

Vehicle Management System using Salesforce

1 INTRODUCTION

1.1 Overview

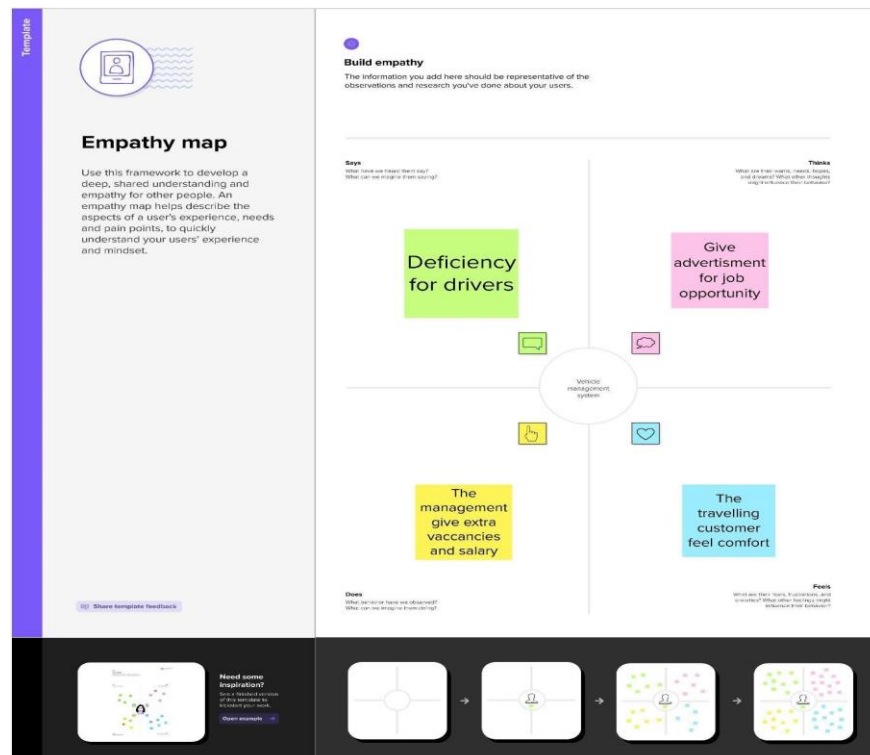
Vehicle Management is an application where a customer Details are stored in order to choose cars, bikes and commercial vehicles for travel within the city. The data which is stored here is further used to remind them if any offers are provided during the seasons and any updates regarding vehicles are sent to them in the form of messages and mails.

1.2 Purpose

The main purpose of these project is to make the customer feel easy and comfort with the travel services. The primary goal of an online taxi booking system is to make taxi booking more convenient for customers. Booking a taxi is simple. Customer satisfaction is the goal. Even though a vehicle management system is typically different from a GPS tracking system, it provides vehicle tracking capabilities. That is to say, the inability of a fleet operator to know the location and status of their fleet and drivers can give way to a variety of different problems. Granted that, poor productivity, fleet inefficiency and delayed deliveries and shipments are only a few of them.

2 PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy Map



2.2 Ideation & Brainstorming Map



3 RESULT

3.1Data Model

S NO.	Field Names	Data Types
1.	Customer Name	Text
2	Customer Mobile No	Number
3	Vehicle Type i)2 wheeler ii)4 wheeler	Picklist
4.	2WHEELERS i) HERO ii)HONDA iii)BAJAJ iv)ROYALENFIELD v)TVS vi)KINETIC vii)OLA viii)JAWA ix)SD x)BATTERY	Picklist

5.	4WHEELERS i)RENAULT ii)SKODA iii) HONDA iv)HYUNDAI v)SUZUKI vi)MAHINDRA vii)VOLKSWAGEN viii)BENZ ix)AUDI x)VOLVO	Picklist
6.	Vehicle Name	Text
7.	Vehicle No	Text
8.	Chassic No	Text
9.	Colour	Text
10.	Body Type	Text
11.	Vehicle Includes i)Fire Extenuation ii) First Aid Kit iii) Multi Charger kit iv)Stepney v) Stereo vi)Tool Kit vii) Tracking Device viii)Tyre Jack	Multi Picklist
12.	Condition i)Good ii)Medium iii)Least	Picklist
13	Mileage	Text
14	Seats	Number

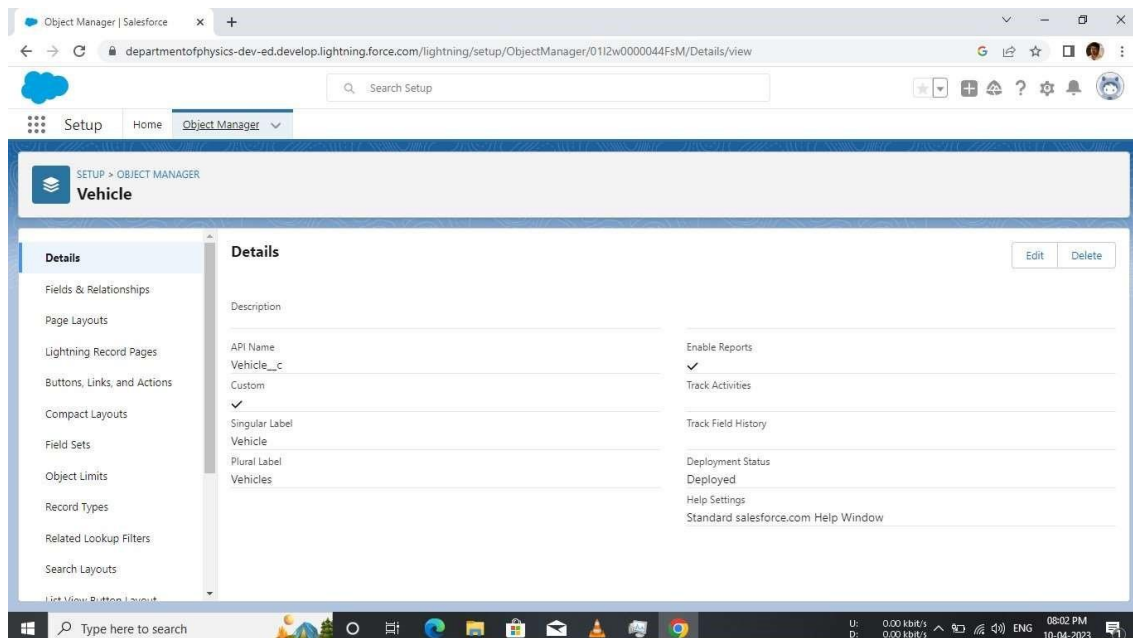
15	Start Date	Date/Time
16	End Date	Date/Time
17	Opportunity	Lookup(opportunities)

