

WhatNext Vision Motors: Shaping the Future of Mobility

with Innovation and Excellence

ABSTRACT:

“Next Vision Motors” can be abstracted as a company focused on transforming transportation through innovative and sustainable solutions. Their vision revolves around creating a future where mobility is just efficient and convenient, but also environmentally conscious and enhances overall well-being. They are likely to achieve this through advancements in electric vehicles, autonomous driving, connectivity, and smart infrastructure.

Here's a more detailed breakdown of the abstraction:

Core Focus:

The core focus is on the future of mobility, going beyond traditional transportation and incorporating elements like electric vehicles, autonomous driving, and connected car technologies.

Innovation:

“Innovation” implies a commitment to pushing the boundaries of what’s possible in vehicle design, technology, and user experience. This could include exploring new materials, propulsion systems, and interaction methods.

Excellence:

“Excellence” suggests a dedication to quality, performance, and reliability in all aspects of their products and services. This could involve rigorous testing, advanced engineering, and a focus on customer satisfaction.

OBJECTIVE

At WhatNext Vision Motors, our objective is to lead the transformation of the mobility landscape by developing forward-thinking, sustainable, and technologically advanced transportation solutions.

- **Lead the future of mobility:** with cutting-edge, sustainable transportation solutions
- **Foster innovation:** through advanced technologies and continuous R&D
- **Promote sustainability:** In design, production, and performance
- **Deliver excellence:** In quality, safety, and customer satisfaction
- **Enable smart, connected mobility:** Experiences for the modern world
- **Drive transformation:** in the transportation industry with forward-thinking strategies

TECHNOLOGY DESCRIPTION

Salesforce:

Salesforce is a cloud-based Customer Relationship Management (CRM) platform that support the vision of smart, connected mobility, whatNext Vision Motors leverages Salesforce's powerful cloud platform. Here's how we structure and develop the project using Salesforce.

Custom Objects:

Objects in salesforce are like tables in a database. Custom Objects are created to store specific data.

Example:

- Vehicle__c – Stores specs, battery status, VN, service history
- Customer__c – Linked with accounts, stores vehicle ownership, preferences
- Service_Request__c – Tracks maintenance, repair, and warranty requests

Tabs:

Tabs are used to display object data in the salesforce UI.

Example: A tab for Vehicle__c allows users to easily view and manage vehicles

Apps:

Lightning components: Create dynamic dashboards for telematics and vehicle health.

Example: an app WhatNext Vision Motors which gives the detailed description about the vehicles.

Profiles:

Profiles define what a user can see, do and edit in Salesforce. It controls object permissions, field access, and more.

Flows:

Flows automate service scheduling, notifications, and onboarding.

Process Builder/Flow Builder:

Trigger updates when vehicles need maintenance or software updates

Apex Triggers:

Custom logic for real-time alerts or mileage-based actions

Apex Classes:

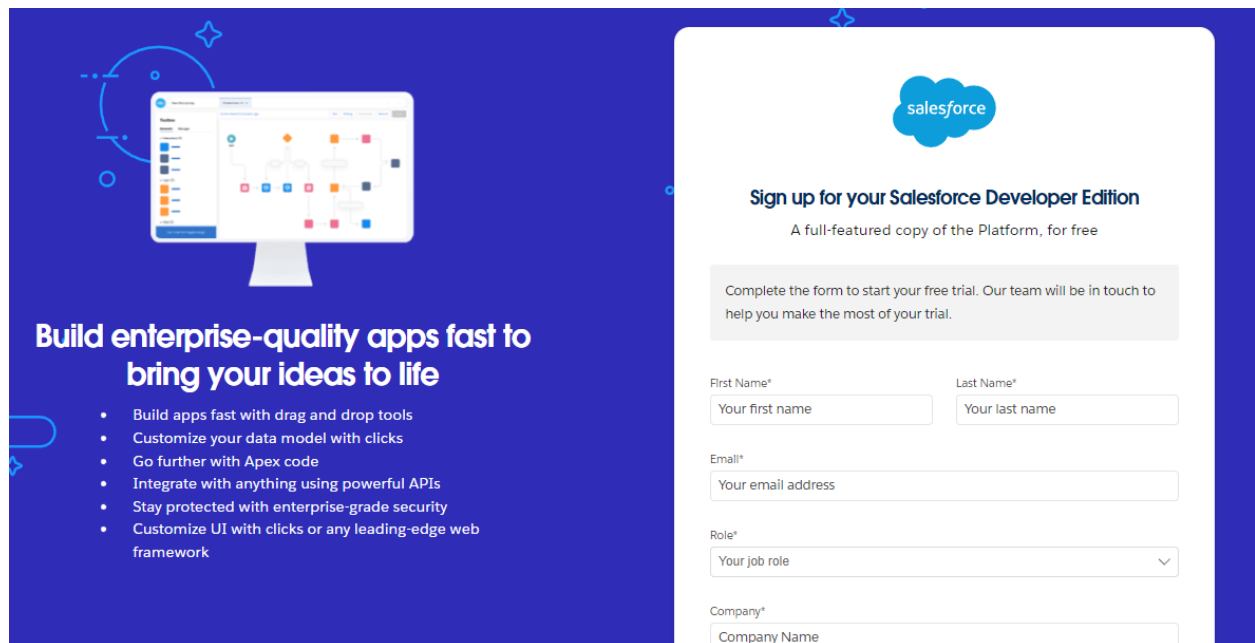
Apex allows us to implement advanced business logic that can't be handled with declarative tools like Flows or Process Builder.

Example: VehicleOrderTriggerHandler

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, password set, and access was granted to the salesforce



2. Custom Objects:

- **Vehicle__c** – Stores vehicle details
- **Vehicle_Dealer__c** - Stores authorized dealer info
- **Vehicle_Customer__c** - Stores customer details
- **Vehicle_Order__c** - Tracks vehicle purchases
- **Vehicle_Test_Drive__c** - Tracks test drive bookings
- **Vehicle_Service_Request__c** - Tracks vehicle servicing requests

3.Creating the Lightning App:

- A custom Lightning App named WhatNext Vision Motors was created.
- Included tab: Object tab named Vehicle
- Assigned to the System Administrator profile.

4. Field & Relationship Creation:

1. Vehicle__c:

- Vehicle_Name__c (Text)
- Vehicle_Model__c (Picklist: Sedan, SUV, EV, etc.)
- Stock_Quantity__c (Number)
- Price__c (Currency)
- Dealer__c (Lookup to Dealer__c)
- Status__c (Picklist: Available, Out of Stock, Discontinued)

2. Vehicle_Dealer__c:

- Dealer_Name__c (Text)
- Dealer_Location__c (Text)
- Dealer_Code__c (Auto Number)
- Email__c (Email)
- Phone__c (Phone)

3. Vehicle_Order__c :

- Customer__c (Lookup to Customer__c)
- Vehicle__c (Lookup to Vehicle__c)
- Order_Date__c (Date)
- Status__c (Picklist: Pending, Confirmed, Delivered, Canceled)

4. Vehicle_Customer__c:

- Customer_Name__c (Text)
- Email__c (Email)
- Phone__c (Phone)
- Address__c (Text)
- Preferred_Vehicle_Type__c (Picklist: Sedan, SUV, EV, etc.)

5. Vehicle_Test_Drive__c :

- Customer__c (Lookup to Customer__c)
- Vehicle__c (Lookup to Vehicle__c)

- Test_Drive_Date__c (Date)
- Status__c (Picklist: Scheduled, Completed, Canceled)

6. Vehicle_Service_Request__c:

- Customer__c (Lookup to Customer__c)
- Vehicle__c (Lookup to Vehicle__c)
- Service_Date__c (Date)
- Issue_Description__c (Text)
- Status__c (Picklist: Requested, In Progress, Completed)

5. Flow & Record-Flow Creation:

- Create a flow named Get Customer Information, Get Nearest Dealer
- Create a update records flow named Assign Dealer to Order

6. Apex and Trigger Batch jobs:

- Created a apex class named VehicleOrderTriggerHandler
- Created a apex trigger named VehicleOrderTrigger
- Again created a apex class named VehicleOrderBatchScheduler
- Save all the apex classes and triggers

