WhatNext Vision Motors:

Shaping the Future of Mobility with Innovation and Excellence

ABSTRACT:

WhatNext Vision Motors, a pioneering force in the automotive industry, is dedicated to transforming the mobility sector with innovative technology and solutions that prioritize customer needs. The company has embarked on an ambitious Salesforce project with the core objective of enhancing the customer experience and streamlining its operational processes. At the heart of this project is the improvement of the customer ordering process, designed to automatically suggest the nearest dealer location to customers based on their address, significantly enhancing convenience and efficiency.

The project also addresses stock availability, including a mechanism that prevents customers from placing orders for vehicles that are out of stock. This proactive approach ensures customers only create orders for currently available vehicles, avoiding potential confusion and disappointment. Furthermore, it incorporates a scheduled process for updating bulk order records, automatically setting the order status to 'Pending' if out of stock, or 'Confirmed' if in stock. This ensures accurate reflection of fulfillment status and provides clear communication to customers.

The implementation of this Salesforce project at WhatNext Vision Motors is expected to yield several benefits. It aims to create a more efficient ordering system that reduces errors and improves overall service, thereby enhancing customer satisfaction and loyalty. Moreover, the project is expected to contribute to operational efficiency by reducing administrative burden on staff, allowing employees to focus on strategic tasks and enabling a more agile response to market demands and customer needs, thereby shaping the future of mobility with innovation and excellence.

OBJECTIVE:

The goal of the **WhatNext Vision Motors CRM project** is to simplify and digitize the end-to-end vehicle dealership process using Salesforce. By focusing on customer satisfaction, operational automation, and data accuracy, this system helps dealers and teams work smarter, not harder. It ensures that every vehicle inquiry, order, test drive, and

service request is handled efficiently with minimal manual effort. The platform brings together all key stakeholders—sales teams, service staff, and customers—on a unified, intelligent system designed to make day-to-day tasks faster, clearer, and more reliable.

Main Aims of the Project

- Enhance and personalize the **customer vehicle ordering experience**.
- Ensure **real-time vehicle stock management** to avoid over-selling.
- Automate routine tasks like sending **email reminders** and **updating records**.
- Assign the **nearest vehicle dealer** based on customer location.
- Track and manage **test drives and service requests** efficiently.
- Improve **internal team collaboration and transparency**.
- Reduce errors and manual work through **smart automation and validations**.

TECHNOLOGY DESCRIPTION

a. Salesforce:

Salesforce is a cloud-based customer relationship management platform that provides tools to manage data, automate workflows, and integrate business processes. It provides point and click tools as well as programmatic capabilities (like Apex and Flows) to build custom business solutions. This project utilizes Salesforce's:

- Custom objects & tabs
- Custom Fields
- Lightening App
- Flows and Record-triggered flows
- Apex triggers and classes

b. Custom Objects:

These are database tables that allow storing data specific to an organization's needs.

2. **Vehicle__c** – Catalog of cars with attributes like model, price, and stock.
3. **Vehicle Customer__c** – Information about potential and existing buyers.
4. **Vehicle Order__c** – Manages vehicle purchase requests.
5. **Vehicle Test Drive__c** – Tracks test drive scheduling and notifications.
6. **Vehicle Service Request__c** – Logs post-purchase service-related issues.

c. Tabs:

Tabs are created for each custom object to allow easy navigation and data entry for users.

d. Custom Apps:

Built to centralize access to all related objects, reports, dashboards, and processes in one place.

e. Flows:

These are used to automate business processes like:

- Sending reminder emails a day before test drives.
- Updating stock quantity when an order is confirmed.
- Auto-populating dealer info based on customer location.

f. Apex:

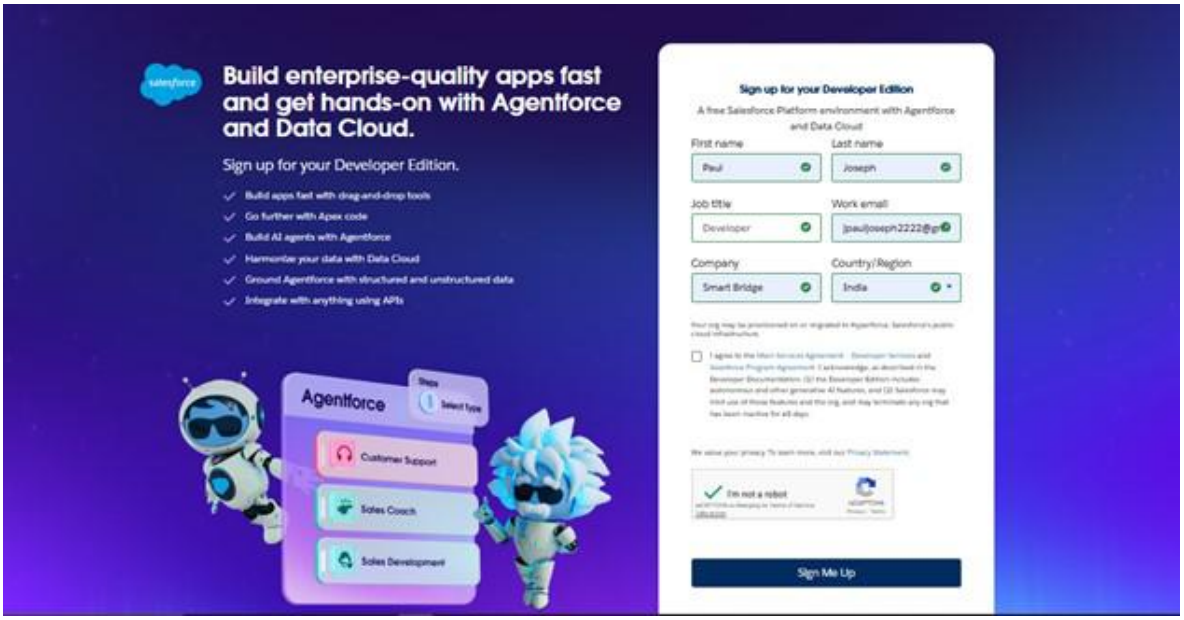
These are used for custom logic that couldn't be achieved through flows:

- Preventing order creation if vehicle stock is zero.
- Automatically assigning the nearest dealer based on customer address.
- Reducing stock quantity upon order confirmation.

DETAILED EXECUTION OF PROJECT PHASES

1. Developer org setup:

A salesforce developer org was created using: https://developer.salesforce.com/signup The account was verified , a new password was set, and access was granted to salesforce setup page.

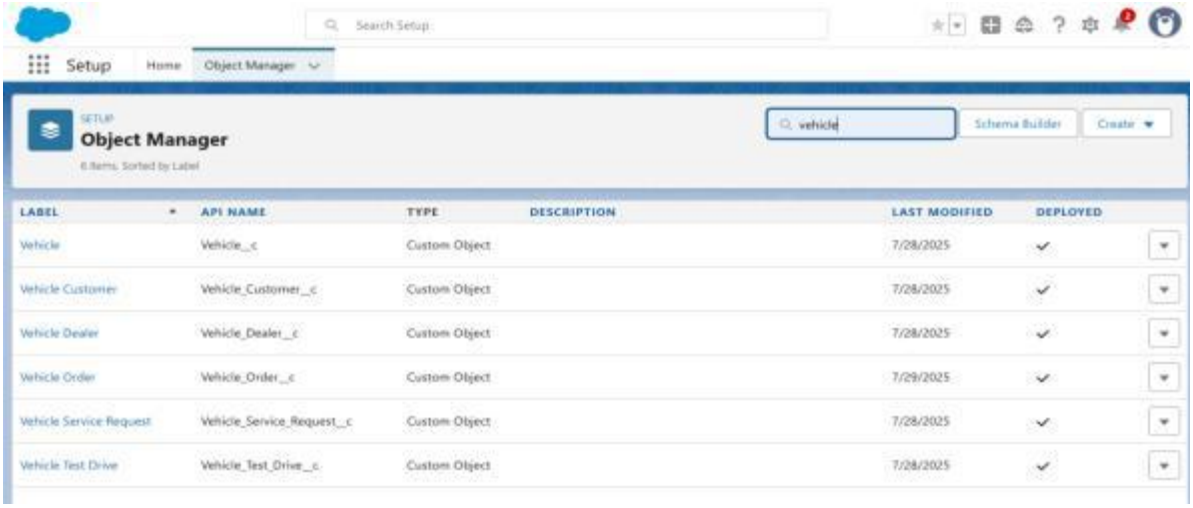


2. **Custom Object Creation:**

Six custom object was created to store business-critical data:

1. **Vehicle Dealer** – Stores dealership location and contact details.
2. **Vehicle** – Catalog of cars with attributes like model, price, and stock.
3. **Vehicle Customer** – Information about potential and existing buyers.
4. **Vehicle Order** – Manages vehicle purchase requests.
5. **Vehicle Test Drive** – Tracks test drive scheduling and notifications.
6. **Vehicle Service Request** – Logs post-purchase service-related issues. Steps followed:

- Navigate to Setup → object manager → Create → Custom Object
- Provided Label, Name, enabled reports/search
- Saved and Created Tabs for each object



3. Create the Lightening App

- A custom Lightening App name WhatNext Vision Motors was created.
- Included tabs: Vehicle Dealers, Vehicles, Vehicle Customers, Vehicle Orders, Vehicle Test Drives, Vehicle Service Request, Reports and Dashboards.
- Assigned to the system administrator profile.