Field in driver object below in data type

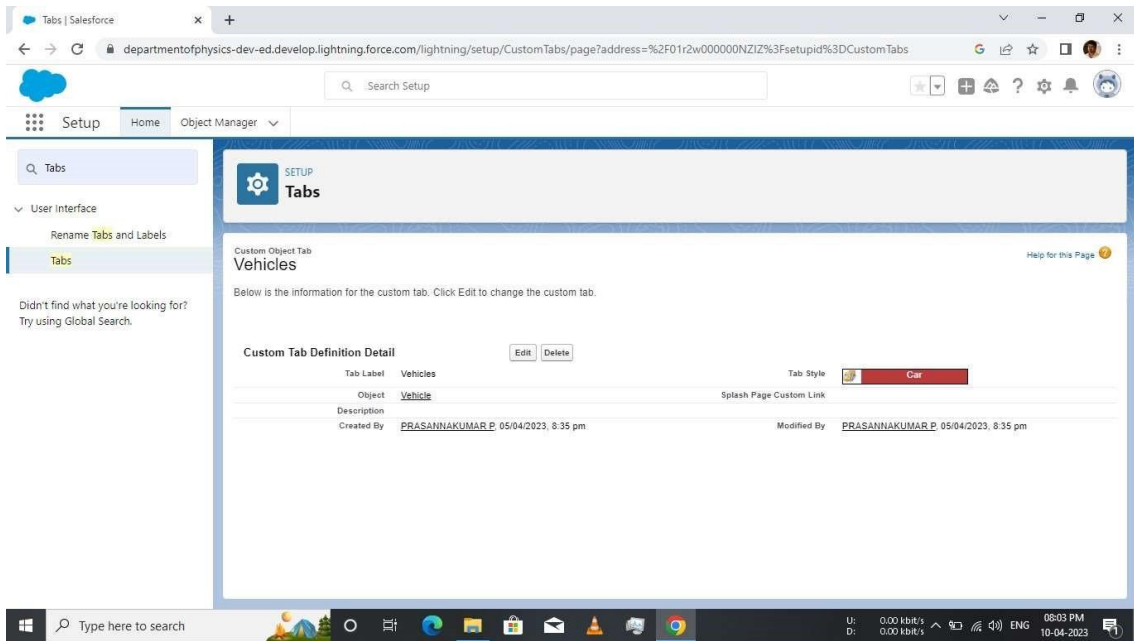
S. No	Field	Data type
1	Driver Name	Text
2	Licence No	Text
3	Mobile No	Number
4	Fair per hour	Number
5	Vehicle	Lookup

a Activity & Screenshot

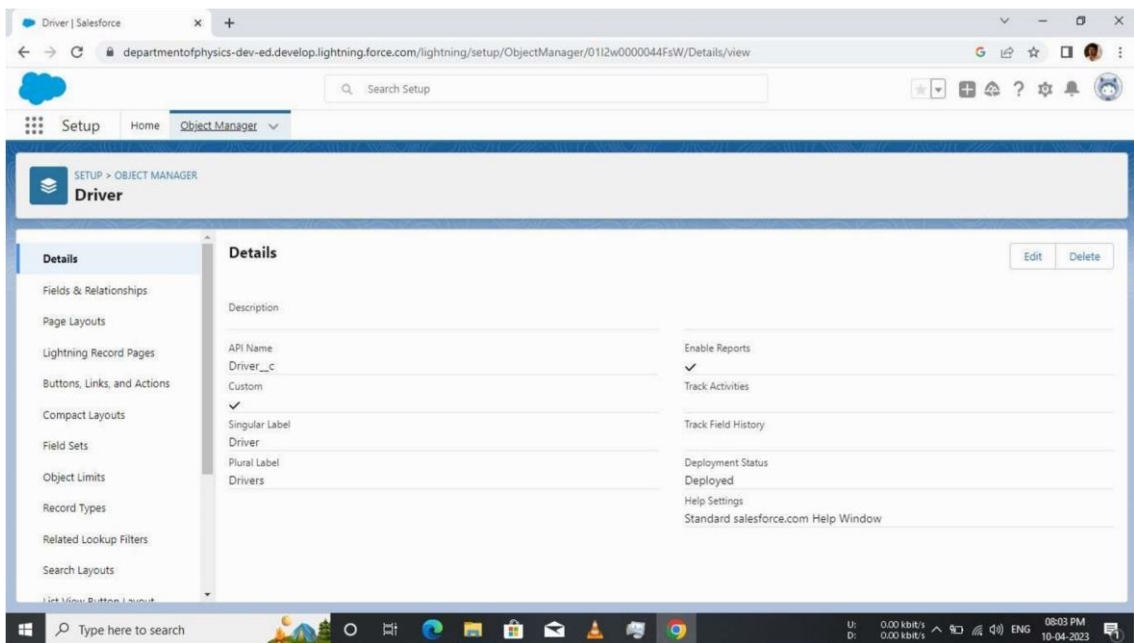
Creation of Objects for Vehicle Management, for this Vehicle Management we need to create two objects i.e. Vehicles, Driver.



Creating custom object tab for vehicle



Creating driver object



Custom object tab for drivers

The screenshot shows the Salesforce Setup interface. On the left, the navigation menu is expanded to 'User Interface' > 'Tabs'. The main content area is titled 'Custom Object Tab Drivers'. Below the title, it says 'Below is the information for the custom tab. Click Edit to change the custom tab.' There is a 'Custom Tab Definition Detail' section with a table showing the configuration for the 'Drivers' tab.

