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**BSIT 4-1**

**PUP-STC**

## **Guidelines for Salesforce Project Documentation And Demo Video Presentation**

### **Project Overview:**

WhatsNext Vision Motors is implementing a Salesforce project to enhance customer experience. The system will automatically suggest the nearest dealer to customers based on their address or location, improving convenience during the ordering process. It also prevents customers from ordering vehicles that are out of stock, reducing confusion and ensuring accurate order creation.

### **Objectives:**

The project aims to improve customer satisfaction, reduce errors, and increase operational efficiency by minimizing manual tasks. The CRM improves customer handling, automated dealer matching, streamlines booking processes, and offers real-time insights into stock levels.

### **Phase 1:Requirement Analysis & Planning**

#### **Understanding Business Requirements:**

- Automatically matching customers with their closest dealer.
- Blocking order creation when a vehicle is unavailable or out of stock.
- Maintaining organized records for vehicles, test drives, customers, orders, dealers, and service requests.
- Sending email notifications to remind customers of their upcoming test drives.
- Ensuring order status accuracy through automated scheduled jobs and batch processes.
- Equipping administrators with dashboards and reports for better business insights.

## **Defining Project Scope and Objectives:**

- Created six custom objects and linked them together.
- Added automation using Flows and Apex class and Apex trigger.
- Set up validation rules and stock checks.
- Built a Lightning App to help users navigate the system.
- Performed testing and deployed the final setup.

## **Design Data Model and Security Model**

### **Data Model Includes:**

- **Vehicle\_c** – contains vehicle details.
- **Vehicle\_Dealer\_c** – contains information about authorized dealers.
- **Vehicle\_Customer\_c** – contains customer profile records.
- **Vehicle\_Order\_c** – manages vehicle purchase orders.
- **Vehicle\_Test\_Drive\_c** – manages test drive activities.
- **Vehicle\_Service\_Request\_c** – records vehicle service requests.

### **Security Model Includes:**

- Set up profiles, roles, and permission sets.
- Configured sharing rules for object and record access.
- Enabled field history tracking for key fields like stock, status, and email.

## **Stakeholders Mapping**

- **System Admin:** Manages the whole CRM system.
- **Dealers:** Receives orders and delivers the vehicles.
- **Customers:** Benefit from faster and easier service.

## **Execution RoadMap.**

- I. Data Modeling → Creation of custom objects
- II. Backend Automation → Triggers, batch jobs
- III. UI Development → Create Lightning App and Page Layouts
- IV. Testing → Unit tests, flow tests, process validation
- V. Deployment → Change Set deployment
- VI. Documentation

## **Phase 2:Salesforce Development - Backend & Configurations**

### **Setup environment & DevOps workflow**

- Set up a Salesforce Developer Org to create and test custom objects, fields, flows, and Apex code.
- Used Change Sets to manage and deploy changes in a controlled way.
- Worked in the Developer Console to write, debug, and test Apex classes and triggers.
- Created a smooth DevOps workflow for version control, avoiding conflicts, and organized testing and deployment.

### **Customization of Objects, Fields, Validation Rules, Automation (Workflow Rules, Process Builder, Flows, Approval Process).**

#### **Custom Objects Created:**

- Vehicle\_c
- Vehicle\_Dealer\_c
- Vehicle\_Customer\_c
- Vehicle\_Order\_c
- Vehicle\_Test\_Drive\_c
- Vehicle\_Service\_Request\_c

The screenshot shows the Salesforce Object Manager page. At the top, there's a navigation bar with links for Setup, Home, and Object Manager. A search bar is present at the top right. Below the header, the title "Object Manager" is displayed, followed by a sub-header "6 Items. Sorted by Label". A search bar with the query "vehi" and buttons for Schema Builder and Create are also visible. The main content area is a table listing six custom objects:

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Vehicle	Vehicle_c	Custom Object		11/26/2025	✓
Vehicle Customer	Vehicle_Customer_c	Custom Object		11/26/2025	✓
Vehicle Dealer	Vehicle_Dealer_c	Custom Object		11/26/2025	✓
Vehicle Order	Vehicle_Order_c	Custom Object		11/26/2025	✓
Vehicle Service Request	Vehicle_Service_Request_c	Custom Object		11/26/2025	✓
Vehicle Test Drive	Vehicle_Test_Drive_c	Custom Object		11/26/2025	✓

**Each object contains fields and relationships such as:**

- Stock\_Quantity\_\_c
- Status\_\_c
- Dealer\_Location\_\_c
- Preferred\_Vehicle\_Type\_\_c
- Order\_Date\_\_c
- Test\_Drive\_Date\_\_c

**Vehicle | Salesforce**

orgfarm-c0add5seed-dev-ed.develop.my.salesforce-setup.com/lightning/setup/ObjectManager/01lgL000003CVRJ/FieldsAndRelationships/view

Setup Home Object Manager

Vehicle

Fields & Relationships

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Price	Price__c	Currency(18, 0)		
Status	Status__c	Picklist		
Stock Quantity	Stock_Quantity__c	Number(18, 0)		
Vehicle Dealer	Vehicle_Dealer__c	Lookup(Vehicle Dealer)		✓
Vehicle Model	Vehicle_Model__c	Picklist		
Vehicle Name	Name	Text(80)		✓

**Vehicle Customer | Salesforce**

orgfarm-c0add5seed-dev-ed.develop.my.salesforce-setup.com/lightning/setup/ObjectManager/01lgL000003CVkf/FieldsAndRelationships/view

Setup Home Object Manager

Vehicle Customer

Fields & Relationships

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text(60)		
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		
Preferred Vehicle Type	Preferred__c	Picklist		
Vehicle Customer Name	Name	Text(80)		✓

Vehicle Dealer | Salesforce

orgfarm-c0add5seed-dev-ed.develop.my.salesforce-setup.com/lightning/setup/ObjectManager/01lgL000003CVW9/FieldsAndRelationships/view

Setup Home Object Manager

SETUP > OBJECT MANAGER  
Vehicle Dealer

**Fields & Relationships**  
8 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Dealer Code	Dealer_Code__c	Auto Number		
Dealer Location	Dealer_Location__c	Text(60)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		
Vehicle Dealer Name	Name	Text(80)		✓

Vehicle Order | Salesforce

orgfarm-c0add5seed-dev-ed.develop.my.salesforce-setup.com/lightning/setup/ObjectManager/01lgL000003CVmH/FieldsAndRelationships/view

Setup Home Object Manager

SETUP > OBJECT MANAGER  
Vehicle Order

**Fields & Relationships**  
9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Assigned Dealer	Assigned_Dealer__c	Lookup(Vehicle Dealer)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Order Date	Order_Date__c	Date		
Owner	OwnerId	Lookup(User,Group)		✓
Status	Status__c	Picklist		
Vehicle	Vehicle__c	Lookup(Vehicle)		✓
Vehicle Customer	Vehicle_Customer__c	Lookup(Vehicle Customer)		✓
Vehicle Order Number	Name	Auto Number		✓

**Vehicle Service Request | Sales** + orgfarm-c0add5seed-dev-ed.develop.my.salesforce-setup.com/lightning/setup/ObjectManager/01lgL000003CW2P/FieldsAndRelationships/view

