triggered flows, Apex triggers, batch processes, and scheduled automation—the company has addressed critical challenges such as manual dealer assignments, test drive scheduling, and out-of-stock order prevention. The solution automatically assigns the nearest dealer based on geolocation, restricts orders to in-stock vehicles, and streamlines communication for test drives and service requests. These innovations not only enhance internal efficiency but also deliver a real-time, transparent, and customer-centric experience. With this transformation, WhatsNext Vision Motors strengthens its position as a forward-thinking leader in the automotive industry—boosting accuracy, productivity, and overall customer satisfaction.
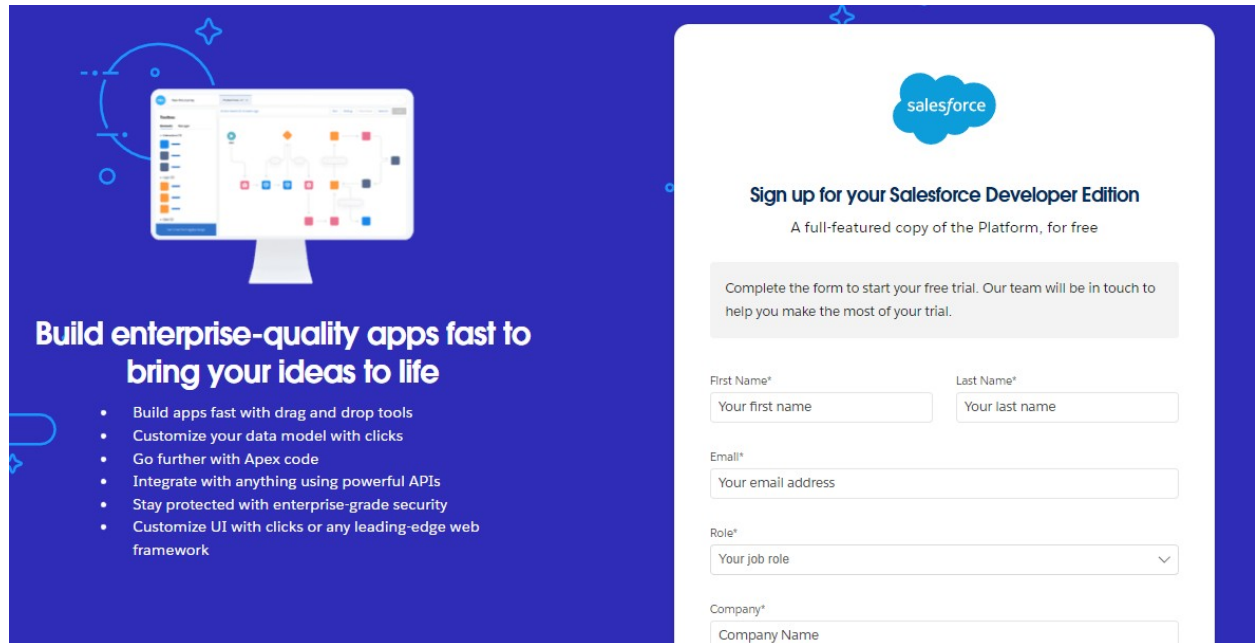
Objectives

 Establish a centralized system to efficiently manage vehicle, dealer, and customer data.

 Automate the order-to-delivery process for greater speed and accuracy.

 Prevent order placement for unavailable or out-of-stock vehicles.

 Implement geolocation-based logic to automatically assign orders to the nearest dealer.

 Automate reminders for test drives and streamline service request tracking.

 Improve customer satisfaction while minimizing manual effort and operational overhead.

Developer Org Set up

Go to **https://developer.salesforce.com/signup**

On the sign up form, enter the following details:

First name & Last name

Email

Role : Developer

Company : College Name

County : Your country

Postal Code : pin code

Username : should be a combination of your name and company

Technical Description

The Salesforce CRM implementation at WhatsNext Vision Motors is designed to deliver a seamless, scalable, and intelligent digital automotive experience. Its technical architecture combines both declarative tools and programmatic components of Salesforce to manage complex business logic, automate operational workflows, and support end-to-end customer lifecycle management.

Custom Objects

Custom objects are configured to represent key real-world entities such as vehicles, customers, orders, test drives, service requests, and dealers**.** Each object is designed to capture essential data, define relationships, and support business processes tailored to the automotive industry.