Tab Label	Drivers	Tab Style	People
Object	Driver	Splash Page Custom Link	
Description			
Created By	PRASANNAKUMAR P	05/04/2023, 8:40 pm	Modified By PRASANNAKUMAR P 05/04/2023, 8:40 pm

Creating fields & relationships for vehicle object

The screenshot shows the Salesforce Setup interface for the 'Vehicle' object. The left navigation menu is expanded to 'Fields & Relationships'. The main content area is titled 'Fields & Relationships' and shows a list of 21 items, sorted by Field Label. The table below lists the fields and their relationships.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
2WHEELERS	X2WHEELERS__c	Picklist	Vehicle Type	
4WHEELERS	X4WHEELERS__c	Picklist	Vehicle Type	
Body Type	Body_Type__c	Text(20)		
Chassic No	Chassic_No__c	Text(20)		
Colour	Colour__c	Text(20)		
Condition	Condition__c	Picklist		
Created By	CreatedById	Lookup(User)		

Vehicle | Salesforce

departmentofphysics-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0112w0000044FsM/FieldsAndRelationships/view

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER

Vehicle

Details

Fields & Relationships

21 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

Customer Mobile No	Customer_Mobile_No__c	Phone	
Customer Name	Customer_Name__c	Text(20)	
End Date	End_Date__c	Date/Time	
Last Modified By	LastModifiedById	Lookup(User)	
Mileage	Mileage__c	Text(80)	
Opportunity	Opportunity__c	Lookup(Opportunity)	✓
Owner	OwnerId	Lookup(User,Group)	✓
Seats	Seats__c	Number(18, 0)	

Type here to search

Vehicle | Salesforce

departmentofphysics-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0112w0000044FsM/FieldsAndRelationships/view

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER

Vehicle

Details

Fields & Relationships

21 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

Owner	OwnerId	Lookup(User,Group)	✓
Seats	Seats__c	Number(18, 0)	
Start Date	Start_Date__c	Date/Time	
Vehicle Includes	Vehicle_Includes__c	Picklist (Multi-Select)	
Vehicle Name	Vehicle_Name__c	Text(20)	
Vehicle Name	Name	Text(80)	✓
Vehicle No	Vehicle_No__c	Text(20)	
Vehicle Type	Vehicle_Type__c	Picklist	

Type here to search

Fields In Driver Object:

Driver | Salesforce

departmentofphysics-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0112w0000044FsW/FieldsAndRelationships/view

