## VEHICLE MANAGEMENT SYSTEM USING SALESFORCE

### **INTRODUCTION**

### 1.1 Overview

Vehicle management is an application where a customer details are stored in order to choose cars, bikes and commercial vehicles for travel with in the city

## 1.2 Purpose

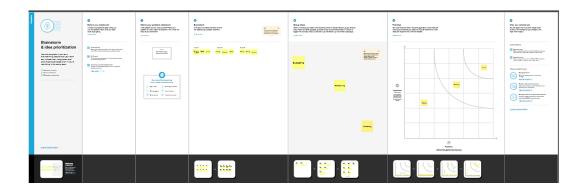
A vehicle management system is a software system — or platform — that serves to manage commercial fleets of vehicles, such as cars, vans or trucks — or even heavy equipment — to ensure they're utilized safely, efficiently and professionally, while making sure they're well maintained and high-performing.

# **Problem Definition & Design Thinking**

# 2.1 Empathy Map



## 2.2 Ideation & Brainstorming Map



# **RESULT**

## 3.1 Data Model:

Fields in the Object	
Field label	Data type
Customer Name	Text
Customer Mobile No	Number
Vehicle Type	Picklist
i)2 wheeler	
ii)4 wheeler	
2WHEELERS	Picklist
i)HERO	
ii)HONDA	
iii)BAJAJ	
iv)ROYAL	
ENFIELD	
- <del>-</del>	
· · · ·	
1 1 · · · · ·	
1 I	
	Picklist
iii) HONDA	
iv)HYUNDAI	
v)SUZUKI	
vi)MAHINDRA	
vii)VOLKSWAGEN	
viii)BENZ	
ix)AUDI	
x)VOLVO	
Vehicle Name	Text
Vehicle No	Text
Chassis No	Text
Colour	Text
Body Type	Text
	Multi Picklist
·	
	Field label Customer Name Customer Mobile No Vehicle Type i)2 wheeler ii)4 wheeler 2WHEELERS i)HERO ii)HONDA iii)BAJAJ iv)ROYAL ENFIELD v)TVS vi)KINETIC vii)OLA viii)JAWA ix)SD x)BATTERY 4WHEELERS i) RENAULT ii)SKODA iii) HONDA iv)HYUNDAI v)SUZUKI vi)MAHINDRA vii)VOLKSWAGEN viii)BENZ ix)AUDI x)VOLVO Vehicle Name

	iv)Stepney	
	v)Stereo	
	vi)Tool Kit	
	vii)Tracking Device	
	viii)Tyre Jack	
	Condition	Picklist
	i)Good	
	ii)Medium	
	iii)Least	
	Mileage	Text
	Seats	Number
	Start Date	Date/Time
	End Date	Date/time
	Opportunity	Lookup(opportunities)
Drivers		
	Field label	Data type
	Driver Name	Text
	Licence No	Text
	Mobile No	Number
	Fair Per Hour	Text
	Vehicle	Lookup(Vehicle)

# 3.1 Activity & Screenshot

## **Activity-1:**

## **Creating Developer Account**

Creating a developer org in salesforce.

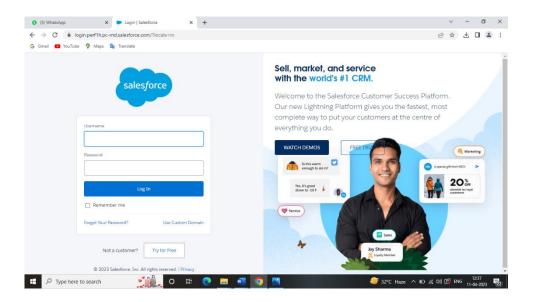
1. Go to

developers.salesforce.com/

- 2. Click on sign up.
- 3. On the sign up form, enter the following details:
  - a. First name & Last name
  - a. Email
  - b. Role: Developer
  - c. Company: College Name
  - d. County: India
  - e. Postal Code : pin code
  - f. Username: should be a combination of your name and company
  - g. This need not be an actual email id, you can give anything in

the format : username@organization.com

## Click on sign up after filling these.



# **Activity 2:**

### **Account Activation**

Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins

## **Login To Your Salesforce Account**

- 1.Go to salesforce.com and click on login.
- 2.Enter the username and password that you just created.
- 3. After login this is the home page which you will see.

