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

Abstract

The project "WhatNext Vision Motors" was developed as part of the Salesforce Developer journey using AgentBlazer, with a vision to build a next-generation digital platform for an innovative electric vehicle (EV) company. The objective was to create a seamless, intelligent, and scalable Salesforce-based solution to enhance customer interaction, vehicle service management, and test drive booking experiences.

By leveraging Salesforce Flow, AgentBlazer components, and declarative tools, the project delivers a fully functional CRM application tailored to the EV industry. It streamlines core operations such as customer onboarding, service appointment scheduling, feedback management, and mobility product showcasing. The platform uses automation to reduce manual intervention and ensure timely communication with customers, creating a frictionless digital experience.

The project follows a modular, low-code development approach using reusable AgentBlazer templates and configurable flows, making it rapid to build and easy to maintain. Through hands-on implementation of Salesforce best practices, the project also showcases how declarative development can empower businesses to adapt quickly in a fast-moving mobility ecosystem.

Objective

WhatsNext Vision Motors is revolutionizing its customer experience and operational efficiency with a cutting-edge Salesforce CRM implementation. The project streamlines the vehicle ordering process by auto-assigning orders to the nearest dealer based on customer location and preventing orders for out-of-stock vehicles. Automated workflows update order statuses dynamically and send scheduled email reminders for test drives. Key technical implementations include Apex triggers for stock validation, batch jobs for stock updates, and scheduled Apex for automated order processing. This initiative enhances customer satisfaction, improves order accuracy, and boosts overall operational efficiency.

Technology Description

The **WhatNext Vision Motors** project was developed using a combination of cutting-edge Salesforce technologies and low-code development tools to create an intelligent, scalable, and user-centric CRM platform. The project primarily leveraged the following technologies:

Salesforce CRM

Salesforce served as the backbone of the project, providing a robust cloud-based CRM platform to manage customer data, service workflows, and mobility product catalogs. Its modular architecture allowed for quick customization and integration of new business processes.

AgentBlazer

AgentBlazer was used as the low-code application builder within Salesforce to rapidly generate reusable modules, forms, and objects. It simplified development by offering drag-and-drop components and

pre-built business logic, significantly reducing build time and manual coding.

Salesforce Flow

Salesforce Flow was implemented for automating complex business processes such as:

- Test ride bookings
- Service scheduling
- Customer feedback collection
  It enabled declarative automation with visual workflows, making it easier to implement logic without writing Apex code.

Custom Objects & Relationships

Custom Salesforce objects were created to represent entities like Vehicles, Service Requests, Feedback, and Bookings. These objects were linked using master-detail and lookup relationships to ensure data consistency and referential integrity.

Lightning App Builder

Used to design responsive user interfaces using Lightning Components, allowing both customers and admins to interact with the system efficiently across devices.

Validation Rules & Process Builder (Optional)

Applied for data validation and automation of record updates in scenarios where Flow was not required or could be complemented.

These technologies together enabled the creation of a dynamic and future-ready CRM solution that aligns with WhatNext Vision Motors' mission to lead innovation in the electric vehicle industry.

Detailed Execution of Project Phases

1. **Salesforce Environment Setup**
   The project began with the creation and verification of a Salesforce Developer Edition account. This environment served as the primary workspace for developing and testing all application components. Proper permissions and configurations were ensured to allow full access to platform features necessary for app development.

2. **Custom Object and Tab Configuration**
   Two core custom objects—**Vehicle** and **Dealer**—were created to represent the foundational data structures of the application. Additional objects such as **Customer**, **Booking**, **Service Request**, and **Lead** were also defined to capture various operational data. Custom tabs were configured for each object to facilitate user-friendly navigation and accessibility within the Salesforce interface.

3. **Field and Relationship Modeling**
   A wide range of fields were added to each object, including text, number, picklist, checkbox, formula, and currency types. Relationships between objects were established using **Lookup** and **Master-Detail** fields (e.g., Dealer–Vehicle, Customer–Booking), enabling structured and interconnected data models. Field-level security, page layouts, and validation rules were also implemented to ensure data consistency and appropriate access controls.

4. **Lightning App Development**
   A dedicated **Lightning Application** named *Vision Motors* was created to unify all relevant components. It provided a customized workspace for users by integrating key tabs, objects,

and utility features under a single app interface, tailored to the needs of both sales and service users.