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER

Driver

Details

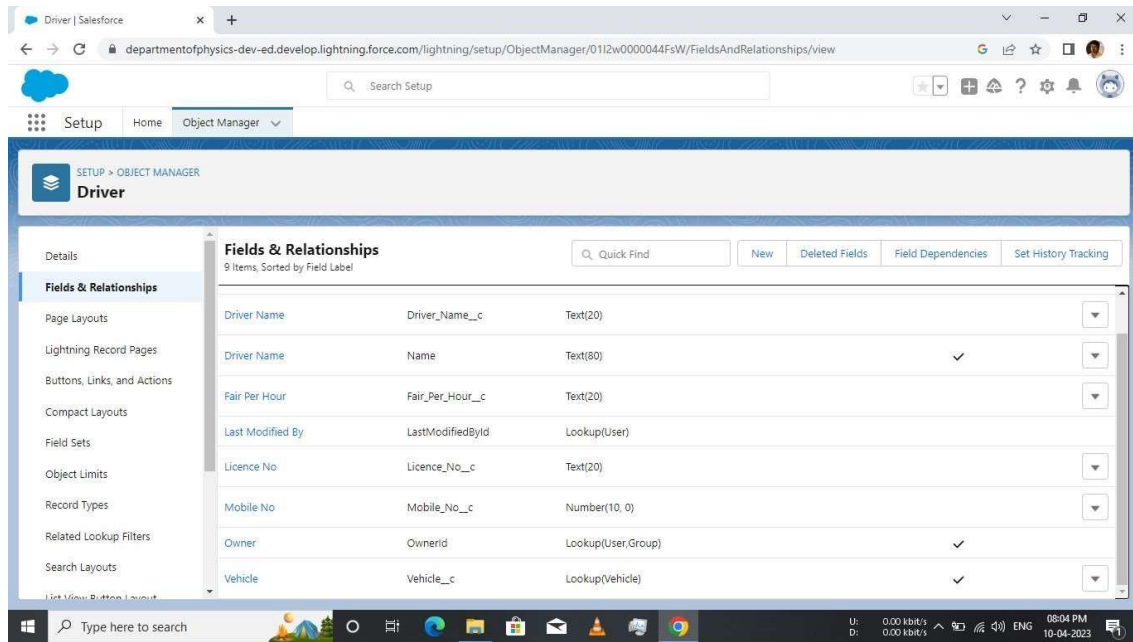
Fields & Relationships

9 Items, Sorted by Field Label

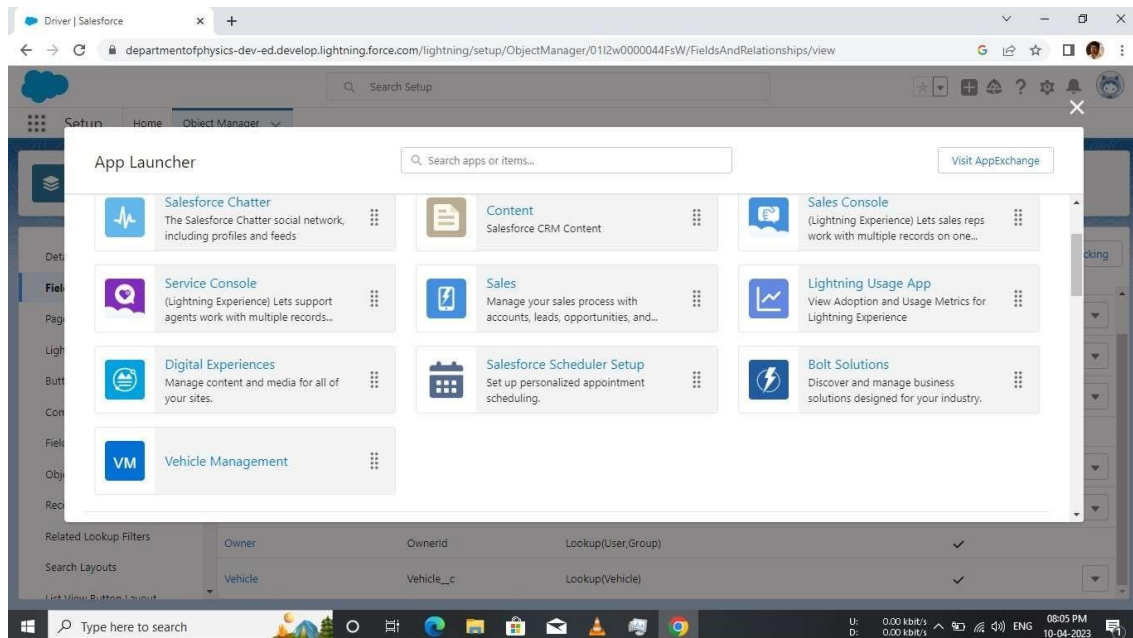
Quick Find New Deleted Fields Field Dependencies Set History Tracking

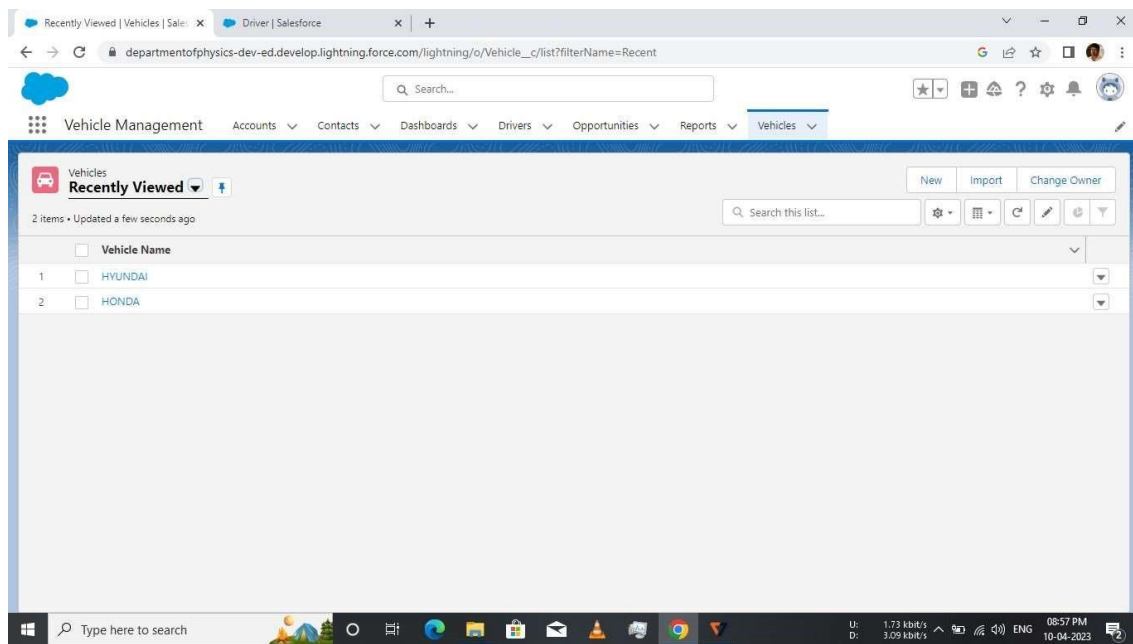
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Driver Name	Driver_Name__c	Text(20)		
Driver Name	Name	Text(80)		✓
Fair Per Hour	Fair_Per_Hour__c	Text(20)		
Last Modified By	LastModifiedById	Lookup(User)		
Licence No	Licence_No__c	Text(20)		
Mobile No	Mobile_No__c	Number(10, 0)		
Owner	OwnerId	Lookup(User,Group)		✓