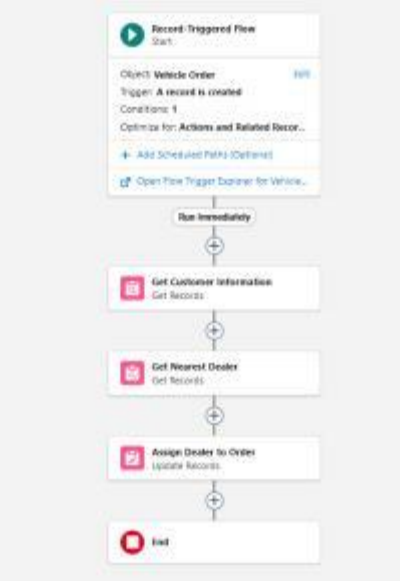
4. Custom Fields Creation.

Custom field were created within eeach object to capture specific business data and to provide user-friendly data entry forms. These fields ensure that all necessary information like vehicle model, price, stock quantity, customer contact details, order status, and service issues – is collected accurately.

5. Flow Implementation:

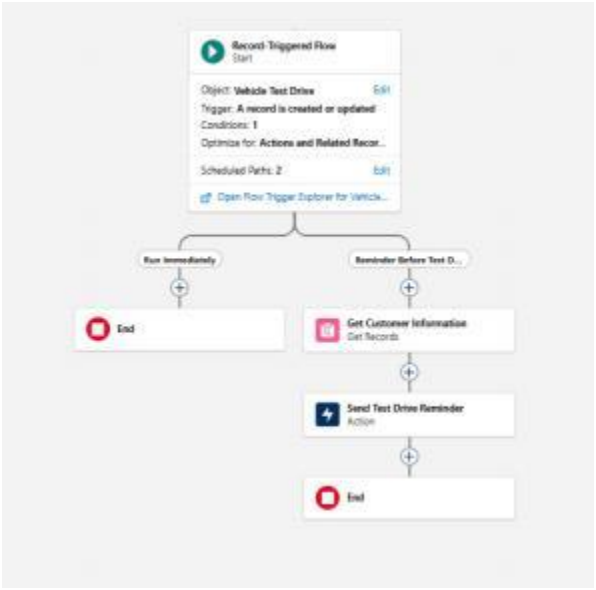
a. Flow Creation: Auto assign Dealer

- Automatically assigns the nearest vehicle dealer to a customer's order based on their address.
- When a new Vehicle Order is created with a status of "Pending," the flow retrieves the customer's address, matches it with the corresponding dealer location, and updates the order with the nearest dealer using automation.



b. <u>Record Triggered Flow Creation: Test Drive Remainder</u>

- This flow automatically sends a reminder email to customers one day before their scheduled vehicle test drive.
- The flow is triggered when a Vehicle Test Drive record is created or updated with the status set to "Scheduled". It waits until one day before the scheduled test drive date, fetches the customer's email address, and sends a reminder email using the "Send Email" action.



6. **Apex Triggers and classes:**
    a. VehicleOrderTriggerHandler:

        Contains reusable logic to validate stock and update inventory during vehicle order processing.

    b. VehicleOrderTrigger:

        Calls the handler logic before and after insert/update of vehicle orders.

    c. VehicleOrderBatch:

        Scans all pending vehicle orders and confirms them if matching vehicles are back in stock.

    d. VehicleOrderBatchScheduler:

        Schedules the batch job to run automatically at a defined time.

PROJECT EXPLANATION WITH REAL WORLD EXAMPLE

Let's walk through it like a real customer interaction.

1. Vehicle Dealers:

    - In the real world, automobile companies operate through a network of authorized dealers in various cities to serve customers more efficiently.
    - In our Salesforce application, each Vehicle Dealer record stores important information such as: Dealer Name, Dealer Location (city-based), Unique Dealer Code (for tracking and validation), Contact Phone Number, Email Address.
    - For instance, in Dehradun, a BMW-authorized dealer manages all sales, test drives, and service requests for BMW vehicles in that region.

2. Vehicles:

    - In a real-world dealership, each Vehicle represents a specific model available for customers to explore, choose, and purchase.
    - In our Salesforce application, each Vehicle record captures essential details such as: Vehicle Name, Vehicle Model (e.g., Sedan, SUV, EV)., Stock

      Quantity, Price, Associated Vehicle Dealer, Current Status (e.g., Available, Booked, Sold).
    - For instance, a BMW model named BMW X7 is added, whose model is SUV and stock quantity is 50. The model is available and can be ordered.