Setup Home Object Manager

Search Setup

SETUP > OBJECT MANAGER

### Vehicle Service Request

Details Fields & Relationships

Page Layouts Lightning Record Pages Buttons, Links, and Actions Compact Layouts Field Sets Object Limits Record Types Related Lookup Filters Search Layouts List View Button Layout Restriction Rules Scoping Rules Object Access Triggers Flow Triggers

Fields & Relationships 9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Issue Description	Issue_Description__c	Text(60)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)	✓	
Service Date	Service_Date__c	Date		
Status	Status__c	Picklist		
Vehicle	Vehicle__c	Lookup(Vehicle)	✓	
Vehicle Customer	Vehicle_Customer__c	Lookup(Vehicle Customer)	✓	
Vehicle Service Request Name	Name	Text(80)	✓	

Quick Find New Deleted Fields Field Dependencies Set History Tracking

<https://orgfarm-c0add5seed-dev-ed.develop.my.salesforce-setup.com/one/one.app#/setup/ObjectManager/01lgL000003CVnu/FieldsAndRelationships/view>

**Vehicle Test Drive | Salesforce** + orgfarm-c0add5seed-dev-ed.develop.my.salesforce-setup.com/lightning/setup/ObjectManager/01lgL000003CVnu/FieldsAndRelationships/view

Setup Home Object Manager

Search Setup

SETUP > OBJECT MANAGER

### Vehicle Test Drive

Details Fields & Relationships

Page Layouts Lightning Record Pages Buttons, Links, and Actions Compact Layouts Field Sets Object Limits Record Types Related Lookup Filters Search Layouts List View Button Layout Restriction Rules Scoping Rules Object Access Triggers Flow Triggers

Fields & Relationships 8 Items, Sorted by Field Label

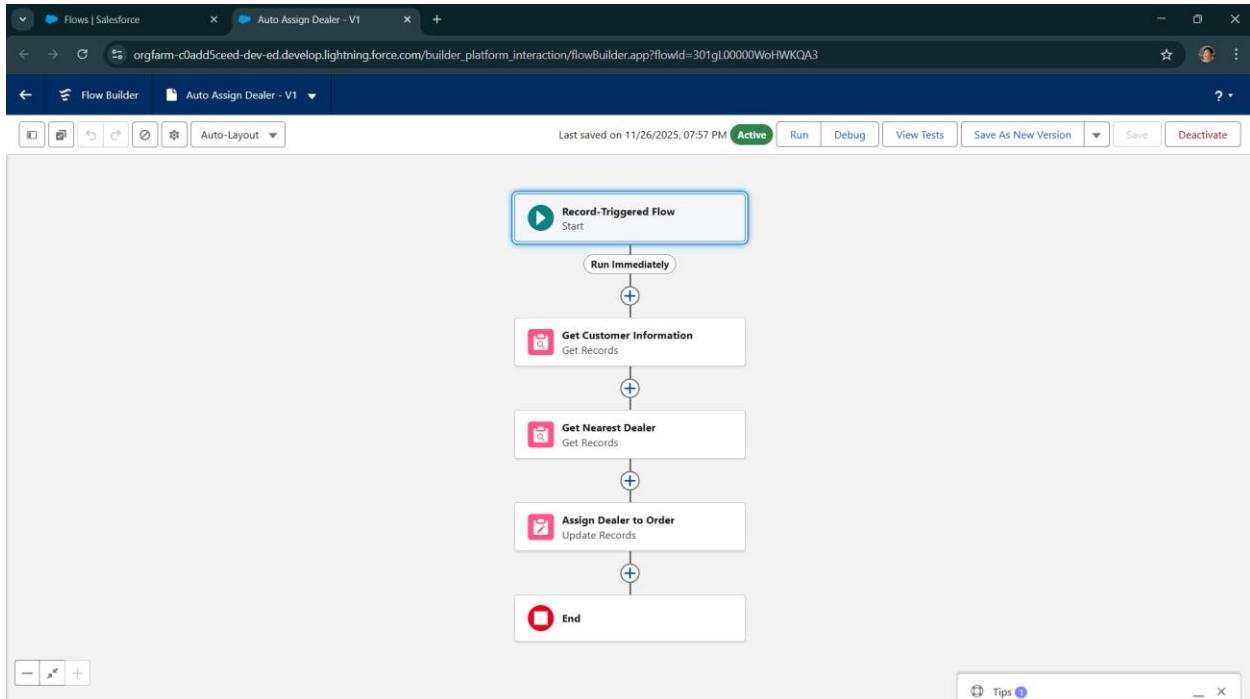
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)	✓	
Status	Status__c	Picklist		
Test Drive Date	Test_Drive_Date__c	Date		
Vehicle	Vehicle__c	Lookup(Vehicle)	✓	
Vehicle Customer	Vehicle_Customer__c	Lookup(Vehicle Customer)	✓	
Vehicle Test Drive Name	Name	Text(80)	✓	

Quick Find New Deleted Fields Field Dependencies Set History Tracking

<https://orgfarm-c0add5seed-dev-ed.develop.my.salesforce-setup.com/lightning/setup/.../view>