Type here to search

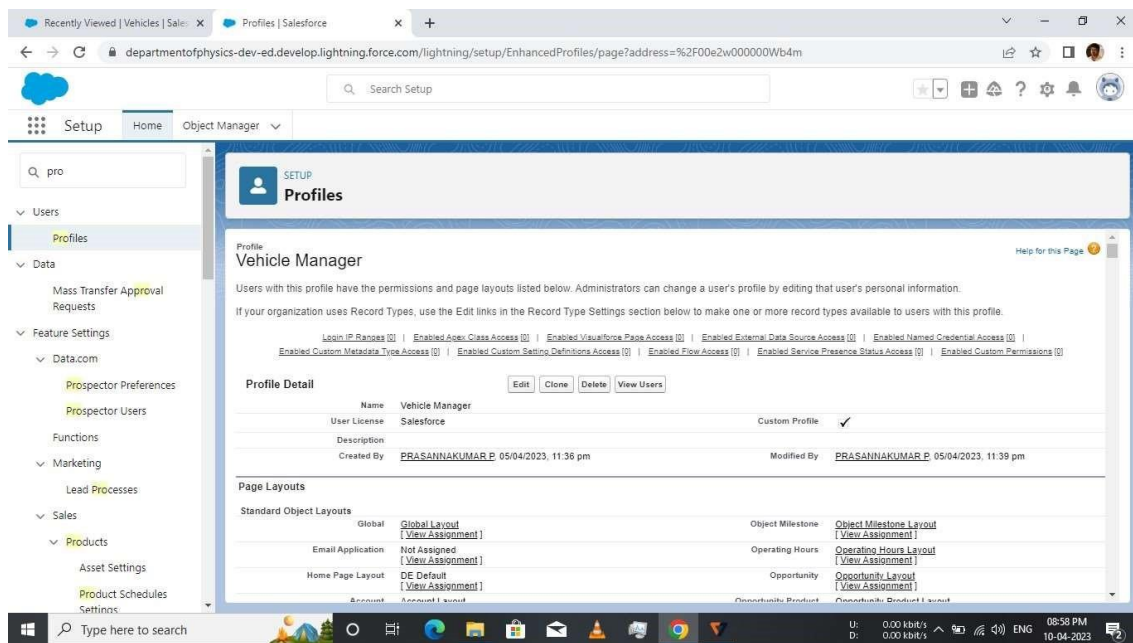


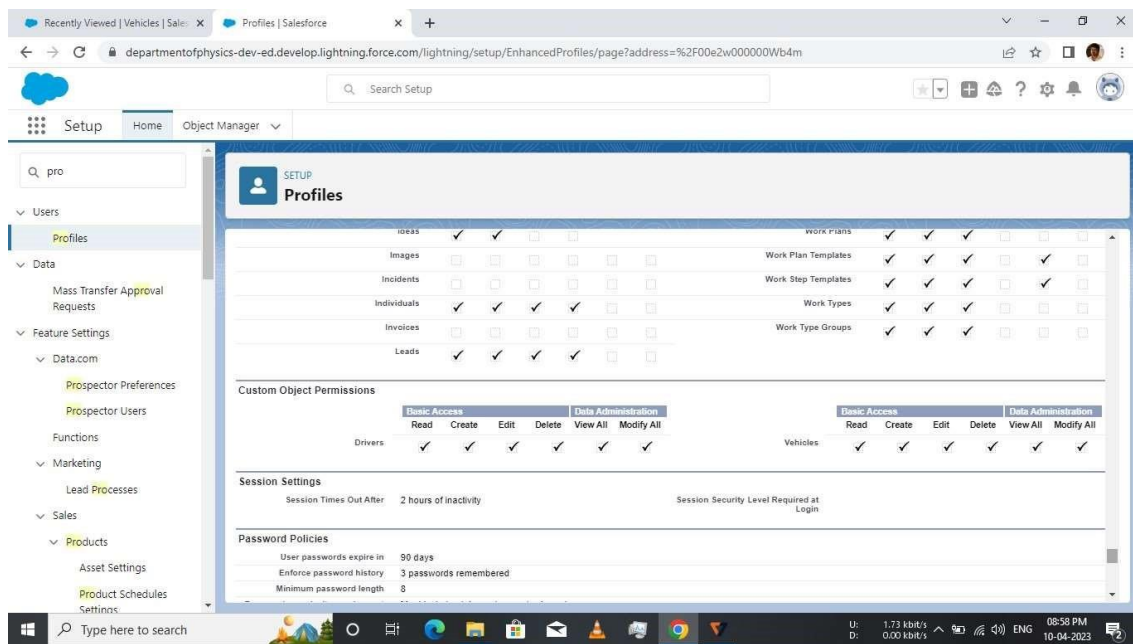
Create the Vehicle Management Construction app



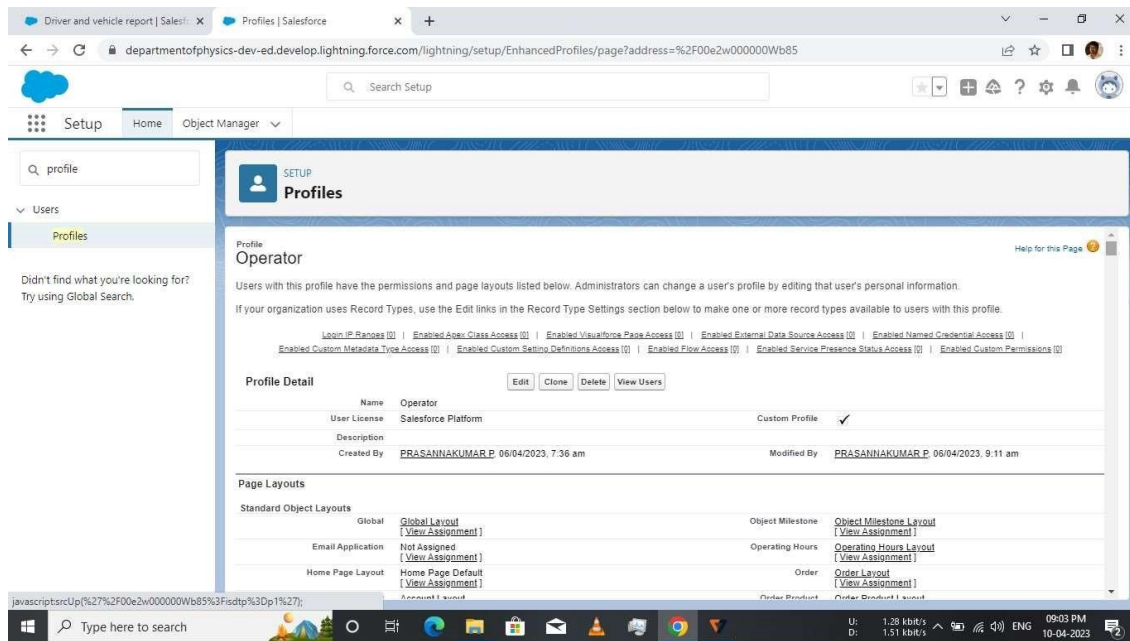


Creating a Profiles: Now create a Vehicle Manager profile and set its object permissions.





Create operator profile



Role vehicle manager as CEO

The screenshot shows the Salesforce Setup interface for the 'Vehicle Manager' role. The left sidebar contains navigation links for Roles, Sales, Service, and Case Teams. The main content area displays the role details and a table of users assigned to the role.

Role: Vehicle Manager

Below is the list of users assigned to this role. Click Edit to modify the role name. Click Assign Users to Role to assign existing users to this role. Click New User to create a user for this role.

Hierarchy: DEPARTMENT OF PHYSICS > CEO > Vehicle Manager
 Siblings: SVP Sales & Marketing, SVP Customer Service & Support, CFO, SVP Human Resources, COO

[Users in Vehicle Manager Role \(1\)](#)

Role Detail

Label	Vehicle Manager	Role Name	Vehicle_Manager
This role reports to	CEO	Role Name as displayed on reports	CEO
Modified By	PRASANNAKUMAR P	Modified On	06/04/2023 9:15 am
Opportunity Access	Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities		
Case Access	Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases		

Users in Vehicle Manager Role

Action	Full Name	Alias	Username	Active
Edit	Prasanna Kumar	pk	prasanna.kumar3951@gmail.com	✓

Two Roles under Vehicle Manager as Operator 1 And Operator 2 Roles which will report to the Vehicle manager

The screenshot shows the Salesforce Setup interface for the 'Operator 1' role. The left sidebar contains navigation links for Roles, Sales, Service, and Case Teams. The main content area displays the role details and a table of users assigned to the role.