- Vehicle__c, Vehicle_Order__c, Vehicle_Customer__c, Vehicle_Dealer__c, Vehicle_Test_Drive__c, and Vehicle_Service_Request__c are the primary custom objects.

- Relationships between objects are managed using Lookup relationships where applicable.

Lightning App

A custom Lightning App has been developed to provide a centralized, user-friendly interface for sales agents and customer service representatives. Key features include:

- **Customized Lightning Record Pages** tailored to business needs.

- **Tab-based navigation** for quick access to Vehicles, Orders, Dealers, Customers, and Reports.
- **Integrated List Views, Reports, and Dashboards** for real-time insights.
- **Flow integration** to streamline business processes.

Several **Flows** are implemented to automate operations without the need for code:

- **Dealer Assignment Flow** – Automatically recommends the nearest dealer based on customer location.
- **Test Drive Reminder Flow** – Sends scheduled email reminders to customers about upcoming test drives.
- **Order Status Update Flow** – Updates order status dynamically based on stock availability.

Record-Triggered Flow Creation

Record-Triggered Flows are implemented to automate key backend processes in response to data changes:

- **Order Creation** – Triggers validation of vehicle stock and automatically assigns the nearest dealer.
- **Test Drive Booking** – Sends a confirmation email to the customer and updates related records.
- **Service Request Creation** – Generates notifications and logs support activities for tracking.

Additionally, Apex implementations are used where advanced logic or complex processing goes beyond the capabilities of declarative tools.

Custom business logic that goes beyond Flow capabilities is handled using Apex, including:

- **Apex Triggers:**

  Prevent orders for out-of-stock vehicles

  Auto-assign dealer during order creation

- **Trigger Handlers: Modular Apex handler classes ensure maintainability and unit test coverage.**

- **Batch Apex:**

  Processes large volumes of vehicle stock data to update availability

- **Scheduled Apex:**

  Periodically updates order statuses and sends summary emails

Object Definition & Relationships

Custom Objects and Key Fields

Object Name	Key Fields	Purpose & Relationships
Vehicle__c	Vehicle_Name__c, Vehicle_Model__c, Stock_Quantity__c, Price__c, Status__c, Dealer__c	Stores vehicle details; related to Dealer & Orders
Vehicle_Dealer__c	Dealer_Name__c, Dealer_Location__c, Dealer_Code__c, Phone__c, Email__c	Stores dealer info; related to Orders
Vehicle_Customer__c	Customer_Name__c, Email__c, Phone__c, Address__c, Preferred_Vehicle_Type__c	Stores customer details; related to Orders & Test Drives
Vehicle_Order__c	Customer__c, Vehicle__c, Order_Date__c, Status__c	Tracks orders; related to Vehicle & Customer
Object Name	**Key Fields**	**Purpose & Relationships**
Vehicle_Test_Drive__c	Customer__c, Vehicle__c, Test_Drive_Date__c, Status__c	Tracks test drives; related to Vehicle & Customer

Vehicle_Service_Request__c	Customer__c, Vehicle__c, Service_Date__c, Issue_Description__c, Status__c	Tracks servicing; related to Vehicle & Customer

Process Automation

Flows & Workflows

- **Auto-assignment of Dealers**: A Flow based on the customer's address auto-assigns the nearest dealer to new orders.

- **Email Reminders**: Automated email flows remind customers about scheduled test drives.

- **Order Status Automation**: A scheduled process dynamically updates order status based on stock availability:

  If stock is **0**, status → "Pending"

  If stock is **available**, status → "Confirmed"

5. Apex Implementation

Apex Triggers

- **Stock Validation Trigger**: Prevents order creation if Stock_Quantity__c ≤ 0.

- **Auto-Assignment Trigger**: Assigns Dealer__c based on proximity (via custom logic or geolocation API).

- **Trigger Handler Pattern**: All logic abstracted into handler classes for scalability and reusability.

Batch Apex

- **Batch Stock Update Job**: Periodically checks and updates vehicle stock levels from backend systems or manually.

- **Email Notification Job**: Sends alerts for low stock and pending orders.

Scheduled Apex

- **Order Processor Scheduler**: Runs daily to update order statuses based on current stock.