# Automation

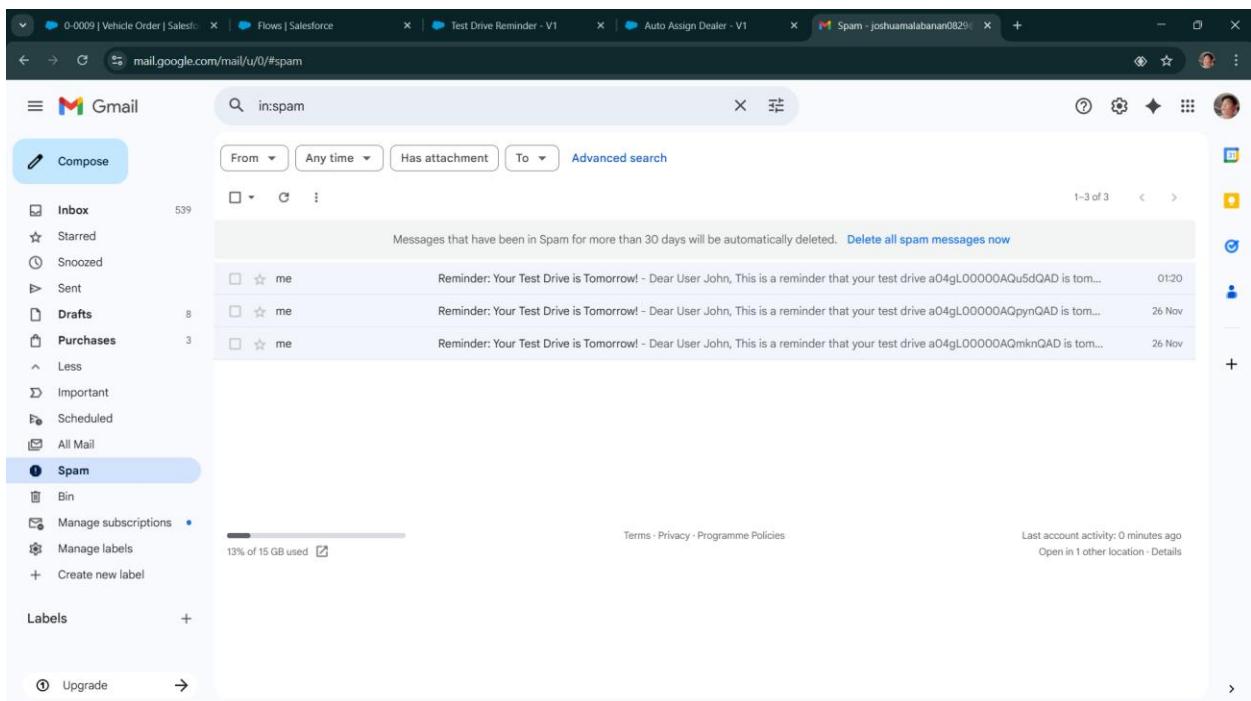
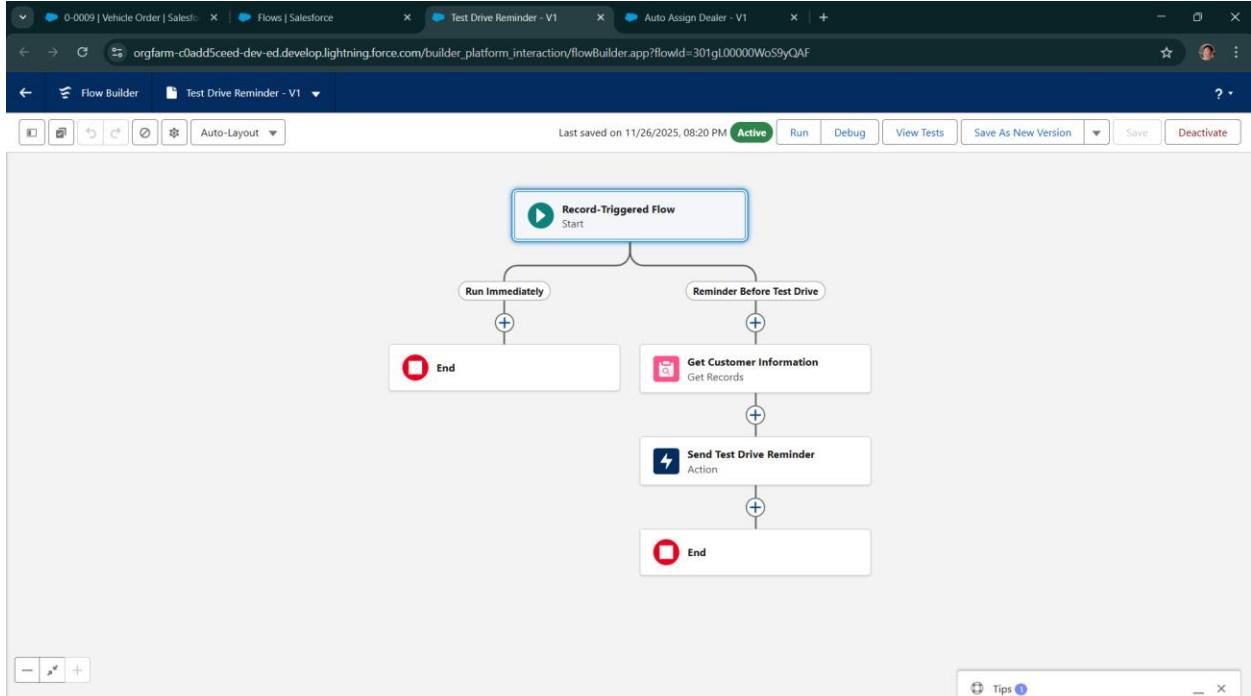
## 1. Auto Assign Dealer



The screenshot shows the Salesforce Lightning Experience for a vehicle order record with ID 0-0009. The page header includes links for Vehicle Customers, Vehicle Dealers, Vehicle Orders (which is the active tab), Vehicle Service Requests, Vehicle Test Drives, Vehicles, Reports, and Dashboards. The main content area displays the following details for the vehicle order:

Vehicle Order Number	Owner
0-0009	Joshua Malabanan
Vehicle Customer	John
Vehicle	Honda
Order Date	11/27/2025
Status	Pending
Assigned Dealer	Doe
Created By	Joshua Malabanan, 11/26/2025, 10:06 AM
Last Modified By	Joshua Malabanan, 11/26/2025, 10:06 AM

## 2. Test Drive Reminder



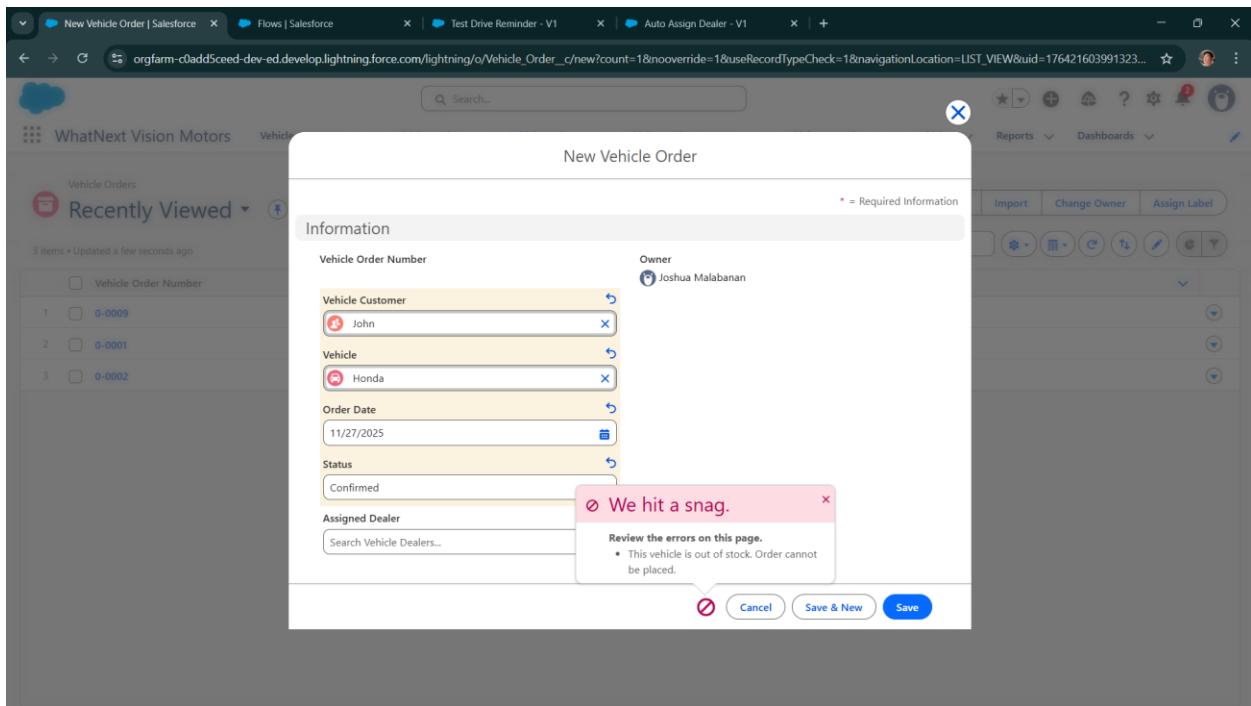
## Apex Classes, Triggers, Asynchronous Apex Classes (if developed, explain briefly).