Role: Operator 1

Below is the list of users assigned to this role. Click Edit to modify the role name. Click Assign Users to Role to assign existing users to this role. Click New User to create a user for this role.

Hierarchy: DEPARTMENT OF PHYSICS > CEO > Vehicle Manager > Operator 1
 Siblings: Operator 2

[Users in Operator 1 Role \(1\)](#)

Role Detail

Label	Operator 1	Role Name	Operator_1
This role reports to	Vehicle Manager	Role Name as displayed on reports	Vehicle Manager
Modified By	PRASANNAKUMAR P	Modified On	06/04/2023 9:17 am
Opportunity Access	Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities		
Case Access	Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases		

Users in Operator 1 Role

Action	Full Name	Alias	Username	Active
Edit	Operator 1 PK	opk	operator1@ok.com	✓

Sign in • MURAL x Sign up • MURAL x Roles | Salesforce x +

departmentofphysics-dev-ed.develop.lightning.force.com/lightning/setup/Roles/page?address=%2F00E2w00000uRkF%3Fsetupid%3DRoles

Search Setup

Setup Home Object Manager

roles

Users

Roles

Feature Settings

Sales

Contact Roles on Contracts

Contact Roles on Opportunities

Service

Case Teams

Case Team Roles

Contact Roles on Cases

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

Role Operator 2

Below is the list of users assigned to this role. Click Edit to modify the role name. Click Assign Users to Role to assign existing users to this role. Click New User to create a user for this role.

Hierarchy: DEPARTMENT OF PHYSICS > CEO > Vehicle Manager > Operator 2
Siblings: Operator 1

Users in Operator 2 Role (1)

Role Detail

Edit Delete

Label	Operator 2	Role Name	Operator_2
This role reports to	Vehicle Manager	Role Name as displayed on reports	Vehicle Manager
Modified By	PRASANNA KUMAR D 06/04/2023, 9:17 am	Sharing Groups	Role Rule and Subordinates
Opportunity Access	Users in this role can edit all opportunities associated with accounts that they own, regardless of who owns the opportunities		
Case Access	Users in this role can edit all cases associated with accounts that they own, regardless of who owns the cases		

Users in Operator 2 Role

Assign Users to Role New User

Action	Full Name	Alias	Username	Active
Edit	Operator 2 PK	pk	operator2@ck.com	✓

Type here to search

U: 115.33 kb/s
D: 0.00 kb/s

ENG 12:43 AM 12-04-2023

Creating a Vehicle manager Users:

Sign in • MURAL x Sign up • MURAL x Roles | Salesforce x +

departmentofphysics-dev-ed.develop.lightning.force.com/lightning/setup/ManageUsers/page?address=%2F0052w00000GEyOD%3FnoRedirect%3D1%26isUserEntityOv...

Search Setup

Setup Home Object Manager

user

Users

Permission Set Groups

Permission Sets

Profiles

Public Groups

Queues

Roles

User Management Settings

Users

Feature Settings

Data.com

Prospector Users

User Interface

Action Link Templates

Actions & Recommendations

App Menu

User: Prasanna Kumar

Permission Set Assignments (0) | Permission Set Assignments Activation Required (0) | Permission Set Group Assignments (0) | Permission Set License Assignments (0) | Personal Groups (0) | Public Group Membership (0) | Queue Membership (0) | Team (0) | Managers in the Role Hierarchy (0) | OAuth Connected Apps (0) | Third-Party Account Links (0) | Installed Mobile Apps (0) | Authentication Settings for External Systems (0) | Login History (0) | User Provisioning Accounts (0)

User Detail

Edit Sharing Reset Password Freeze

Name	Prasanna Kumar	Role	Vehicle Manager
Alias	pk	User License	Salesforce
Email	prasannakumar3951@gmail.com	Profile	Vehicle Manager
Username	prasannakumar3951@gmail.com	Active	✓
Nickname	User16007533117647500029	Marketing User	<input type="checkbox"/>
Title		Offline User	<input type="checkbox"/>
Company		Knowledge User	<input type="checkbox"/>
Department		Flow User	<input type="checkbox"/>
Division		Service Cloud User	<input type="checkbox"/>
Address		Site.com Contributor User	<input type="checkbox"/>
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	Site.com Publisher User	<input type="checkbox"/>
Locale	English (India)	WDC User	<input type="checkbox"/>
Language	English	Mobile Push Registrations	View
Delegated Approver		Data.com User Type	<input type="checkbox"/>

Type here to search

U: 0.00 kb/s
D: 0.00 kb/s

ENG 12:50 AM 12-04-2023

Creating a Operator 1 and 2 Users:

Sign in • MURAL x | Sign up • MURAL x | Users | Salesforce x +

departmentofphysics-dev-ed.develop.lightning.force.com/lightning/setup/ManageUsers/page?address=%2F0052w00000GEyOc%3Fnoredirect%3D1%26isUserEntityOve...