# **Activity 3:**

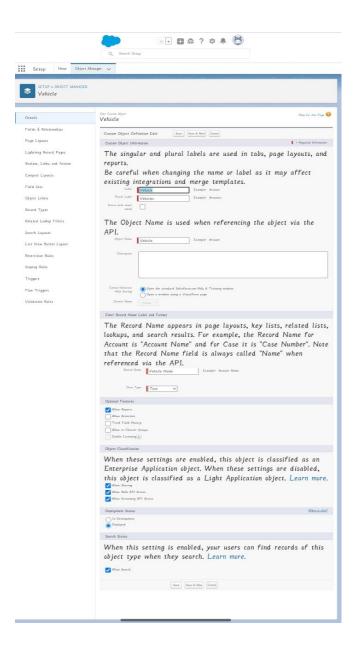
### To Create an object:

Creation of Objects for Vehicle Management, For this Vehicle Management we need to create 2 objects i.eVehicles, Driver.

The below steps will assist you in creating those objects.

- Click on the gear icon and then select Setup.
- Click on the object manager tab just beside the home tab.

- After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
- Creation of Vehicle Object



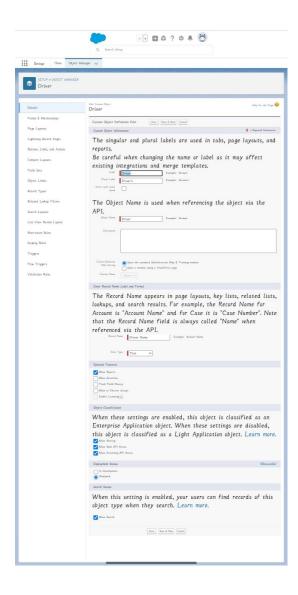
On the Custom Object Definition page, create the object as follows:

- Label: Vehicle
- Plural Label: Vehicles
- Record Name: Vehicle Name
- Check the Allow Reports checkbox
- Check the Allow Search checkbox
- Click Save.

- Now create a custom tab. Click the Home tab, enter Tabs in Quick Find and select Tabs.
- Under Custom Object Tabs, click New.
- For Object, select Vehicle.
- For Tab Style, select any icon.
- Leave all defaults as is. Click Next, Next, and Save.

# **Activity-4:**

To Create a driver object continue the same steps Which is followed for the above object.



# **Activity-5:**

**Fields In Driver Object:** 

Create a dependency between these two picklists, so that when a Vehicle type is selected, only respective 2Wheeler Brands are available in the 2Wheeler field, Similarly for 4 wheelers.

The below steps will assist you in creating Field Dependencies.

- Click on the gear icon and then select Setup.
- Click on the object manager tab just beside the home tab.
- After the above steps, Select Vehicles Object
- Now Select Fields and relationships from setup menu of the vehicle object.
- Click Field Dependencies.
- Click New.
- Select Vehicle Type as the Controlling Field and select 2wheelers as the Dependent Field.
- Click Continue.
- Select the appropriate 2 wheelers Brands in each column by double-clicking them.
- 2WHEELERS :i) HERO ii)HONDA iii)BAJAJ iv)ROYAL ENFIELD v)TVS vi)KINETIC vii)OLA

viii)JAW A ix)SD x)BATTERY

- Click Include Values.
- Click Preview, then test the dependency by selecting different Vehicle Type and viewing the different Vehicles available for Vehicle Type.
- Click Close to close the preview window. Click Save.

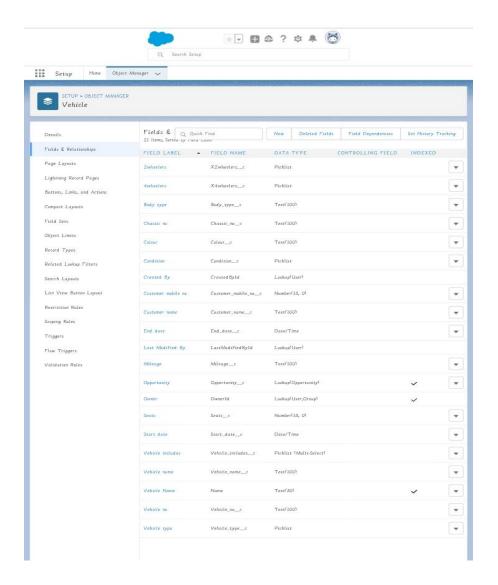
## Follow same steps for 4wheelers also

- Vehicle Type as the Controlling Field and select 4wheelers as the Dependent Field.
- Click Continue.
- Select the appropriate 4wheelers Brands in each column by double-clicking them.
- 4WHEELERS: i) RENAULT