### Apex Trigger Handler

- Blocking orders when a vehicle is out of stock.
- Decreasing vehicle stock once an order is confirmed.

### Trigger

Executed before or after inserting and updating records in Vehicle\_Order\_\_c.



### Asynchronous Apex

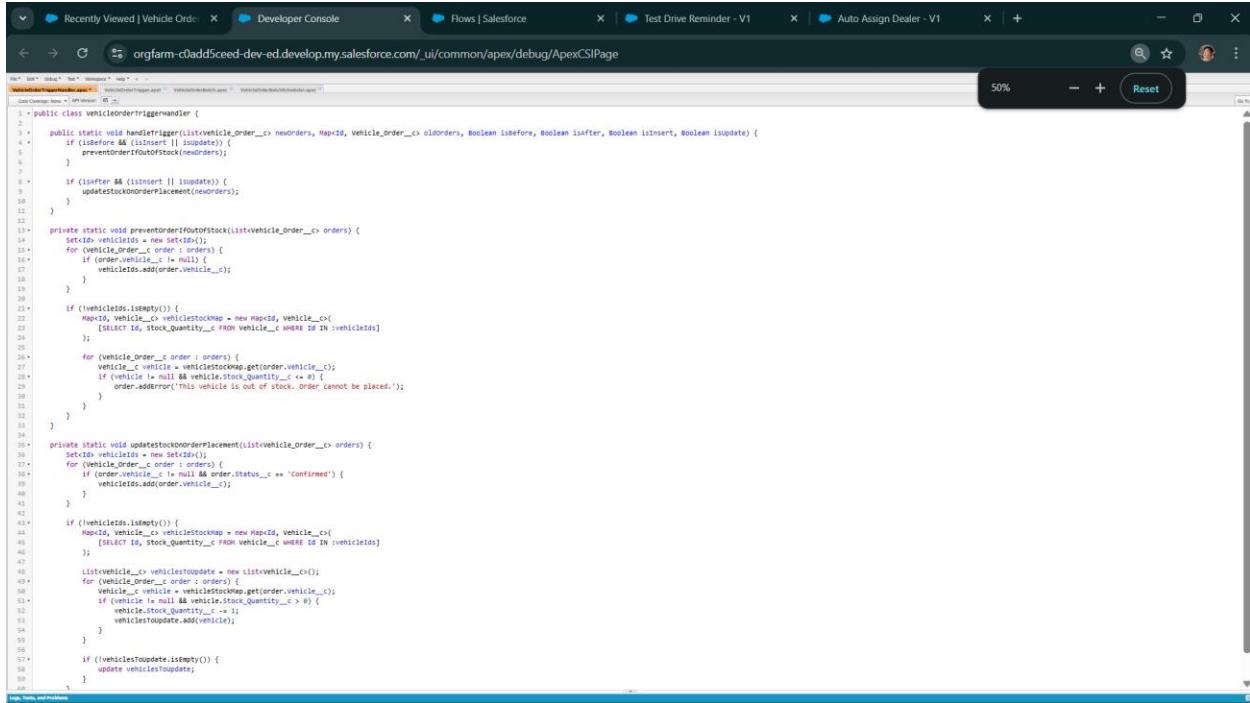
#### Batch Apex

- Reviews all pending orders.
- Confirms orders automatically when vehicle stock is available.
- Updates stock levels accordingly.

#### Scheduled Apex

- Runs the batch process daily at a set time.

## Apex Class VehicleOrderTriggerHandler

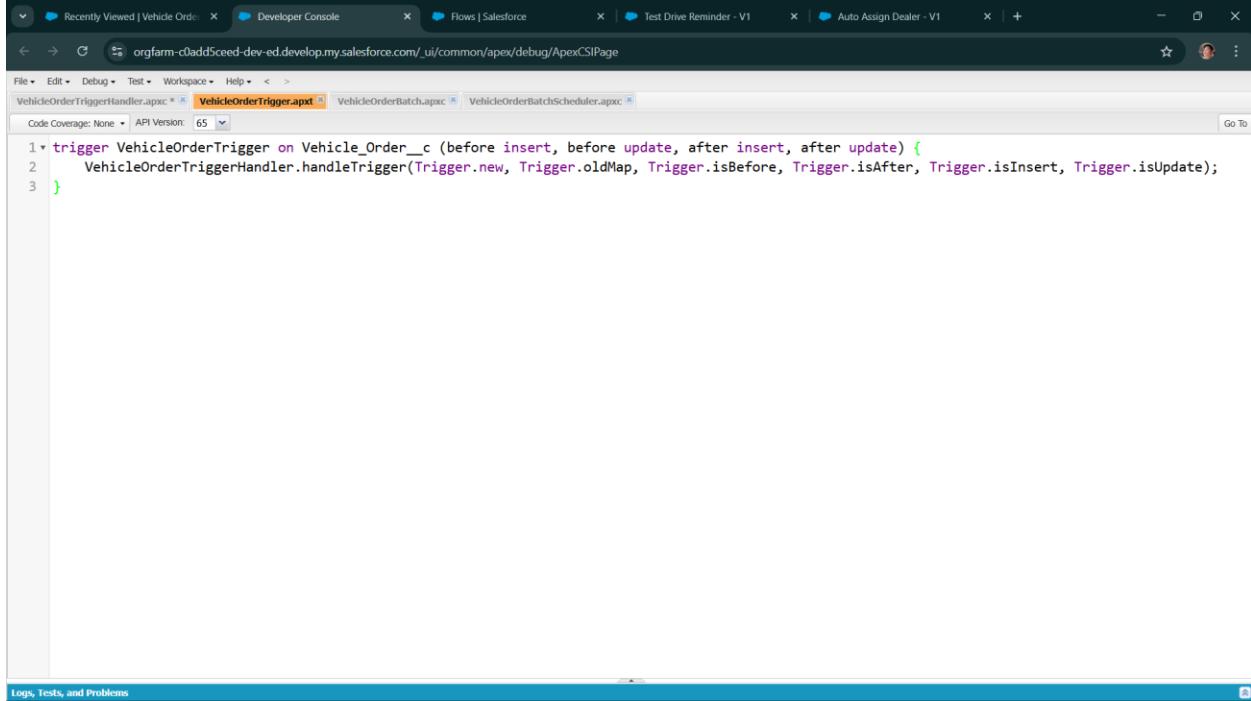


The screenshot shows the Salesforce Developer Console with the following details:

- Tab bar: Recently Viewed | Vehicle Order... (active), Developer Console, Flows | Salesforce, Test Drive Reminder - V1, Auto Assign Dealer - V1.
- Search bar: Search term: "VehicleOrderTriggerHandler".
- Code editor:

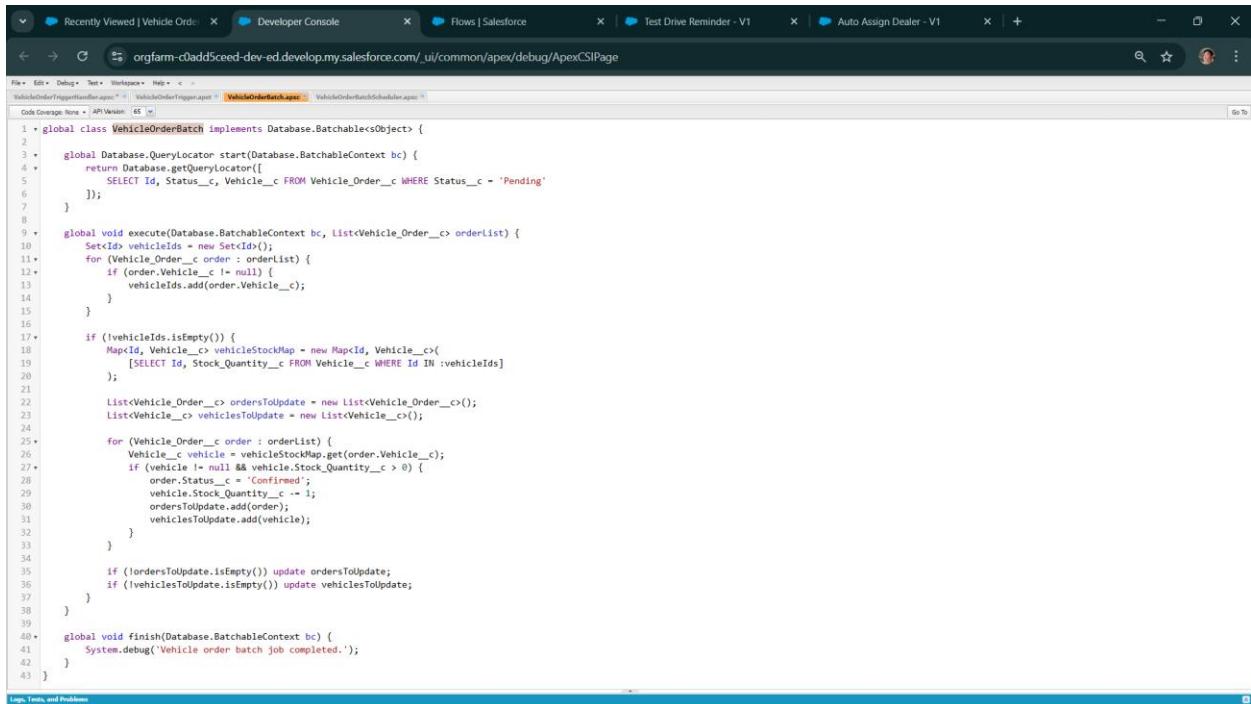
```
1 public class vehicleordertriggerhandler {
2
3     public static void handletrigger(List<Vehicle_order__c> newOrders, Map<Id, Vehicle_order__c> oldOrders, Boolean isbefore, Boolean isafter, Boolean isinsert, Boolean isupdate) {
4
5         if (isbefore || (isinsert || isupdate)) {
6             preventOrderInOutOfStock(newOrders);
7         }
8
9         if (isafter || (isinsert || isupdate)) {
10            updateStockOnOrderPlacement(newOrders);
11        }
12
13     private static void preventOrderInOutOfStock(List<Vehicle_order__c> orders) {
14         Set<Id> vehicleIds = new Set<Id>();
15         for (Vehicle_order__c order : orders) {
16             if (order.vehicle__c != null) {
17                 vehicleIds.add(order.vehicle__c);
18             }
19         }
20         if (!vehicleIds.isEmpty()) {
21             Map<Id, Vehicle__c> vehicleStockMap = new Map<Id, Vehicle__c>(
22                 [SELECT Id, Stock_Quantity__c FROM Vehicle__c WHERE Id IN :vehicleIds]
23             );
24
25             for (Vehicle_order__c order : orders) {
26                 Vehicle__c vehicle = vehicleStockMap.get(order.vehicle__c);
27                 if (vehicle != null && vehicle.stock_quantity__c <= 0) {
28                     order.addError('This vehicle is out of stock. Order cannot be placed.');
29                 }
30             }
31         }
32     }
33
34     private static void updateStockOnOrderPlacement(List<Vehicle_order__c> orders) {
35         Set<Id> vehicleIds = new Set<Id>();
36         for (Vehicle_order__c order : orders) {
37             if (order.vehicle__c != null && order.status__c == 'Confirmed') {
38                 vehicleIds.add(order.vehicle__c);
39             }
40         }
41
42         if (!vehicleIds.isEmpty()) {
43             Map<Id, Vehicle__c> vehicleStockMap = new Map<Id, Vehicle__c>(
44                 [SELECT Id, Stock_Quantity__c FROM Vehicle__c WHERE Id IN :vehicleIds]
45             );
46
47             List<Vehicle__c> vehiclesToUpdate = new List<Vehicle__c>();
48             for (Vehicle_order__c order : orders) {
49                 Vehicle__c vehicle = vehicleStockMap.get(order.vehicle__c);
50                 if (vehicle != null && vehicle.stock_quantity__c > 0) {
51                     vehicle.stock_quantity__c--;
52                     vehiclesToUpdate.add(vehicle);
53                 }
54             }
55
56             if (!vehiclesToUpdate.isEmpty()) {
57                 updateVehiclesToUpdate();
58             }
59         }
60     }
61 }
```

## Apex Trigger VehicleOrderTrigger



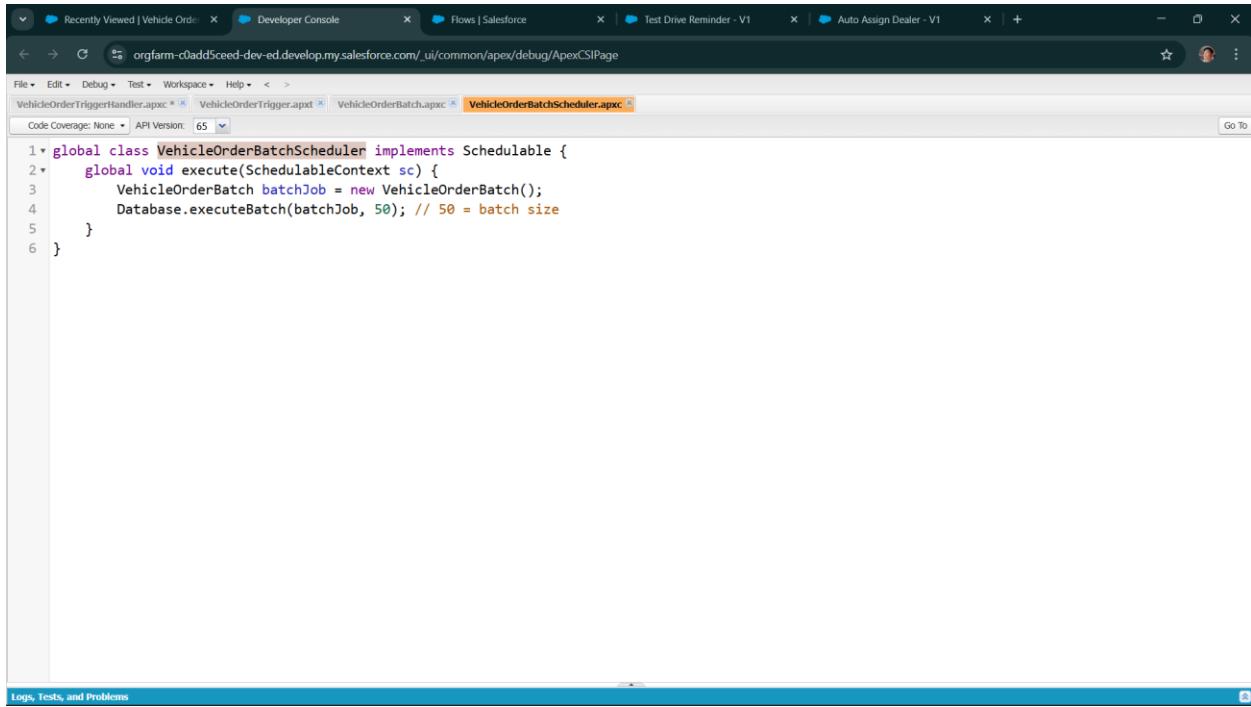
```
trigger VehicleOrderTrigger on Vehicle_Order__c (before insert, before update, after insert, after update) {
    VehicleOrderTriggerHandler.handleTrigger(Trigger.new, Trigger.oldMap, Trigger.isBefore, Trigger.isAfter, Trigger.isInsert, Trigger.isUpdate);
}
```

