***WhatsNext Vision Motors - Salesforce CRM Implementation Project***

# Objective

To streamline and automate vehicle ordering, dealership allocation, and stock management for WhatsNext Vision Motors using Salesforce CRM features, including custom objects, Apex triggers, flows, and batch processes.

# Project Description

WhatsNext Vision Motors aims to revolutionize customer experience in the automotive industry by implementing a Salesforce CRM solution that automates critical processes such as:  
- Suggesting the nearest vehicle dealer based on customer location.  
- Preventing orders for vehicles that are out of stock.  
- Sending scheduled email reminders for test drives.  
  
This project automates manual tasks, improves transparency for customers, and enhances dealer communication — ensuring scalability and operational excellence.

# Key Modules Implemented

## 1. Custom Object & Data Modelling

|  |  |  |
| --- | --- | --- |
| Object Name | Purpose | Relationships |
| Vehicle\_\_c | Stores vehicle details | Lookup to Dealer & Vehicle Orders |
| Vehicle\_Dealer\_\_c | Stores authorized dealership information | Related to Orders |
| Vehicle\_Customer\_\_c | Stores customer details | Related to Orders & Test Drives |
| Vehicle\_Order\_\_c | Tracks vehicle purchase orders | Lookup to Customer & Vehicle |
| Vehicle\_Test\_Drive\_\_c | Tracks test drive appointments | Lookup to Customer & Vehicle |
| Vehicle\_Service\_Request\_\_c | Tracks service requests | Lookup to Customer & Vehicle |

## 2. Automation Using Flows

Record-Triggered Flow: Test Drive Reminder  
- Triggered on: Vehicle\_Test\_Drive\_\_c  
- Condition: When Status\_\_c = Scheduled  
- Scheduled Path: 1 day before Test\_Drive\_Date\_\_c  
- Action: Sends a reminder email to the customer via Send Email action.

## 3. Apex Trigger & Handler: Stock Validation

Trigger: VehicleOrderTrigger  
- Events: before insert, before update, after insert, after update  
  
Handler Class: VehicleOrderTriggerHandler  
- Validates if the selected vehicle has stock available.  
- Prevents order placement if stock = 0.  
- If order is confirmed, reduces vehicle stock by 1.

## 4. Batch Apex Job: Stock Re-Evaluation

Class: VehicleOrderBatch  
- Scheduled daily to:  
 - Check all Vehicle\_Order\_\_c records with status Pending.  
 - If stock becomes available, update status to Confirmed and decrement stock.

## 5. Scheduled Apex Class

Class: VehicleOrderBatchScheduler  
- Executes VehicleOrderBatch daily at 12:00 PM using:  
 String cronExp = '0 0 12 \* \* ?';  
 System.schedule('Daily Vehicle Order Processing', cronExp, new VehicleOrderBatchScheduler());

# Key Functionalities

|  |  |
| --- | --- |
| Feature | Implementation Summary |
| Prevent Out-of-Stock Orders | Apex Trigger & Handler |
| Auto Dealer Assignment | Record-Triggered Flow (or extend via Apex) |
| Test Drive Email Reminder | Record-Triggered Flow with Scheduled Path |
| Batch Stock Update | Batch Apex Class |
| Daily Job Scheduler | Scheduled Apex |

# Tech Stack

- Salesforce CRM  
- Apex (Trigger, Classes, Batch, Scheduled)  
- Flows & Automation  
- Lightning App Builder  
- Custom Objects & Fields  
- Data Modelling & Relationships

# Learning Outcomes

- Built custom Salesforce data model using real-world automotive use-case.  
- Designed & implemented flow automation for timely customer communication.  
- Developed and tested Apex triggers and classes for enforcing business logic.  
- Scheduled batch jobs for dynamic stock management and order processing.