ii)SKODA iii)
HONDA
iv)HYUNDAI
v)SUZUKI
vi)MAHIND
RA
vii)VOLKSW
AGEN
viii)BENZ
ix)AUDI

x)VOLVO

- Click Include Values.
- Click Preview, then test the dependency by selecting different Vehicle Type and viewing the different Vehicles available for Vehicle Type.
- Click Close to close the preview window.
- Click Save.



# **Activity-6:**

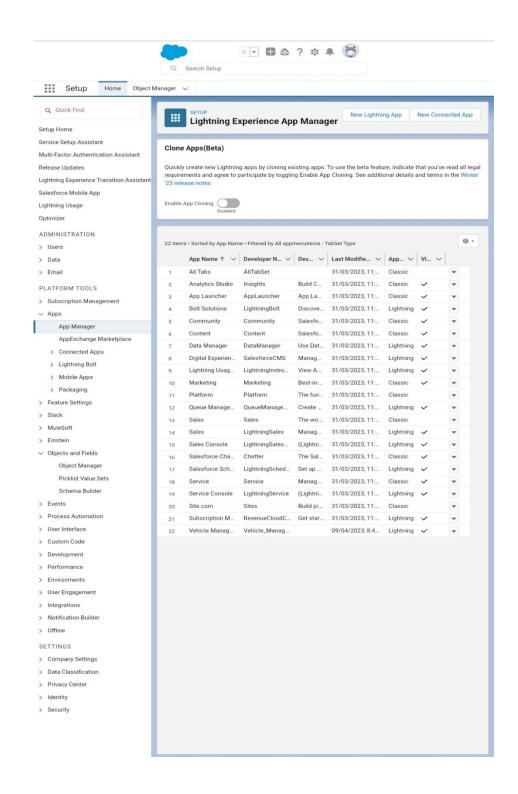
### **Create the Vehicle Management Construction app**

- From Setup, enter App Manager in the Quick Find and select App Manager.
- Click New Lightning App. Enter Vehicle Management as the App Name, then click Next
- Under App Options, leave the default selections and click Next.
- Under Utility Items, leave as is and click Next.
- From Available Items, select Accounts, Contacts, Opportunities, Vehicle,
   Driver, Reports, and Dashboards and move them to Selected Items. Click Next.

- From Available Profiles, select System Administrator and move it to Selected Profiles. Click Save & Finish.
- To verify your changes, click the App Launcher, type Vehicle Management and select the Vehicle Management app.

#### Note:

- 1. App Launcher-Displays available apps.
- 2. App Name-Displays the current selected app.
- 3. Navigation menu-Displays the tabs available inside the app.



# **Activity-7:**

**Creating a Profiles:** Now create a Vehicle Manager profile and set its object permissions.

## **Creating a Profiles:**

Now create a Vehicle Manager profile and set its object permissions.

- From Setup enter Profiles in the Quick Find box, and select Profiles.
- From the list of profiles, find Standard User.
- Click Clone.
- For Profile Name, enter Vehicle Manager.
- Click Save.
- While still on the Vehicle Manager profile page, then click Edit.
- Scroll down to Custom Object Permissions and give access for Create,Read,Edit,Delete,View all and modify all for Vehicle object and Drivers object.