3. Vehicle Customers:

    - In the real world, a Vehicle Customer refers to an individual who is interested in exploring, booking, or purchasing a vehicle from a dealership.

- When adding a new customer, the following key details are captured: Vehicle Customer, Email, Phone Number, Residential Address, Preferred Vehicle Type (e.g., Sedan, SUV, EV).

4. Vehicle Orders:
   - In a real-world dealership scenario, a Vehicle Order represents a formal request made by a customer to purchase a specific vehicle model from a dealer.
   - In our Salesforce system, when a new order is placed, the following information is stored: Vehicle Order Number, Vehicle Customer (who is placing the order), Vehicle (the model selected), Order Date, Order Status (e.g., Pending, Confirmed, Delivered), Assigned Dealer (automatically assigned based on customer location using Record-Triggered Flow).

5. Vehicle Test Drives:
   - In a real-world dealership, before purchasing a vehicle, customers often request a test drive to evaluate the vehicle's comfort, performance, and features. This is a key step in the customer decision-making process.
   - It records essential details such as: Vehicle Test Drive Name, Vehicle Customer (who is requesting the test drive), Vehicle (the model to be test-driven), Test Drive Date, Status (Scheduled, Completed, Cancelled, etc.)

6. Vehicle Service Request:
   - In the real world, once a vehicle is purchased, customers often require **after-sales service**—from regular maintenance to issue resolution. To manage these effectively, the system uses a **Vehicle Service Request** object.
   - The key information stored for each service request includes: Vehicle Service Request Name, Vehicle Customer, Vehicle, Service Date, Issue Description, Status (such as Requested, In Progress, Completed)

SCREENSHOTS:

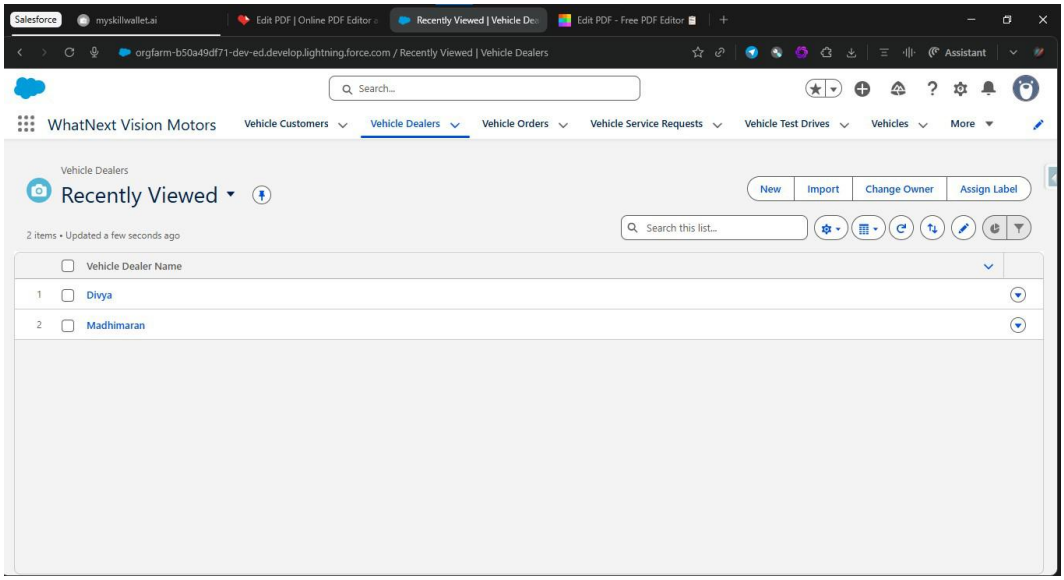


Figure 1: Custom App WhatNext Vision Motors

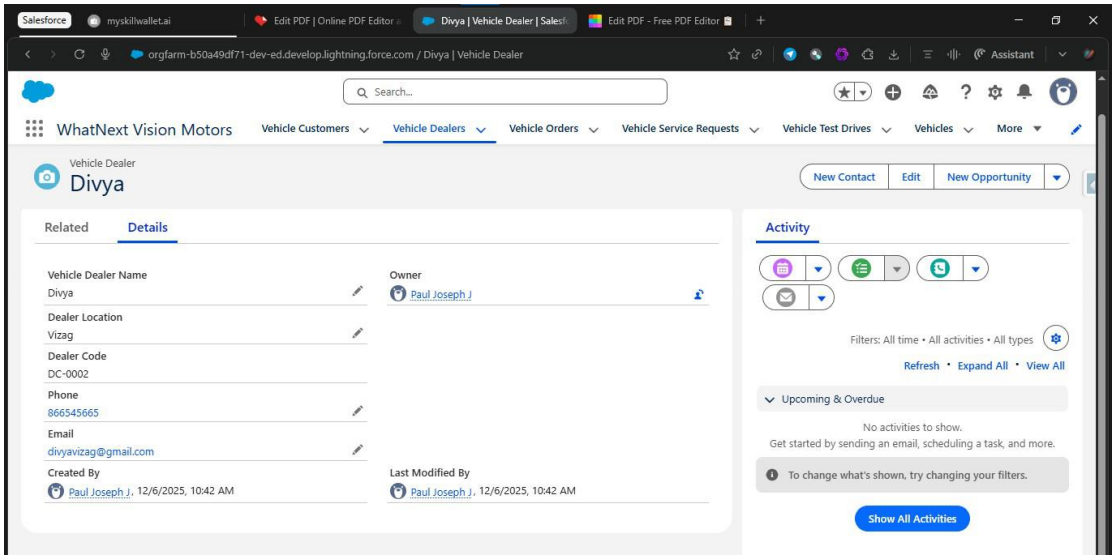


Figure 2: Vehicle dealers in WhatNext Vision Motors

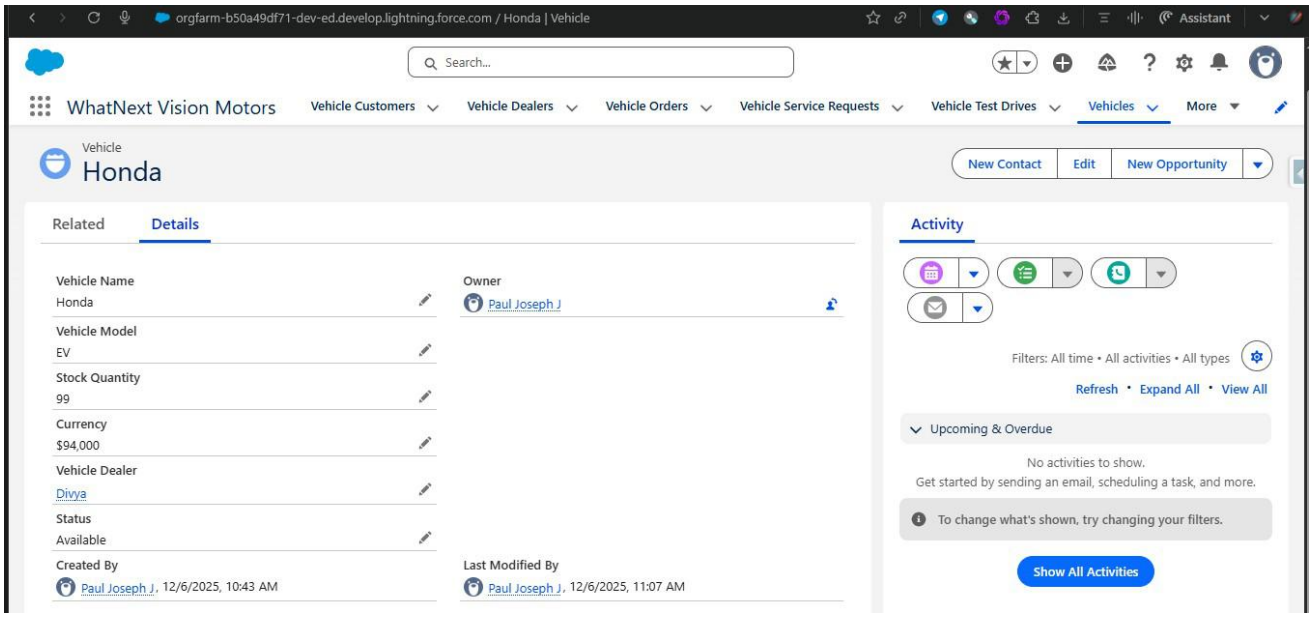


Figure 3: Vehicles in WhatNext Vision Motors

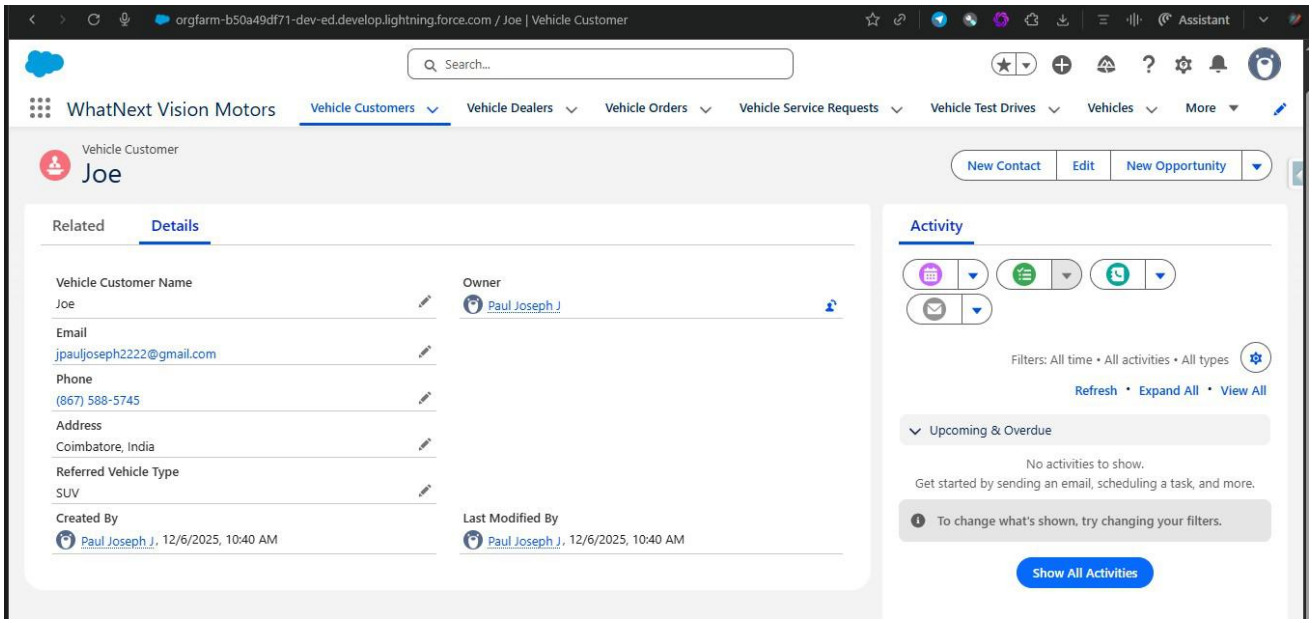


Figure 4: Vehicle customer in WhatNext Vision Motors