PROJECT EXPLANATION WITH REAL-WORLD EXAMPLES

Business Need:

WhatNext Vision Motors allows customers to book test drives online. The system must:

- Check if a vehicle is available on the requested date/time,
- Create a Test_Drive__c record
- Notify the assigned sales representative
- Prevent double-booking the same vehicle

Custom Objects:

- Test_Drive__c
- Vehicle__c
- Customer__c

Apex class:

TestDriveScheduler.cls

Lightning component integration:

When a customer selects a date and vehicle on the portal, this class is called to schedule the test drive

- **Email Notification Trigger**

When a customer schedule a test drive then the customer receive a email that “Your test drive is tomorrow. If you need to reschedule please contact us”.

SCREENSHOTS

SETUP
New Custom Object

Custom Object Definition Edit [Save] [Save & New] [Cancel]

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports.

Label [Text] Example: Account

Plural Label [Text] Example: Accounts

Starts with vowel sound ☐

The Object Name is used when referencing the object via the API.

Object Name [Text] Example: Account

Description [Text]

Context-Sensitive Help Setting ☒ Open the standard Salesforce.com Help & Training window ☐ Open a window using a Visualforce page

Content Name [None]

Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is required.

Record Name [Text] Example: Account Name

Data Type [Text] Warning: If you plan to insert a high volume of records in this object, via the API for example, use the Text data type.

FIG: Custom object

Setup Home Object Manager

Search tabs

User Interface

Rename Tabs and Labels

Tabs

Didn't find what you're looking for? Try using Global Search.

SETUP
Tabs

Custom Tabs

You can create new custom tabs to extend Salesforce functionality or to build new application functionality. Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed Visualforce pages. Lightning Component tabs allow you to add Lightning components to allow you to add Lightning Pages to Lightning Experience and the mobile app.

Custom Object Tabs [New] What Is This?

No Custom Object Tabs have been defined

Web Tabs [New] What Is This?

No Web Tabs have been defined

Visualforce Tabs [New] What Is This?

No Visualforce Tabs have been defined

Lightning Component Tabs [New] What Is This?

No Lightning component tabs have been defined

Lightning Page Tabs [New] What Is This?

FIG: Custom Tabs

Vehicle
New Custom Field

Step 2: Enter the details

Field Label: Vehicle Model

Values: ☐ Use global picklist value set
☒ Enter values, with each value separated by a new line

Sedan
SUV
EV
etc

☐ Display values alphabetically, not in the order entered
☐ Use first value as default value
☒ Restricted picklist to the values defined in the value set

Field Name: Vehicle_Model

Description:

Previous Next Cancel

FIG: Custom Field

SETUP > OBJECT MANAGER
Vehicle

Vehicle
New Custom Field

Step 1: Choose the field type

Specify the type of information that the custom field will contain.

Data Type

☐ None Selected Select one of the data types below

☐ Auto Number A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.

☐ Formula A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.

☐ Roll-Up Summary A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.

☒ Lookup Relationship Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.

☐ Master-Detail Relationship Creates a special type of parent-child relationship between this object (the child, or "detail") and another object (the parent, or "master") where:

- The relationship field is required on all detail records.
- The ownership and sharing of a detail record are determined by the master record.
- When a user deletes the master record, all detail records are deleted.

Next Cancel

FIG: Custom Field type

Vehicle Order
VC-0003

* = Required Information

Vehicle Order Name: VC-0003

Owner: Abdul Trainer

Vehicle Customer: test KHIT 123434

Vehicle: 1erwe

Order Date: 21/02/2025

Status: Pending

Created By: Abdul Trainer, 13/02/2025, 5:34 am

By: Abdul Trainer, 13/02/2025, 5:41 am

We hit a snag.

Review the errors on this page.

- This vehicle is out of stock. Order cannot be placed.

Cancel Save

FIG: Vehicle Order

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Step 2: Enter the details Step 2 of 4

Previous **Next** Cancel

Field Label: Stock Quantity

Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.99".