5. **Process Automation Using Flows**
   Automation was a critical aspect of this project. Multiple **flows** were designed using Flow Builder—including screen flows for user interaction and record-triggered flows for backend automation. These flows handled operations such as automatic updates of related records, sending notifications, and conditional record creation based on user actions or data changes.

6. **Custom Apex Development and Batch Processing**
   Where declarative tools were insufficient, custom **Apex Classes** and **Triggers** were developed to implement advanced business logic. Additionally, **Batch Apex Jobs** were written to handle scheduled processing of large datasets, such as bulk updating vehicle records, generating dealer performance reports, and monitoring service requests at scale.

7. **User Interface and Experience Optimization**
   Efforts were made to enhance the overall usability of the application. This included configuring **compact layouts**, creating **custom record pages**, and utilizing **dynamic forms** and **visibility rules** to streamline the user interface for different roles and data contexts.

8. **Testing and Validation**
   All components—objects, flows, triggers, and batch jobs—underwent rigorous testing within the developer environment. Unit testing was performed for Apex code, and functional testing was conducted for flows and relationships to ensure expected behavior across various use cases.

Project Explanation with Real-World Use Case

To design and implement a scalable, cloud-based solution using Salesforce CRM to manage vehicle inventory, dealership operations, customer bookings, and service workflows for a multi-dealer automobile business.

Real-World Scenario

Imagine *Vision Motors*, a mid-sized automobile company expanding its operations across multiple cities in India. The company deals with multiple car brands and maintains partnerships with several dealers. As the business grows, manual tracking of vehicle inventory, dealer data, customer bookings, and service requests becomes inefficient, error-prone, and disconnected.

To overcome these challenges, *Vision Motors* requires an integrated digital system that allows:

- Centralized management of all vehicles and dealers
- Streamlined booking and customer service workflows
- Real-time updates and automation for sales and support processes
- A user-friendly app interface for both internal staff and external stakeholders

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Solution Overview

Using Salesforce's low-code platform, a fully functional **Dealership Management Application** was developed with the following modules:

1. Vehicle and Dealer Management

- Each vehicle is recorded in the **Vehicle** object with attributes such as brand, model, fuel type, price, and availability.

- Dealers are managed through the **Dealer** object, storing contact details, assigned inventory, and location-based data.
- A **relationship** is established where each dealer can be linked to multiple vehicles using a master-detail field.

Real-life example: A Tata Motors dealer in Gwalior can log in and view only their assigned cars, update vehicle availability, or add new stock in real-time.

2. Customer Booking and Service Request

- The **Booking** object allows customers to book test drives or purchases, directly linked to vehicles and dealers.
- The **Service Request** object enables users to schedule servicing, with options to track progress and assign to service teams.

Example: A customer interested in a Hyundai Venue books a test drive online, which triggers a notification to the corresponding dealer, updates the vehicle status, and logs a lead automatically.

3. Automation with Salesforce Flows

- **Screen Flows** guide users through booking or service processes with user-friendly forms.
- **Record-Triggered Flows** automate backend operations like sending confirmation emails, updating inventory, and generating follow-up tasks.

Example: Once a booking is confirmed, the system automatically assigns a salesperson, sends a confirmation email to the customer, and marks the vehicle as reserved.

4. Custom Apex Logic and Batch Jobs

- Advanced business rules—like bulk updates on inventory, service history reports, or dealer performance summaries—are implemented using **Apex Triggers** and **Batch Apex Jobs**.

Example: A nightly batch job checks for all vehicles with pending service requests and emails reminders to the dealer's service manager.

5. Lightning App and Enhanced UI

- The **Vision Motors Lightning App** consolidates all modules into a single interface.
- Custom tabs, record pages, and filtered views ensure a seamless experience for sales executives, service staff, and administrators.