## Apex Class VehicleOrderBatch



```
global class VehicleOrderBatch implements Database.Batchable<sObject> {
    global Database.QueryLocator start(Database.BatchableContext bc) {
        return Database.getQueryLocator([
            SELECT Id, Status__c, Vehicle__c FROM Vehicle_Order__c WHERE Status__c = 'Pending'
        ]);
    }
    global void execute(Database.BatchableContext bc, List<Vehicle_Order__c> orderList) {
        Set<Id> vehicleIds = new Set<Id>();
        for (Vehicle_Order__c order : orderList) {
            if (order.Vehicle__c != null) {
                vehicleIds.add(order.Vehicle__c);
            }
        }
        if (!vehicleIds.isEmpty()) {
            Map<Id, Vehicle__c> vehicleStockMap = new Map<Id, Vehicle__c>(
                [SELECT Id, Stock_Quantity__c FROM Vehicle__c WHERE ID IN :vehicleIds]
            );
            List<Vehicle_Order__c> ordersToUpdate = new List<Vehicle_Order__c>();
            List<Vehicle__c> vehiclesToUpdate = new List<Vehicle__c>();
            for (Vehicle_Order__c order : orderList) {
                Vehicle__c vehicle = vehicleStockMap.get(order.Vehicle__c);
                if (vehicle != null && vehicle.Stock_Quantity__c > 0) {
                    order.Status__c = 'Confirmed';
                    vehicle.Stock_Quantity__c -= 1;
                    ordersToUpdate.add(order);
                    vehiclesToUpdate.add(vehicle);
                }
            }
            if (!ordersToUpdate.isEmpty()) update ordersToUpdate;
            if (!vehiclesToUpdate.isEmpty()) update vehiclesToUpdate;
        }
    }
    global void finish(Database.BatchableContext bc) {
        System.debug('Vehicle order batch job completed.');
    }
}
```

## Apex Class VehicleOrderBatchScheduler



The screenshot shows the Salesforce Developer Console interface. The title bar indicates the URL is orgfarm-c0add5eed-dev-ed.develop.my.salesforce.com/\_ui/common/apex/debug/ApexCSIPage. The tabs at the top show VehicleOrderTriggerHandler.apxc, VehicleOrderTrigger.apxc, and VehicleOrderBatchScheduler.apxc (which is the active tab). The code editor displays the following Apex class:

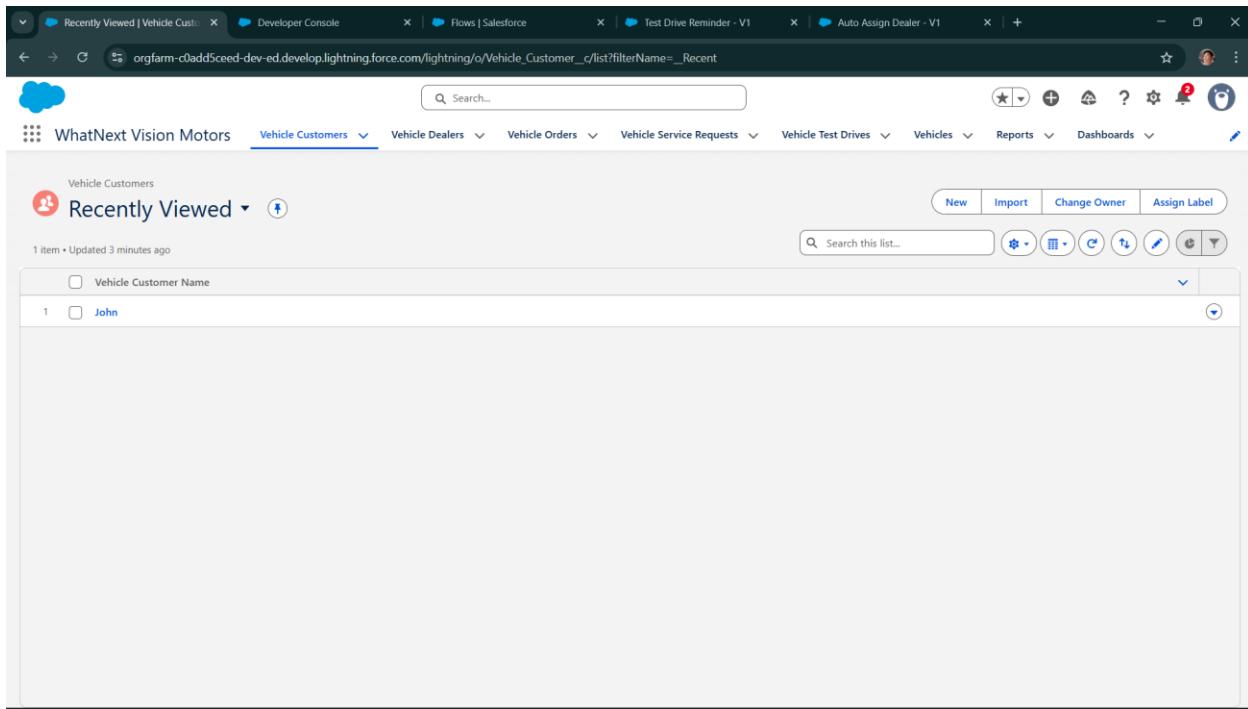
```
1 * global class VehicleOrderBatchScheduler implements Schedulable {
2 *     global void execute(SchedulableContext sc) {
3 *         VehicleOrderBatch batchJob = new VehicleOrderBatch();
4 *         Database.executeBatch(batchJob, 50); // 50 = batch size
5 *     }
6 }
```

## Phase 3: UI/UX Development & Customization

Lightning App setup through App Manager.