Length: 18 Number of digits to the left of the decimal point

Decimal Places: 0 Number of digits to the right of the decimal point

Field Name: Stock_Quantity

Description:

Help Text:

FIG: Enter Details

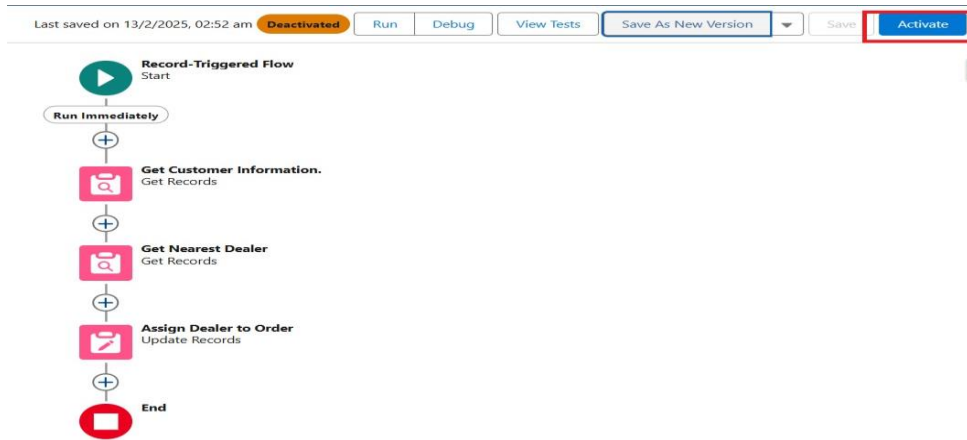


FIG: Get Records

New Lightning App

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

* App Name ⓘ
Name your app...

* Developer Name ⓘ
Enter a developer name...

Description ⓘ
Enter a description...

App Branding

Image ⓘ
Upload

Primary Color Hex Value ⓘ
#0070C2

Org Theme Options
☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview

Next

FIG: Lightning App

Send Email

* Label
Send Test Drive Reminder.

* API Name ⓘ
Send_Test_Drive_Reminder

Description

Send Email ⓘ
emailSimple-emailSimple

FIG: Send Email

CONCLUSION

The WhatNext Vision Motors project demonstrates how innovative automotive companies can leverage Salesforce to transform customer experiences, streamline operations, and shape the future of mobility. By utilizing Salesforce features such as custom objects, Apex classes, automation tools like flows and process builder, and dynamic Lightning components, the project showcases how digital transformation in the automotive industry can be both scalable and customer-centric.

Through this implementation, WhatNext Vision Motors can efficiently manage vehicle inventory, customer test drives, service request, and post-sales engagement—all within a unified CRM environment. The integration of business logic via Apex and real-time user interaction through declarative tools enables teams to make smarter decisions and respond faster to evolving customer needs.

Ultimately, this project highlights how Salesforce empowers organizations like WhatNext Vision Motors to deliver excellence, drive innovation, and build strong, lasting relationships with their customers. As mobility evolves, platforms like

salesforce will be the digital foundation enabling automotive leaders to stay ahead of the curve- turning vision into action.

FUTURE SCOPE:

1. Integration with IOT and vehicle telematics:

By connecting real-time vehicle data to salesforce using IOT platforms, service reminders, predictive maintenance, and remote diagnostics can be automated, enhancing customer satisfaction and operational efficiency.

2. Advanced Analytics with Einstein AI

Leveraging salesforce Einstein for predictive analytics and customer insights can help identify sales trends, optimize marketing strategies, and personalise customer engagement.

3. Mobile App for Dealers and Customers:

A custom salesforce mobile app can empower dealers to manage test drives, leads, and follow-ups on the go. Similarly, customers can schedule services, track vehicle deliveries, and interact with support team directly.

4. Marketing Automation:

Using tools like Marketing cloud or pardot, WhatNext Vision Motors can automate personalized campaigns, nurture leads, and improve conversion.

5. Enhanced Security and Compliance Features:

As customer data increases, features like field-level encryption, audit trails, and GDPR/DPDP compliance modules can be implemented to protect user trust.