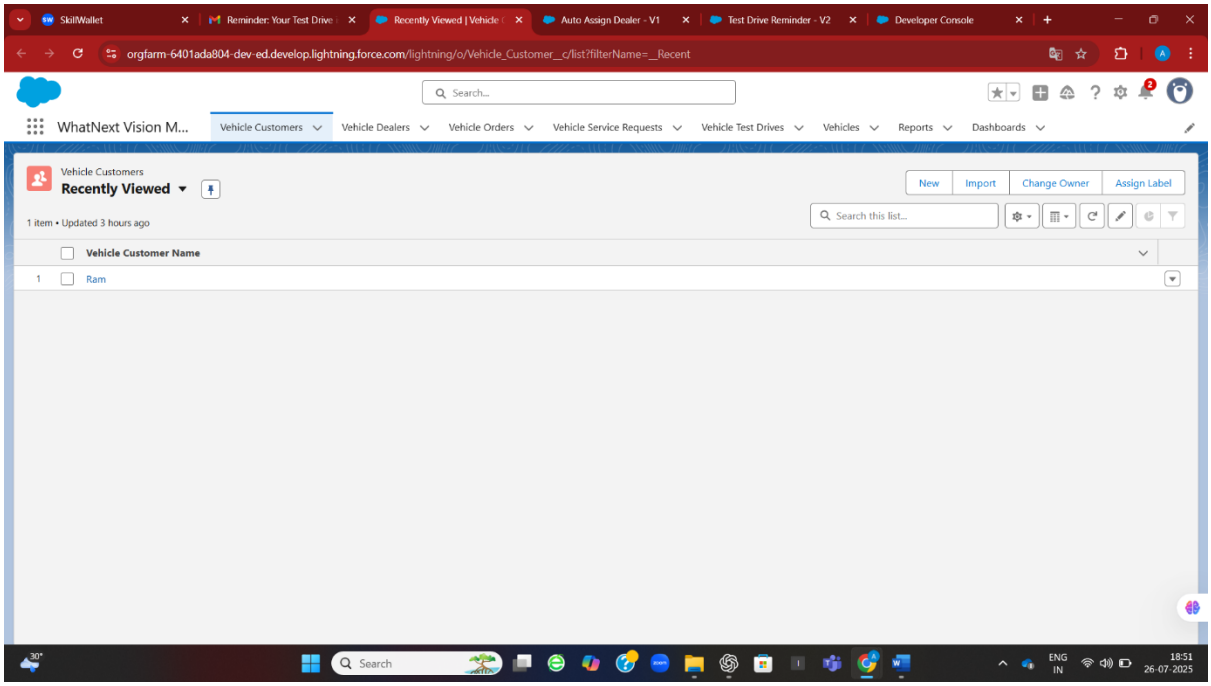
Example: A sales executive logs in to the Lightning App dashboard, sees their upcoming test drive schedule, customer leads, and available vehicles in one view.

Outcome and Benefits

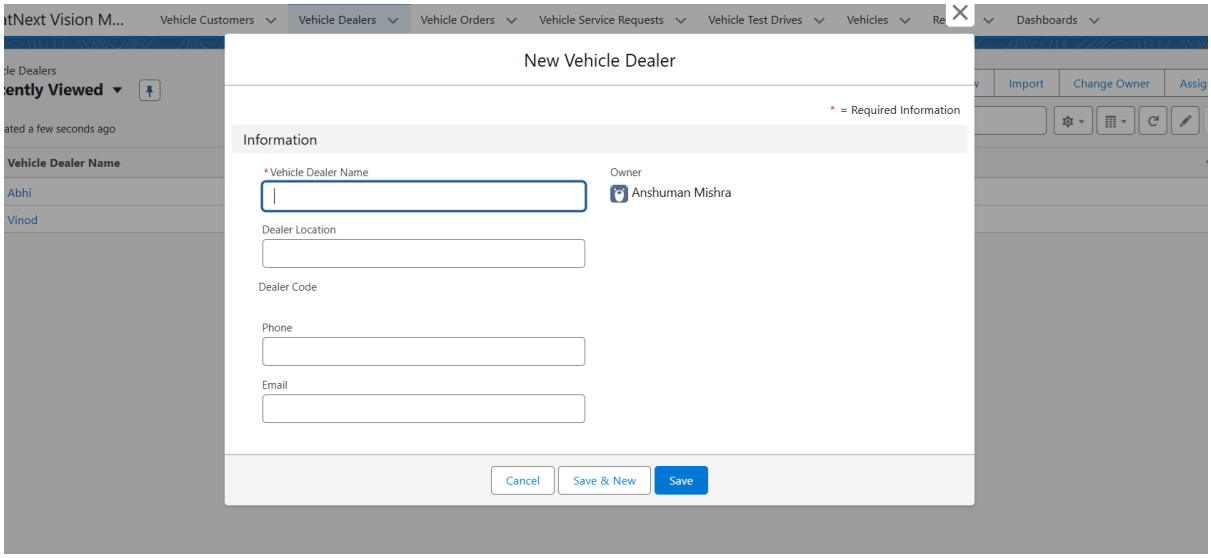
- **Increased operational efficiency** through automation and data centralization.
- **Better customer experience** with timely responses and booking confirmations.
- **Improved visibility** for administrators to track dealership performance, sales trends, and service metrics.
- **Scalability** that allows easy addition of new dealers, vehicle models, or business processes.