To create a new profile:

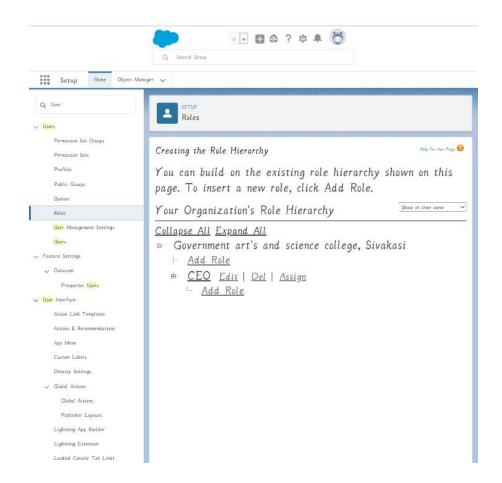
Go to setup  $\rightarrow$  type profiles in quick find box  $\rightarrow$  click on profiles  $\rightarrow$  clone the desired profile

(standard user is preferable) → enter profile name → save

## **Activity-8:**

# **Setup Roles:**

- 1. Click on the Gear Icon
- 2. Click "Setup"
- 3. In the Quick Find box, enter "Roles"
- 4. Click "Roles"
- 5. Click on "Set Up Roles"
- 6. Click "Expand All"
- 7. Under the CEO, click on "Add Role"
- 8. Fill up the Label as Vehicle Manager, Role Name Vehicle\_Manager.
- 9. Enter a Role name that will be displayed on Reports
- 10. Click on Save.



# **Activity-9:**

# **Creating a Users:**

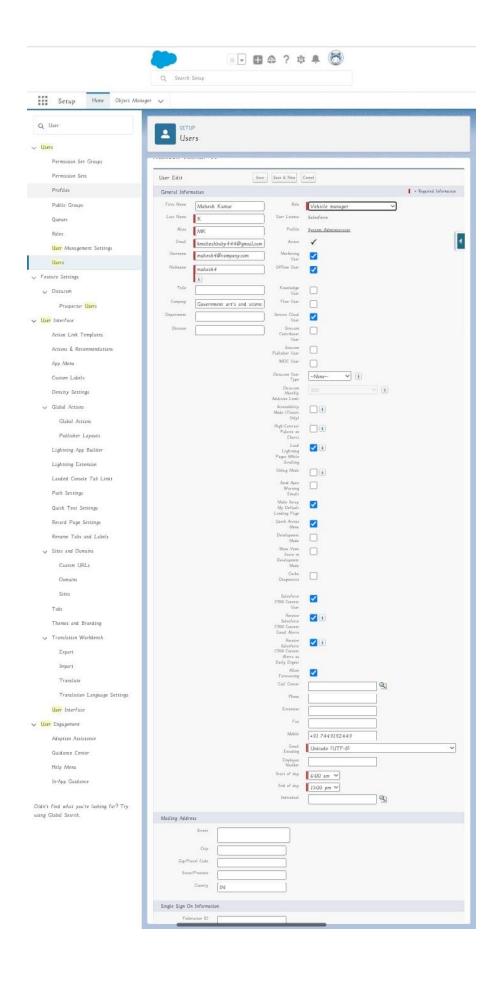
- 1. From Setup, in the Quick Find box, enter Users, and then select Users.
- 2. Click New User.
- 3. Enter the user's name John Teddy and (Your) email address and a unique username in

the form of an email address. By default, the username is the same as the email address.

- 4. Select a **Role**(Vehicle Manager)
- 5. Select a User Licence As salesforce.
- 6. Select a profile as Vehicle Manager.
- 7. Check Generate new password and notify the user immediately to have the user's

login name and a temporary password emailed to your email.

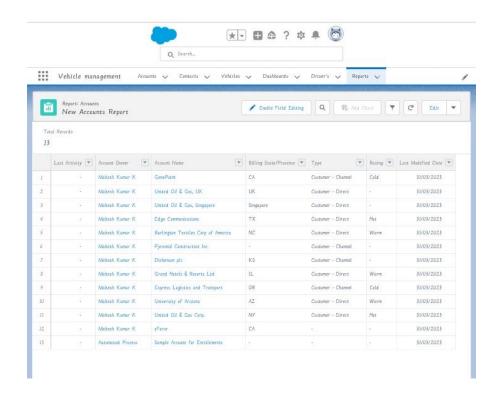
Fill in the fields (first name, last name, alias, email id, username, nick name, role, userlicense, profiles)  $\rightarrow$  save.