Search Setup

Setup Home Object Manager

user

Users

Permission Set Groups

Permission Sets

Profiles

Public Groups

Queues

Roles

User Management Settings

Users

Feature Settings

Data.com

Prospector Users

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Action Link Templates

Actions & Recommendations

SETUP Users

User: Operator 1 Pk

Permission Set Assignments | Permission Set Assignments: Activation Required | Permission Set Group Assignments | Permission Set License Assignments | Personal Groups | Public Group Membership | Queue Membership | Team | Managers in the Role Hierarchy | OAuth Connected Apps | Third-Party Account Links | Installed Mobile Apps | Authentication Settings for External Systems | Login History | User Provisioning Accounts

User Detail

Edit Sharing Reset Password Freeze

Name	Operator 1 Pk	Role	Operator 1
Alias	opk	User License	Cross Org Data Proxy
Email	prasanakumar3951@gmail.com	Profile	Cross Org Data Proxy User
Username	operator1@pk.com	Active	<input checked="" type="checkbox"/>
Nickname	User16807540807757293101	Marketing User	<input type="checkbox"/>
Title		Offline User	<input type="checkbox"/>
Company		Knowledge User	<input type="checkbox"/>
Department		Flow User	<input type="checkbox"/>
Division		Service Cloud User	<input type="checkbox"/>
Address		Site.com Contributor User	<input type="checkbox"/>
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	Site.com Publisher User	<input type="checkbox"/>
Locale	English (India)	WDC User	<input type="checkbox"/>
Language	English	Mobile Push Registrations	View
		Data.com User Type	

javascriptsrcUp[%27%2F0052w00000GEyOc%3Fnoredirect%3D1%26isUserEntityOverride%3D1%26isotp%3Dp1%27%2F0052w00000GEyOh%3Fnoredirect%3D1%26isUserEntityOv...

Type here to search

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D: 4.63 kbit/s

12:50 AM
12-04-2023

Sign in • MURAL x | Sign up • MURAL x | Users | Salesforce x +

departmentofphysics-dev-ed.develop.lightning.force.com/lightning/setup/ManageUsers/page?address=%2F0052w00000GEyOh%3Fnoredirect%3D1%26isUserEntityOv...

Search Setup

Setup Home Object Manager

user

Users

Permission Set Groups

Permission Sets

Profiles

Public Groups

Queues

Roles

User Management Settings

Users

Feature Settings

Data.com

Prospector Users

User Interface

Action Link Templates

Actions & Recommendations

App Menu

SETUP Users

User: Operator 2 Pk

Permission Set Assignments | Permission Set Assignments: Activation Required | Permission Set Group Assignments | Permission Set License Assignments | Personal Groups | Public Group Membership | Queue Membership | Team | Managers in the Role Hierarchy | OAuth Connected Apps | Third-Party Account Links | Installed Mobile Apps | Authentication Settings for External Systems | Login History | User Provisioning Accounts

User Detail

Edit Sharing Reset Password Freeze

Name	Operator 2 Pk	Role	Operator 2
Alias	opk	User License	Cross Org Data Proxy
Email	prasanakumar3951@gmail.com	Profile	Cross Org Data Proxy User
Username	operator2@pk.com	Active	<input checked="" type="checkbox"/>
Nickname	User16807542811669358822	Marketing User	<input type="checkbox"/>
Title		Offline User	<input type="checkbox"/>
Company		Knowledge User	<input type="checkbox"/>
Department		Flow User	<input type="checkbox"/>
Division		Service Cloud User	<input type="checkbox"/>
Address		Site.com Contributor User	<input type="checkbox"/>
Time Zone	(GMT+05:30) India Standard Time (Asia/Kolkata)	Site.com Publisher User	<input type="checkbox"/>
Locale	English (India)	WDC User	<input type="checkbox"/>
Language	English	Mobile Push Registrations	View
		Data.com User Type	

Delegated Approver

Type here to search

U: 0.43 kbit/s
D: 0.00 kbit/s

12:50 AM
12-04-2023

Reports

Reports for vehicle and customer details

Vehicle and Customer Details | Salesforce

departmentofphysics-dev-ed.develop.lightning.force.com/lightning/r/Report/0002w00000D9QREAE3/view?queryScope=userFolders

Vehicle Management Accounts Contacts Dashboards Drivers Opportunities Reports Vehicles

Report: Vehicles
Vehicle and Customer Details

Enable Field Editing Add Chart Edit

Total Records: 2 Total Seats: 10

Customer Name	Customer Mobile No	Vehicle: Vehicle Name	Vehicle: ID	Vehicle No	Chassis No	Colour	Seats
<input type="checkbox"/> KRISH (1)	9659987080 (1)	HONDA	a022w00000o4QmY	TN 51F 5221	1HGBH41JXMN109186	BLUE	6
Subtotal							6
Subtotal							6
<input type="checkbox"/> ROBERT DOWNEY JR (1)	9655990008 (1)	HYUNDAI	a022w00000o4Qn8	TN 50P 6784	2GYKL67JPE5598041	BLACK	4
Subtotal							4
Subtotal							4
Total (2)							10

Row Counts Detail Rows Subtotals Grand Total

Reports for drivers with vehicle report

Drivers with Vehicle Report | Salesforce

departmentofphysics-dev-ed.develop.lightning.force.com/lightning/r/Report/0002w00000D9QROEA3/view?queryScope=userFolders

Vehicle Management Accounts Contacts Dashboards Drivers Opportunities Reports Vehicles

Report: Drivers with Vehicle
Drivers with Vehicle Report

Enable Field Editing Add Chart Edit

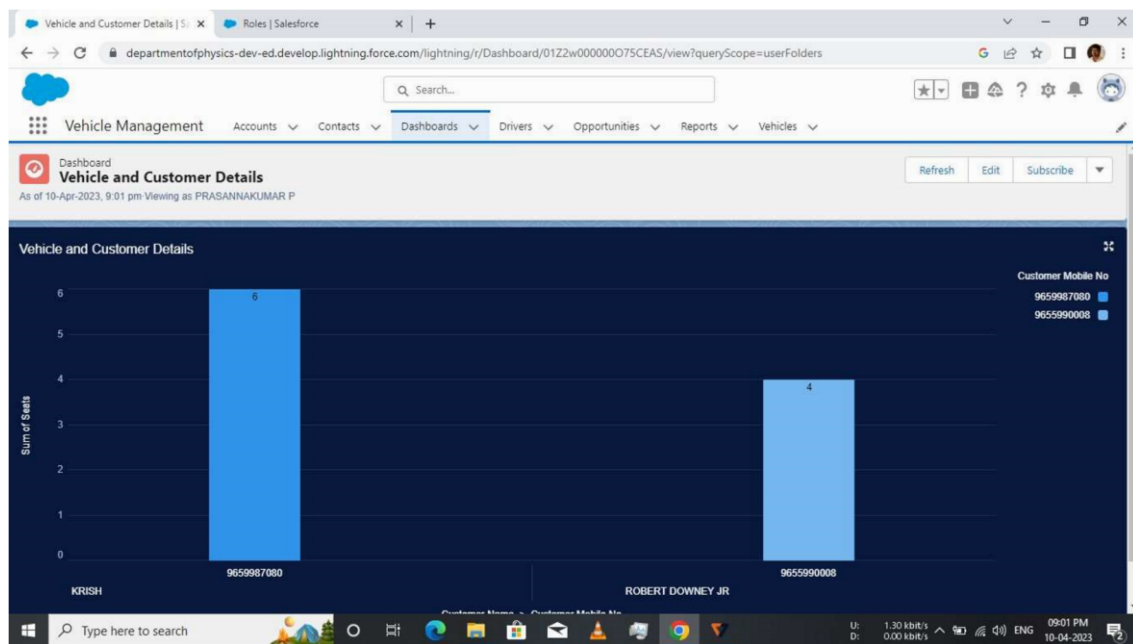
Total Records: 2 Total Vehicle Seats: 10