Screenshots

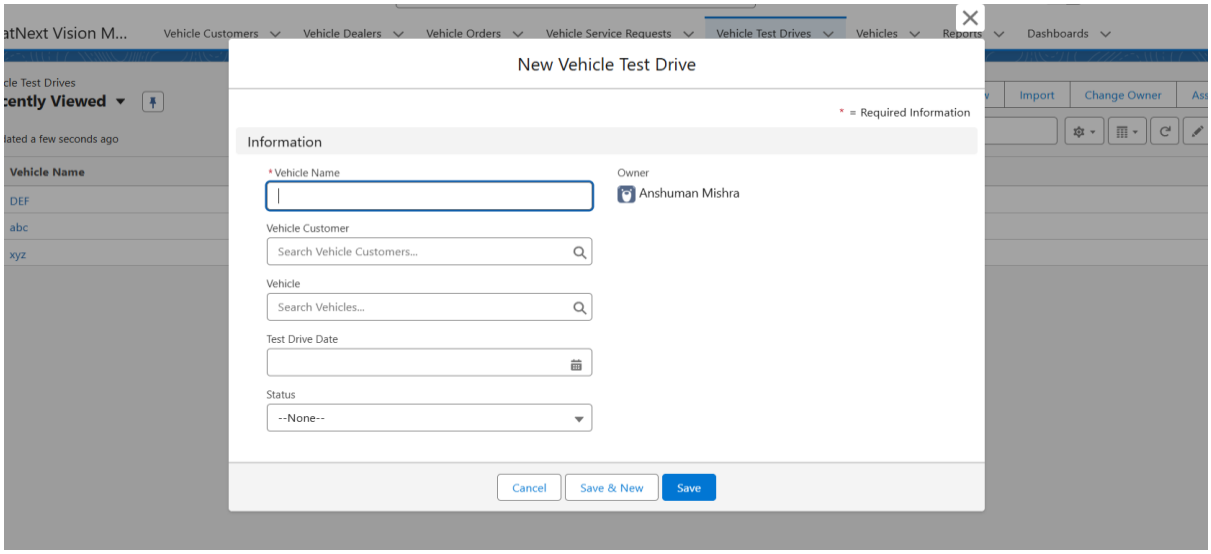
Homepage/Dashboard of the app



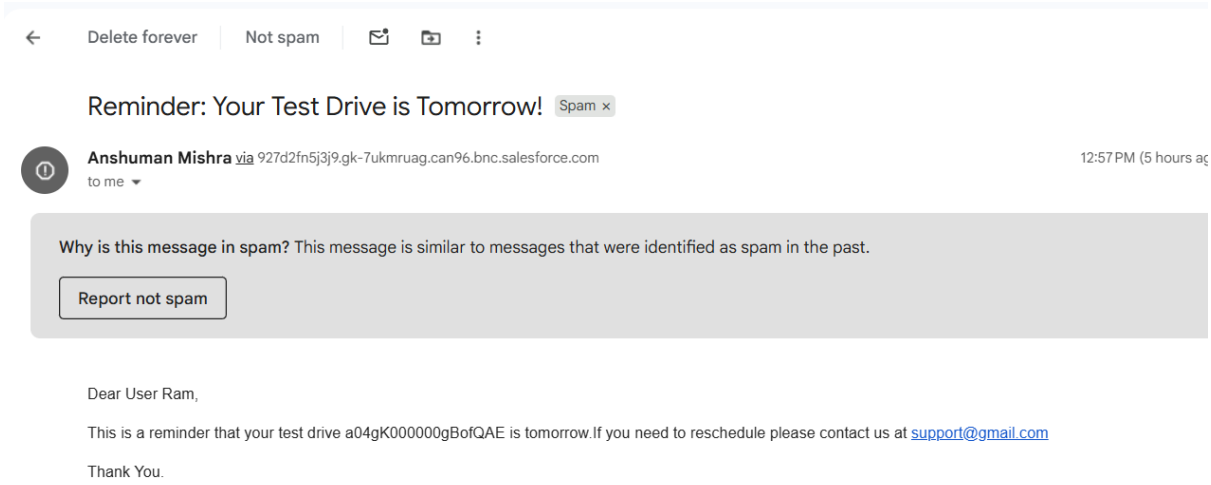
New Vehicle Dealer form



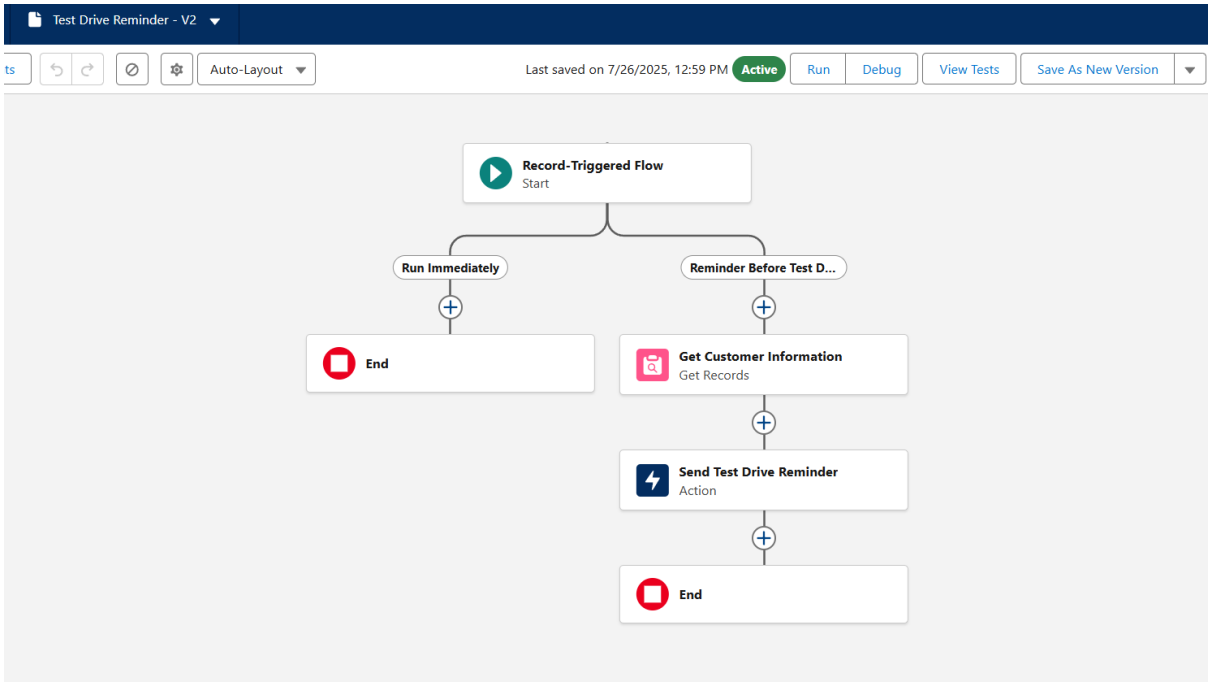
Test Ride Booking form



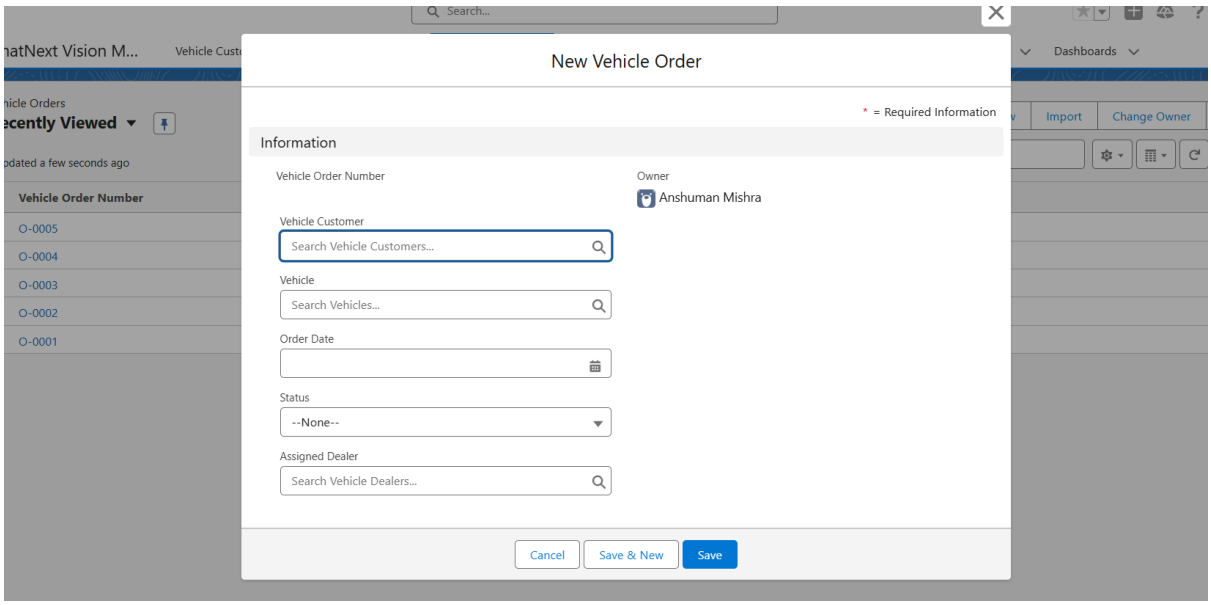
Test Drive Reminder Mail



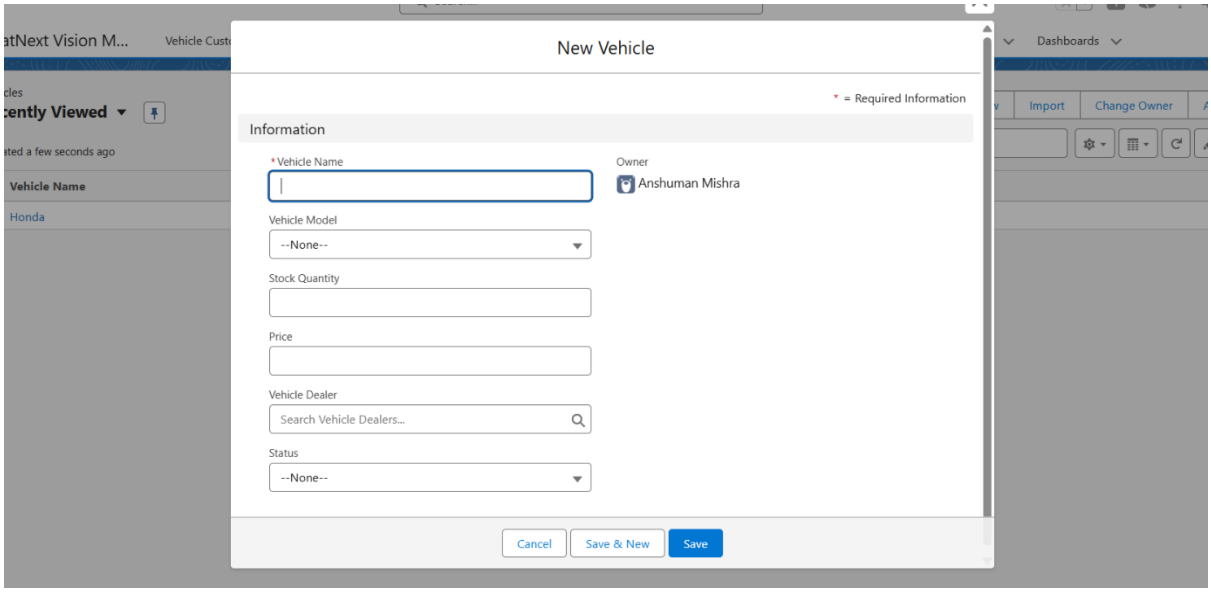
Test Drive Reminder Flow



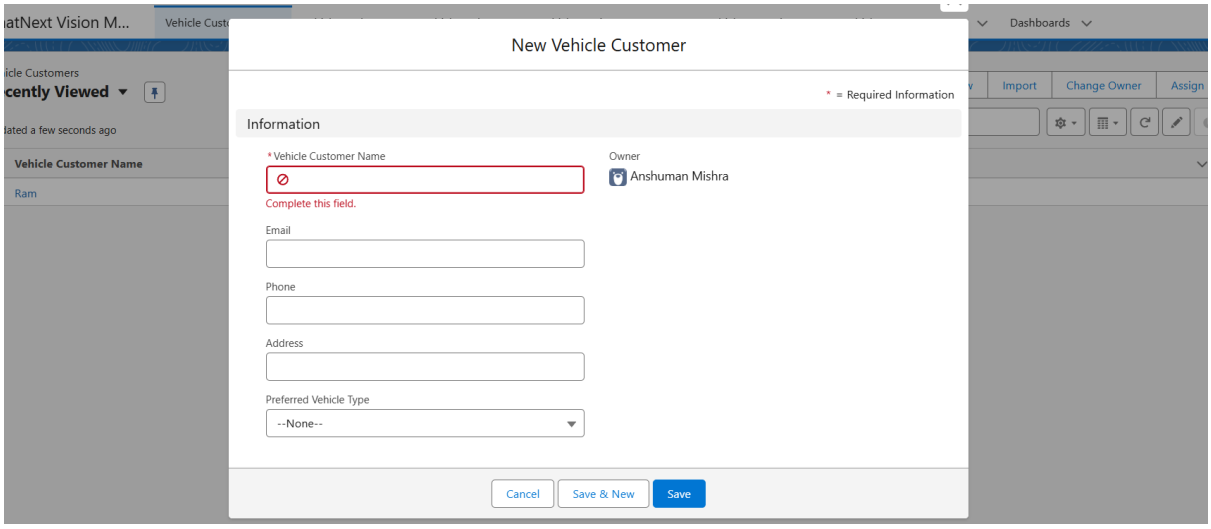
New Vehicle Order Form



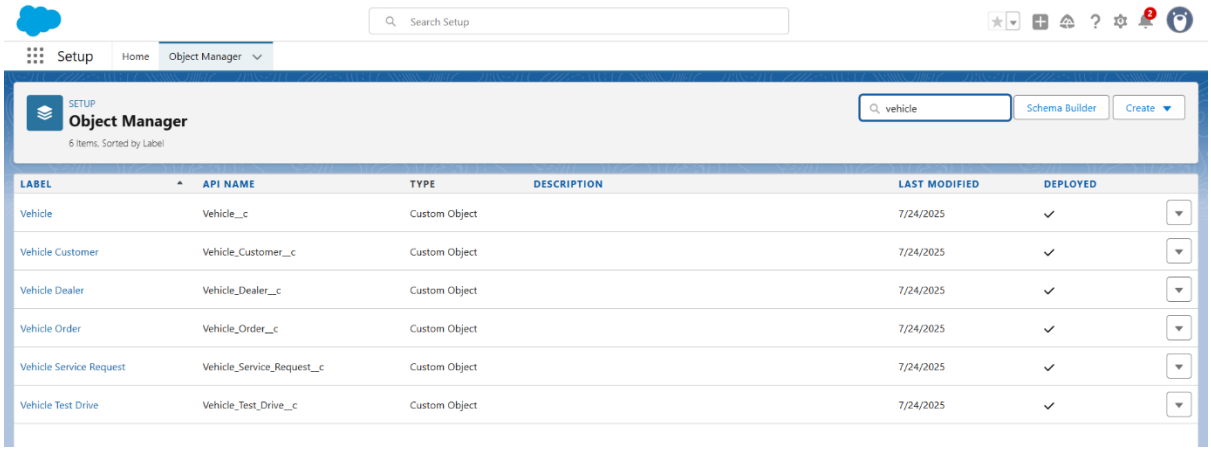
New Vehicle Form



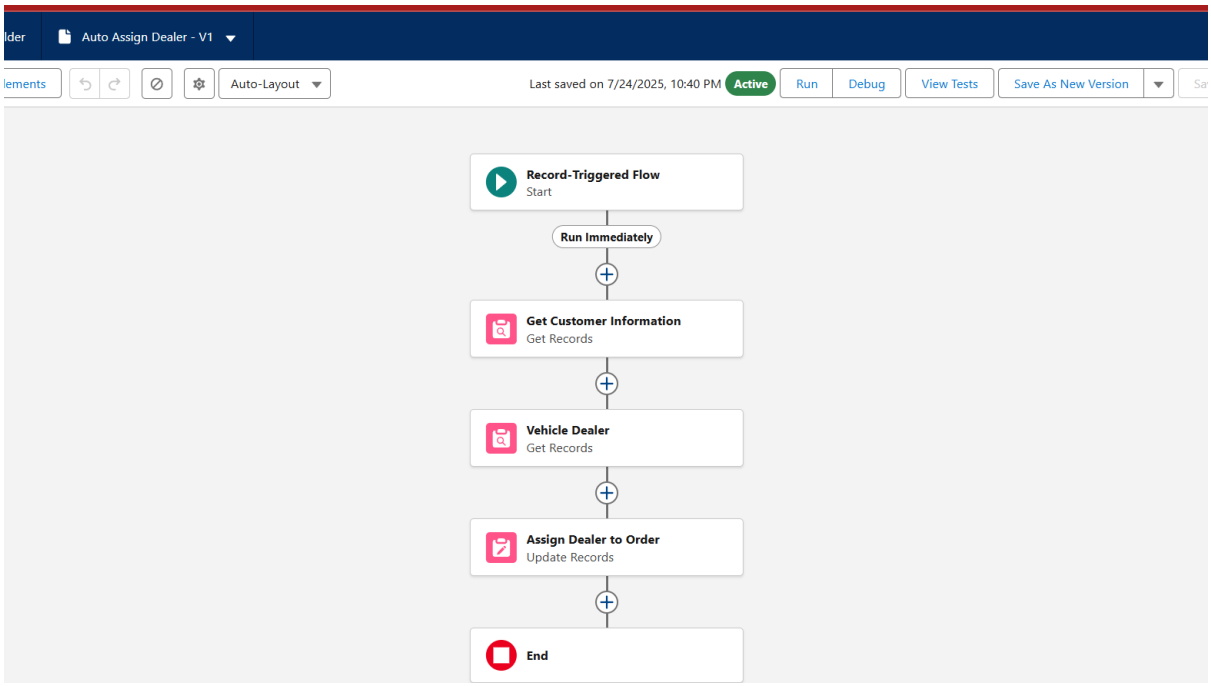
New Vehicle Customer Form