Created “**WhatsNext Vision Motors**” App:

- Includes navigation tabs for Vehicles, Dealers, Customers, Orders, Test Drives, Service Requests, Reports, and Dashboards.



## Page Layouts, Dynamic Forms.

- Designed layouts for each object.
- Showed fields based on user roles.
- Hid or showed fields when needed.

## User Management.

- Assigned System Administrator profile.
- Set up app access for users.

## Reports and Dashboards.

- Vehicle Stock
- Dealer Assignments
- Test Drive Summary
- Vehicle Orders

## Lightning Pages

- Created custom pages for Vehicle, Dealer, and Customer.
- Added related lists and quick actions.

The screenshot shows the Salesforce Lightning interface with the title bar displaying multiple open tabs: 'Recently Viewed | Vehicle Customer', 'Developer Console', 'Flows | Salesforce', 'Test Drive Reminder - V1', and 'Auto Assign Dealer - V1'. The main content area is titled 'Vehicle Customers' and shows a 'Recently Viewed' list. The list header includes a search bar, a 'New' button, an 'Import' button, a 'Change Owner' button, and an 'Assign Label' button. Below the header, there is a search bar labeled 'Search this list...' and a set of icons for filtering and sorting. The list itself contains one item: '1 John' with a checkbox next to it. The URL in the browser is [https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle\\_Customer\\_\\_c/list?filterName=\\_Recent](https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle_Customer__c/list?filterName=_Recent).

The screenshot shows the Salesforce Lightning interface with the title bar displaying multiple open tabs: 'Recently Viewed | Vehicle Dealer', 'Developer Console', 'Flows | Salesforce', 'Test Drive Reminder - V1', and 'Auto Assign Dealer - V1'. The main content area is titled 'Vehicle Dealers' and shows a 'Recently Viewed' list. The list header includes a search bar, a 'New' button, an 'Import' button, a 'Change Owner' button, and an 'Assign Label' button. Below the header, there is a search bar labeled 'Search this list...' and a set of icons for filtering and sorting. The list contains two items: '1 Bill' and '2 Doe', each with a checkbox next to it. The URL in the browser is [https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle\\_Dealer\\_\\_c/list?filterName=\\_Recent](https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle_Dealer__c/list?filterName=_Recent). A link at the bottom of the page is [https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle\\_Dealer\\_\\_c/home](https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle_Dealer__c/home).

The screenshot shows the WhatNext Vision Motors Salesforce Lightning interface. The top navigation bar includes links for Recently Viewed, Developer Console, Flows, Test Drive Reminder - V1, Auto Assign Dealer - V1, and other tabs like Vehicle Customers, Vehicle Dealers, Vehicle Service Requests, Vehicle Test Drives, Vehicles, Reports, and Dashboards. The main content area is titled "Vehicle Orders" and shows a "Recently Viewed" section. A search bar at the top right says "Search...". Below it, a button bar has "New", "Import", "Change Owner", and "Assign Label". A "Search this list..." input field is followed by a set of icons for filtering, sorting, and other actions. The list itself shows 3 items updated a few seconds ago, each with a checkbox and a number (1, 2, 3) next to a "Vehicle Order Number": 0-0009, 0-0001, and 0-0002. The URL in the browser address bar is [https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle\\_Order\\_c/list?filterName=\\_Recent](https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle_Order_c/list?filterName=_Recent).

The screenshot shows the WhatNext Vision Motors Salesforce Lightning interface, similar to the previous one but with a different tab selected: "Vehicle Service Requests". The top navigation bar and main structure are identical. The main content area is titled "Vehicle Service Requests" and shows a "Recently Viewed" section. A search bar at the top right says "Search...". Below it, a button bar has "New", "Import", "Change Owner", and "Assign Label". A "Search this list..." input field is followed by a set of icons for filtering, sorting, and other actions. The list shows 1 item updated a few seconds ago, each with a checkbox and a number (1) next to a "Vehicle Service Request Name": test. The URL in the browser address bar is [https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle\\_Service\\_Request\\_c/list?filterName=\\_Recent](https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle_Service_Request_c/list?filterName=_Recent).

Vehicle Test Drives

Recently Viewed ▾

3 items • Updated a few seconds ago

	Vehicle Test Drive Name	Actions
1	<input type="checkbox"/> test	<input type="button" value=""/>
2	<input type="checkbox"/> abc	<input type="button" value=""/>
3	<input type="checkbox"/> xyz	<input type="button" value=""/>

https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle\_Test\_Drive\_c/home

Vehicles

Recently Viewed ▾

2 items • Updated a few seconds ago

	Vehicle Name	Actions
1	<input type="checkbox"/> Honda	<input type="button" value=""/>
2	<input type="checkbox"/> Toyota	<input type="button" value=""/>

https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Vehicle\_c/home

Screenshot of the Salesforce Lightning Home page for WhatNext Vision Motors, specifically the Reports section.

The URL in the browser is <https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Report/home?queryScope=mru>.

The page header includes tabs for Recent | Reports | Salesforce, Developer Console, Flows | Salesforce, Test Drive Reminder - V1, Auto Assign Dealer - V1, and a plus sign for creating new items.

The main content area shows a search bar with "Search..." and a "Recent" report category. Below it is a decorative illustration of a cactus, sun, and clouds. A message says "Recent reports appear here" with a link to "View All Reports".

The left sidebar lists categories for Reports: Recent, Created by Me, Private Reports, Public Reports, All Reports; Folders: All Folders, Created by Me, Shared with Me; and Favorites: All Favorites.

The bottom status bar shows the URL again: <https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Report/home>.

Screenshot of the Salesforce Lightning Home page for WhatNext Vision Motors, specifically the Dashboards section.

The URL in the browser is <https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Dashboard/home?queryScope=mru>.

The page header includes tabs for Recent | Dashboards | Salesforce, Developer Console, Flows | Salesforce, Test Drive Reminder - V1, Auto Assign Dealer - V1, and a plus sign for creating new items.

The main content area shows a search bar with "Search..." and a "Recent" dashboard category. Below it is a decorative illustration of a cactus, sun, and clouds. A message says "Recent dashboards appear here" with a link to "View All Dashboards".

The left sidebar lists categories for Dashboards: Recent, Created by Me, Private Dashboards, All Dashboards; Folders: All Folders, Created by Me, Shared with Me; and Favorites: All Favorites.

The bottom status bar shows the URL again: <https://orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/o/Dashboard/home>.

## **Phase 4: Data Migration, Testing & Security**

### **Mention the data loading process (e.g., Data Import Wizard, Data Loader).**

- Sample customer, dealer, and vehicle records were added. Records were created manually in Salesforce, but larger datasets can be imported using the Data Import Wizard or Data Loader for easy bulk uploads without coding.

### **Field History Tracking, Duplicate Rules, Matching Rules should be documented.**

Enabled for:

- Stock\_Quantity\_\_c
- Status\_\_c
- Order\_Date\_\_c

### **Profiles, Roles and Role Hierarchy, Permission sets, Sharing Rules.**

- Security was set up to control who can access data. Profiles handled basic permissions, roles let managers see their team's records, Permission Sets gave extra access, and Sharing Rules made sure sales teams only saw what they needed.