Driver: Driver Name	Licence No	Mobile No	Vehicle: Vehicle Type	Vehicle: Vehicle Name	Vehicle: Vehicle No	Vehicle: Chassis No	Vehicle: Seats	Vehicle: Mileage
<input type="checkbox"/> Operator 1 (1)	TN51 9067845986 (1)	9856098223 (1)	4 wheeler	HYUNDAI	TN 50P 6784	2GYKL67JPE5598041	4	50
Subtotal							4	
Subtotal							4	
Subtotal							4	
<input type="checkbox"/> Operator 2 (1)	TN50 7889345665 (1)	8983457923 (1)	4 wheeler	HONDA	TN 51F 5221	1HGBH41JXMN109186	6	60
Subtotal							6	
Subtotal							6	
Subtotal							6	
Total (2)							10	

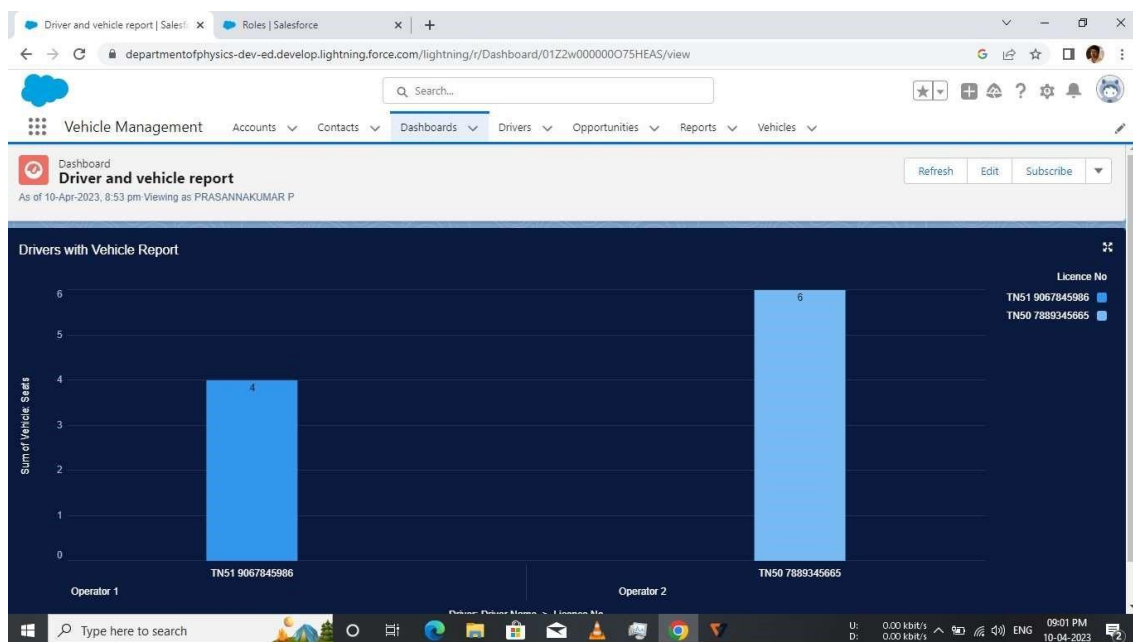
Row Counts Detail Rows Subtotals Grand Total

Dashboards

Dashboards for vehicle and customer details



Dashboards for driver with vehicle report



4 Trailhead Profile Public URL

Team Lead - <https://trailblazer.me/id/prasanna3951>

Team Member 1 - <https://trailblazer.me/id/logem10>

Team Member 2 - <https://trailblazer.me/id/cjesus10>

Team Member 3 – <https://trailblazer.me/id/kirur7>

5 ADVANTAGES

- Improve fleet safety and working conditions.

- Improve the behaviour and performance of drivers and beat unsafe driving.
- Schedule shifts and work hours.
- Leverage driver retention.
- Track vehicles, assets or professional equipment (even trailers and containers) □ Schedule routine maintenance.
- Manage fuel efficiency.

DISADVANTAGE

- It requires Internet connection to manage apps of vehicle management
- It requires skilled resources to maintain such system. This increases maintenance costs.

6 APPLICATIONS

The entire fleet on a single screen, in real time

Even though a vehicle management system is typically different from a GPS tracking system, it provides vehicle tracking capabilities. That is to say, the inability of a fleet operator to know the location and status of their fleet and drivers can give way to a variety of different problems. Granted that, poor productivity, fleet inefficiency and delayed deliveries and shipments are only a few of them. Surely, these issues, given the right circumstances, can seriously hurt business reputation and customer retention.

7 CONCLUSIONS

The main purpose of these project is to make the customer feel easy and comfort with the travel services. The primary goal of an online taxi booking system is to make taxi booking more convenient for customers. Booking a taxi is simple. Customer satisfaction is the goal.

8 FUTURE SCOPE

In future all of the disadvantages have been rectified. THE MONITOR CENTER OF VEHICLE MANAGEMENT SYSTEM has been improved in future.