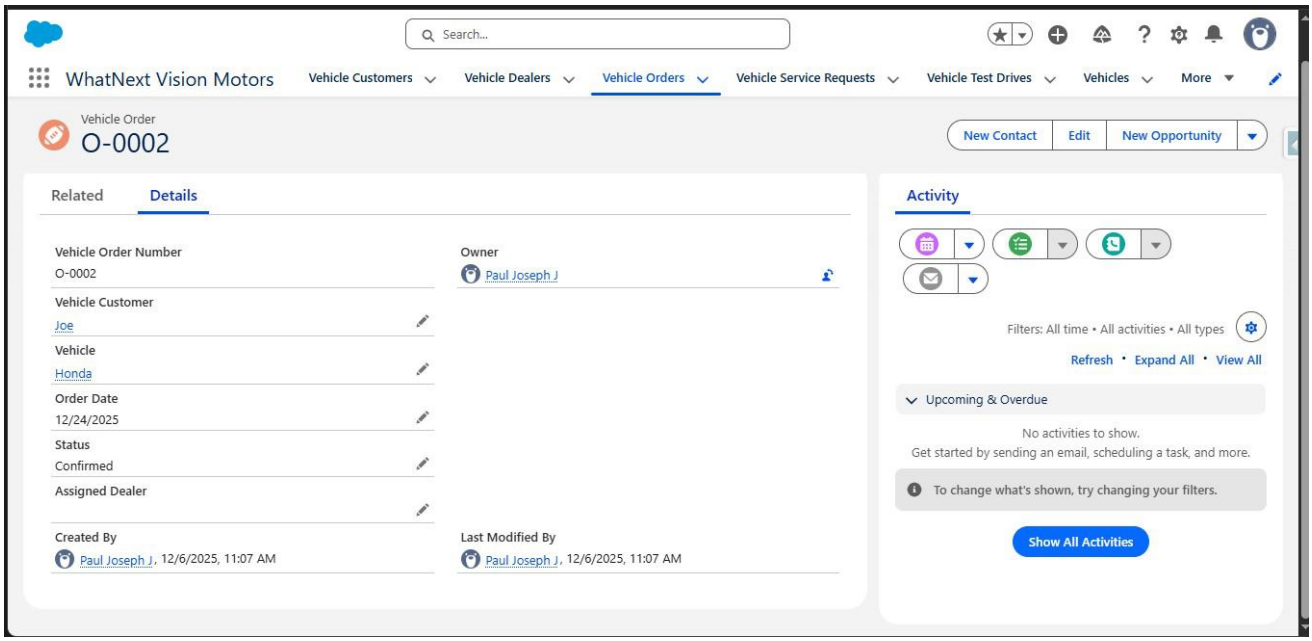


Figure 5: Vehicle orders in WhatNext Vision Motors

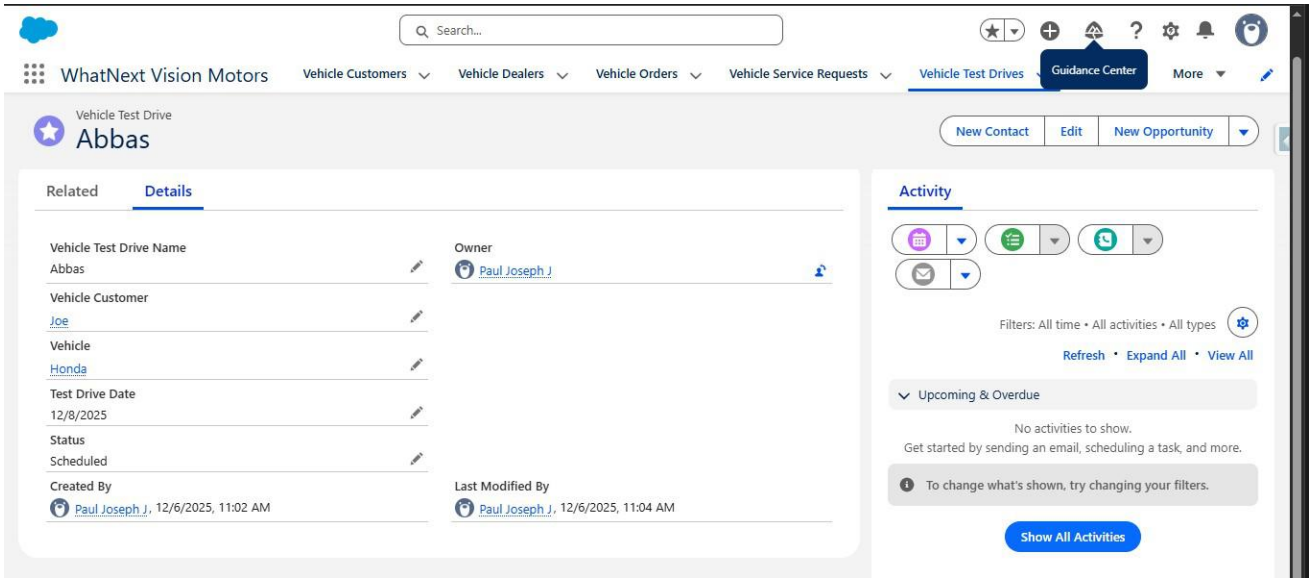


Figure 6: Vehicle Test Drive in WhatNext Vision Motors

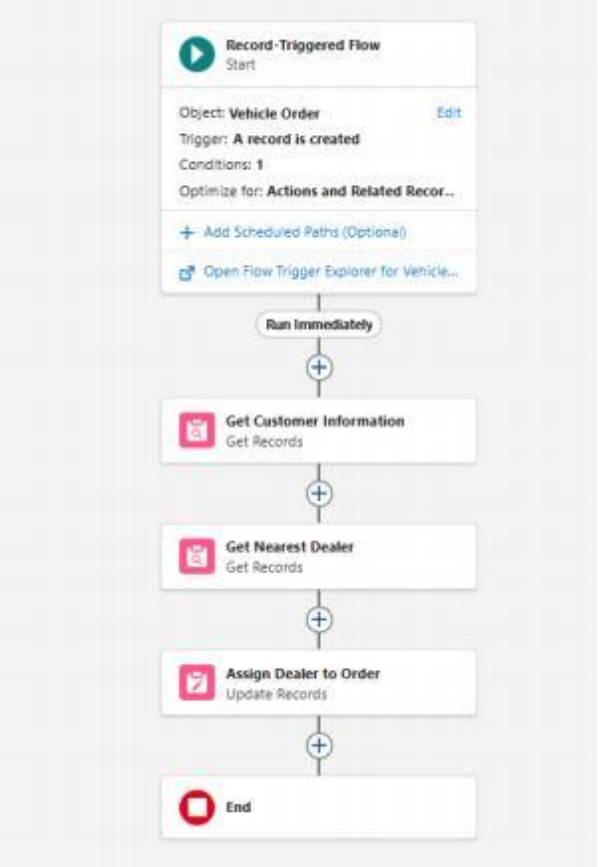


Figure 8: Auto Assign Dealer Flow

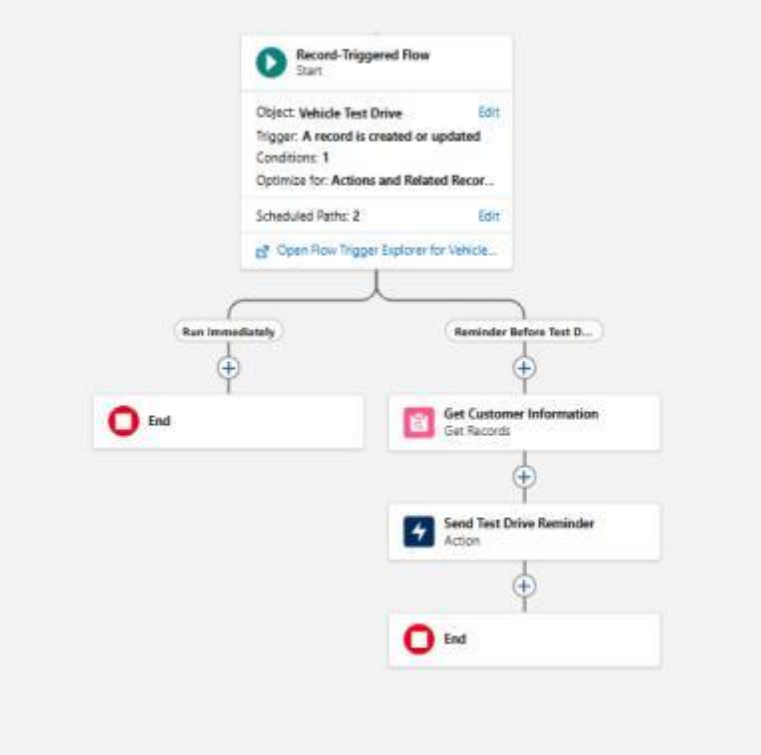


Fig 9: Test Drive Reminder Flow

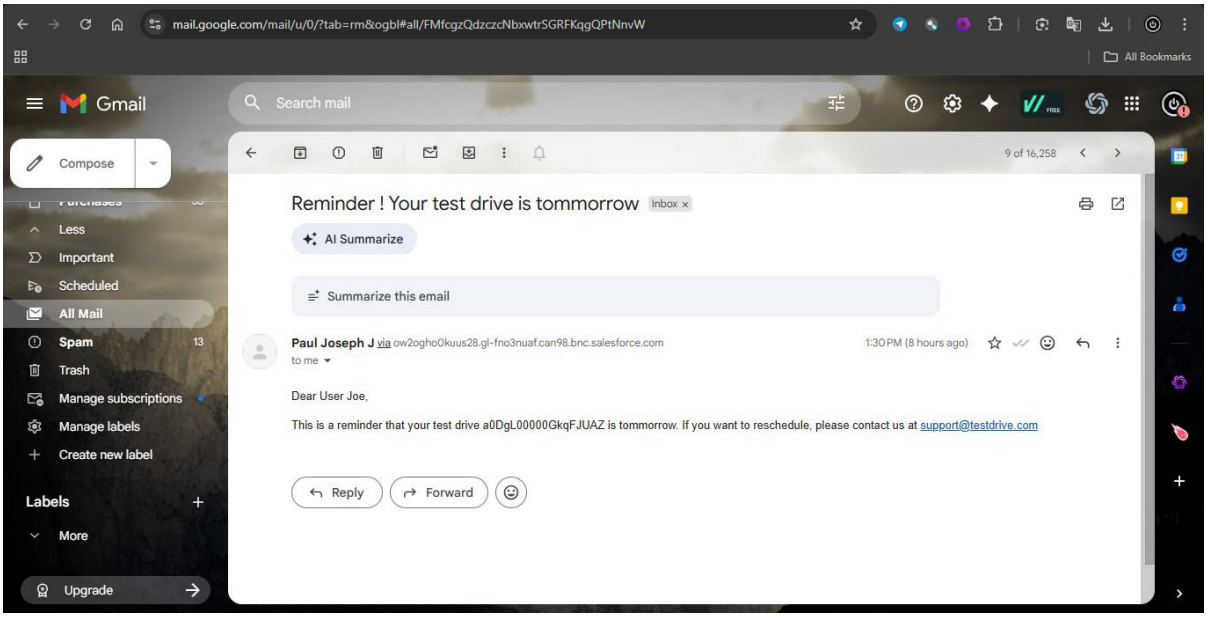


Fig 10: Test Drive Reminder Email confirmation

CONCLUSION

The WhatNext Vision Motors CRM project successfully digitalizes the vehicle dealership ecosystem by integrating smart automation, real-time tracking, and user-centric features. It reduces manual intervention, eliminates errors, and provides a unified platform for

managing customer relationships and vehicle logistics.

Future Work

Planned future enhancements include:

- Integration with Google Maps API to calculate the actual nearest dealer by distance.
- Development of a customer self-service portal using Salesforce Experience Cloud.
- Implementing analytics dashboards to gain insights into order trends, service issues, and dealer performance.
- Enhancing mobile responsiveness for on-the-go access by sales and service teams.