Project Phases – WhatsNext Vision Motors Salesforce CRM Transformation

Phase 1: Planning & Requirement Gathering

- Define business goals and pain points (manual dealer assignment, out-of-stock orders, etc.).
- Collect requirements from stakeholders (sales, service, IT, customers).
- Document user stories and acceptance criteria.
- Identify KPIs for success (e.g., order accuracy %, reduced manual effort, customer satisfaction scores).

Phase 2: Environment Setup & Org Configuration

- Create **Developer Orgs** and **Sandbox** environments.
- Configure Salesforce edition & licensing.
- Set up user profiles, roles, and permission sets.
- Prepare sample datasets (vehicles, dealers, customers).

Phase 3: Data Modeling & Custom Object Development

- Create **custom objects**: Vehicle, Vehicle_Order, Vehicle_Customer, Dealer, Test Drive, Service Request.

- Define **key fields** (e.g., Stock Quantity, Dealer Location, Order Status).
- Establish **relationships** (lookup and master-detail where needed).
- Configure **record types** and page layouts for different use cases.

Phase 4: UI & Lightning App Development

- Build a **custom Lightning App** with tab navigation.
- Customize **Lightning Record Pages** for vehicles, customers, dealers, and orders.
- Configure **list views, reports, and dashboards** for insights.
- Provide a **user-friendly interface** for sales agents and customer support teams.

Phase 5: Process Automation (Flows & Declarative Tools)

- Implement **Record-Triggered Flows**:
  - Auto-assign nearest dealer.
  - Test drive reminders (email & notifications).
  - Order status updates (based on stock).
- Configure **scheduled flows** for periodic checks.
- Test declarative automation for edge cases.

Phase 6: Apex Development (Advanced Logic)

- Create **Apex Triggers**:
  - Stock validation (prevent order if stock ≤ 0).
  - Auto-dealer assignment via geolocation logic.
- Implement **Trigger Handler Pattern** for reusability.
- Develop **Batch Apex** for stock updates & large data processing.
- Schedule **Apex Jobs** for order status updates and daily notifications.

Phase 7: Integration & Testing

- Prepare for future ERP/Inventory integration (real-time stock updates).

- Conduct **unit testing** for triggers, flows, and batch processes.
- Perform **system integration testing (SIT)** for end-to-end processes.
- Conduct **User Acceptance Testing (UAT)** with business users.

Phase 8: Deployment & Training

- Migrate configurations and code to **Production Org**.
- Set up **change sets / deployment pipeline**.
- Train sales, dealer, and service staff on the new CRM system.
- Roll out phased go-live (pilot → full launch).

Phase 9: Monitoring & Optimization

- Monitor system performance and adoption.
- Collect user feedback and refine automations.
- Adjust dashboards/reports based on KPIs.
- Document improvements for future enhancements.

Phase 10: Future Enhancements (Scope Expansion)

- Real-time ERP stock synchronization.
- Advanced dealer geo-mapping using Maps API.
- Customer self-service portal for bookings and service tracking.
- AI-powered analytics & recommendation engine (Einstein Analytics).

Conclusion

The Salesforce CRM implementation at WhatsNext Vision Motors represents a significant milestone in its digital transformation journey within the automotive industry. By seamlessly integrating business processes with advanced Salesforce capabilities—such as custom data modeling, Apex-driven automation, and flow orchestration—the company has built a more agile, intelligent, and customer-focused framework. This transformation has optimized critical workflows, including vehicle order management, dealer assignment, test drive scheduling, and service request handling. With automated validations and scheduled processes, orders are ensured to align with real-time stock availability, while customers benefit from timely updates and reminders. As a result, WhatsNext Vision Motors has strengthened efficiency, reliability, and customer satisfaction, positioning itself as a forward-thinking leader in the mobility sector.

Future Scope

 Real-Time Stock Integration – Connect Salesforce with external ERP or inventory management systems to provide instant updates on vehicle availability.

 Enhanced Geo-Mapping – Utilize advanced mapping and location services (e.g., Maps API) to deliver smarter, more accurate dealer recommendations based on customer proximity.

 Customer Self-Service Portal – Develop a portal where customers can independently book test drives, track orders, and schedule service requests, reducing dependency on manual support.

 Advanced Analytics & Dashboards – Implement intelligent dashboards and predictive analytics to track order trends, analyze customer preferences, and forecast vehicle demand.