Custom Objects



Auto Assign Dealer Flow



Conclusion

The **WhatNext Vision Motors** project effectively showcases how Salesforce and AgentBlazer can be leveraged to create an intelligent, scalable, and low-code CRM platform tailored for the electric vehicle (EV) industry. The project simulates a real-world business scenario where customer experience, service efficiency, and operational automation are critical to success.

By integrating features like test ride booking, service request automation, and feedback collection, the project ensures seamless user journeys and proactive customer engagement. The use of Salesforce Flow and AgentBlazer templates allowed for rapid development and error-free automation, reflecting the power of declarative development in modern enterprise applications.

This project not only enhanced understanding of CRM architecture and Salesforce tools but also demonstrated how to solve real-world business problems using minimal code and maximum functionality.

Future Scope

The current version of the project lays a strong foundation, but it also opens doors for further enhancements and real-world application. Potential future developments include:

- **Third-party Integrations**
  Integrating with services like Google Maps for dealership locations or WhatsApp for real-time service reminders.
- **Mobile App Experience**
  Developing a Salesforce mobile-first version to allow customers to book rides or raise service requests on the go.
- **AI & Analytics**
  Adding Einstein Analytics for predictive maintenance, customer behavior insights, and service demand forecasting.

- **Role-based Access Control**
  Introducing profiles for Sales Teams, Technicians, and Managers with customized dashboards and permissions.
- **Community Portals**
  Creating Salesforce Experience Cloud portals for customers to manage their bookings, view service history, and give feedback.
- **Inventory & Delivery Tracking**
  Adding modules for managing EV stock inventory, delivery schedules, and invoice generation.

These enhancements would transform the application into a complete digital ecosystem for any modern electric vehicle brand aiming to scale efficiently while delivering outstanding customer experiences.