### **Creation of Test Classes**

- All automations were tested to ensure they worked correctly. Dealer assignments and test drive reminders were validated, triggers prevented out-of-stock orders and updated stock on confirmation, and Batch Apex successfully auto-confirmed pending orders when stock was available.

The screenshot shows a Salesforce Lightning interface for a vehicle customer named 'John'. The top navigation bar includes tabs for 'Vehicle Customers', 'Vehicle Dealers', 'Vehicle Orders', 'Vehicle Service Requests', 'Vehicle Test Drives', 'Vehicles', 'Reports', and 'Dashboards'. The main content area displays the 'Details' tab for 'Vehicle Customer Name: John'. Fields shown include Owner (Joshua Malabanan), Email (joshuamalabanan0829@gmail.com), Phone ((123) 456-7890), Address (Tanaauan City), Preferred Vehicle Type (Sedan), and Created By (Joshua Malabanan). The last modified information is also displayed.

The screenshot shows a Salesforce Lightning interface for a vehicle dealer named 'Doe'. The top navigation bar includes tabs for 'Vehicle Customers', 'Vehicle Dealers', 'Vehicle Orders', 'Vehicle Service Requests', 'Vehicle Test Drives', 'Vehicles', 'Reports', and 'Dashboards'. The main content area displays the 'Details' tab for 'Vehicle Dealer Name: Doe'. Fields shown include Owner (Joshua Malabanan), Dealer Location (Tanaauan City), Dealer Code (DC-0001), Phone ((123) 456-7890), Email (joshuamalabanan90@gmail.com), and Created By (Joshua Malabanan). The last modified information is also displayed.

0-0009 | Vehicle Order | Salesforce | Developer Console | Flows | Salesforce | Test Drive Reminder - V1 | Auto Assign Dealer - V1 | +

orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/r/Vehicle\_Order\_c/a03gL00000Jdh2bQAD/view

### WhatNext Vision Motors

Vehicle Customers | Vehicle Dealers | **Vehicle Orders** | Vehicle Service Requests | Vehicle Test Drives | Vehicles | Reports | Dashboards

#### Vehicle Order

**0-0009**

**Related** **Details**

Vehicle Order Number	0-0009	Owner	 <a href="#">Joshua Malabanan</a>
Vehicle Customer	<a href="#">John</a>		
Vehicle	<a href="#">Honda</a>		
Order Date	11/27/2025		
Status	Pending		
Assigned Dealer	<a href="#">Doe</a>		
Created By	 <a href="#">Joshua Malabanan</a> , 11/26/2025, 10:06 AM	Last Modified By	 <a href="#">Joshua Malabanan</a> , 11/26/2025, 10:06 AM

New Contact | Edit | New Opportunity

test | Vehicle Service Request | Developer Console | Flows | Salesforce | Test Drive Reminder - V1 | Auto Assign Dealer - V1 | +

orgfarm-c0add5seed-dev-ed.develop.lightning.force.com/lightning/r/Vehicle\_Service\_Request\_c/a05gL00000AyW7KQAV/view

### WhatNext Vision Motors

Vehicle Customers | Vehicle Dealers | **Vehicle Orders** | **Vehicle Service Requests** | Vehicle Test Drives | Vehicles | Reports | Dashboards

#### Vehicle Service Request

**test**

**Related** **Details**

Vehicle Service Request Name	test	Owner	 <a href="#">Joshua Malabanan</a>
Vehicle	<a href="#">Toyota</a>		
Service Date	11/27/2025		
Issue Description	test		
Status	Requested		
Vehicle Customer	<a href="#">John</a>		
Created By	 <a href="#">Joshua Malabanan</a> , 11/26/2025, 9:19 AM	Last Modified By	 <a href="#">Joshua Malabanan</a> , 11/26/2025, 9:19 AM

New Contact | Edit | New Opportunity

The screenshot shows a Salesforce Lightning interface for a 'Vehicle Test Drives' record. The record name is 'test'. The details tab is selected, displaying the following fields:

- Vehicle Test Drive Name: test
- Owner: Joshua Malabanan
- Vehicle: Toyota
- Test Drive Date: 11/27/2025
- Status: Scheduled
- Vehicle Customer: John
- Created By: Joshua Malabanan, 11/26/2025, 9:20 AM
- Last Modified By: Joshua Malabanan, 11/26/2025, 9:20 AM

At the top, there are tabs for Related and Details, and buttons for New Contact, Edit, and New Opportunity.

The screenshot shows a Gmail inbox with a search bar set to 'in:spam'. A single email message is visible:

**Reminder: Your Test Drive is Tomorrow!** (Spam)

**Joshua Malabanan** via fquojki5wilc.gl-fa7vuar.can98.bnc.salesforce.com  
to me ▾

01:20 (11 hours ago)

Why is this message in spam? This message is similar to messages that were identified as spam in the past.  
[Report as not spam](#)

Dear User John,

This is a reminder that your test drive a04gl00000AQu5dQAD is tomorrow. If you need to reschedule please contact us at [support@gmail.com](mailto:support@gmail.com)

Thank You.

At the bottom, there are buttons for Reply, Forward, and a reply icon.

This screenshot shows a vehicle record in the WhatNext Vision Motors application. The vehicle is a Honda Sedan with a price of \$70,000. It is currently out-of-stock and was created by Joshua Malabanan on November 26, 2025, at 1:53 AM. The record is owned by Joshua Malabanan.

Field	Value
Vehicle Name	Honda
Vehicle Model	Sedan
Stock Quantity	0
Price	\$70,000
Vehicle Dealer	Doe
Status	Out-of-stock
Created By	Joshua Malabanan, 11/26/2025, 1:53 AM
Last Modified By	Joshua Malabanan, 11/26/2025, 8:00 PM

This screenshot shows a new vehicle order creation page. The vehicle order number is 0-0009, and it is assigned to John. The vehicle is a Honda. The order date is set to 11/28/2025. The status is confirmed. An error message is displayed: "We hit a snag. Review the errors on this page. • This vehicle is out of stock. Order cannot be placed." The user has the option to cancel or save the new order.

## **Phase 5:Deployment, Documentation & Maintenance**

### **Explain the Deployment strategy (change sets or other methods).**

All components were deployed with Change Sets, including:

- Custom objects
- Flows
- Apex classes and triggers
- Page layouts
- Reports and dashboards

### **Maintenance Plan**

- Admin monitors scheduled jobs.
- Check vehicle stock weekly.
- Update flows and triggers when needed.
- Audit data and sharing settings every three months.

### **Troubleshooting Approach**

- Check Debug Logs for issues.
- Review paused or failed flows.
- Look at Apex logs for errors.
- Use field history to track data problems.

## **Conclusion**

WhatsNext Vision Motors is using Salesforce to improve customer experience and streamline operations. The system automatically suggests the nearest dealer and prevents orders for out-of-stock vehicles, ensuring accuracy. Automated processes also update order statuses, marking orders as 'Pending' if unavailable and 'Confirmed' if in stock. This project helps reduce errors, save time on manual tasks, and gives employees more time to focus on other tasks. It can be further enhanced using AI and modern technologies.