# **Activity-10:**

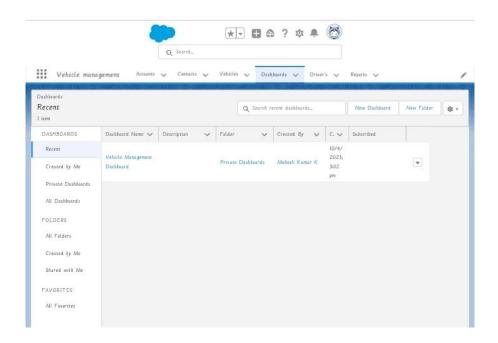
## Reports And Dashboards.

- Go to Reports and click New Report.
- Select the Accounts, Contacts and Vehicle report type and click Start Report.
- To begin filtering, click Filters.
- Click the Show Me standard filter and select My Contacts. Click Apply.
- Click on add columns add Vehicle: Vehicle name, Vehicle: Customer id,
   Vehicle: Customer name, Vehicle: Customer Number, Vehicle: Chassis Number.
- Click Save.
- Save your report as Vehicle and Customer Details and accept the auto-generated unique name.



### Dashboard:

- 1. Click the Dashboards tab.
- 2. Click New Dashboard.
- 3. Name the dashboard Vehicle and Customer Details and click Create.
- 4. Click +Component.
- 5. Select the Supplies report and click Select.
- 6. Select the Vertical Bar Chart component and click Add.
- 7. Click Save and then Done.



# Trailhead profile public URL

Team Lead - https://trailblazer.me/id/mahek44

Team Member 1 - https://trailblazer.me/id/manas806

Team Member 2 - https://trailblazer.me/id/munek5

Team Member 3 - <a href="https://trailblazer.me/id/nivas59">https://trailblazer.me/id/nivas59</a>

## **ADVANTAGES & DISADVANTAGE**

#### **ADVANTAGES**

## **Driver safety**

Statistically speaking, a motor vehicle crash happens approximately every 5 seconds. Peak hours in a busy rural area won't make things easier. Fleet managers need to know how to educate drivers on safe driving practices. And having a driving behavior report, or a driver scorecard helps identify the behaviors that need to be addressed. In many countries, it is the law that all vehicles are also equipped with an on-board camera that will record all types of incidents for future reference.

A vehicle management system offers full fleet visibility on a single screen. Fleet managers get all sorts of information, such as:

Location and status of vehicles and drivers

Trip logs and events, routes followed, delays caused

Productivity, efficiency and performance levels of vehicles and staff

Timely notifications regarding malfunctions and delays

In general, fleet managers and operators enjoy better insights that lead to better customer service.

### **DISADVANTAGES**

We bet a flurry of questions will run through your head on the quest for the perfect fleet vehicle.

How does the cost of buying a new fleet vehicle compare to buying a used one?

If I buy a used fleet vehicle, how much will I spend on maintenance, as compared to buying a new one?

How does either decision affect my cash flow?

A new vehicle means higher prices and higher depreciation percentage, once you buy. But it also means reliability and the latest technology features. Interestingly enough, a used vehicle means lower initial cost and lower depreciation rates; but also, questionable reliability and possible repairing or upgrading costs.

A fleet vehicle is a big investment. And it's important to make your decision carefully. Let's examine what you should think about before you pay a visit to the dealer.

#### **APPLICATIONS**

#### **Vehicle Status**

We've always treated you with a per-vehicle status snapshot. This was more about the key indications of a vehicle's health. But, how about fleet utilization? With our newest addition in metric tiles, you're now able to quickly glance at how your fleet is being used and reach your conclusions about how optimally this is done. Unanswered questions like "Do I need extra vehicles?" or "Am I paying for more than I need?", will be a thing of the past, in no time!

#### **CONCLUSION**

Add and update maintenance tasks like oil change, air filter change and tire replacement.

Add, update and set automatic reminders for maintenance tasks based on mileage and/or time.

Improvements

We made a series of web application performance improvements and minor fixes

### **FUTURE SCOPE**

### **Fleet Safety Scorecard**

Get a glance at your dashboard and gain quick, summarized insights about the safety level of your fleet with key indicative metrics, on our new fleet safety scorecard. Not only will it help you improve your fleet strategy; if you use it right, it will also help prevent downtime and upkeep your company reputation. You'll only need to make a habit of taking a quick look at the numbers on the fleet safety scorecard, every few days. Identify issues with driver behavior and offer your drivers these overdue state-certified fleet safety courses you've always suspected they need. Your fleet will thank you for it!