

PROJECT REPORT

Project Title : Vehicle Management System using Salesforce

Project ID : NM2023TMID17828

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.

VEHICLE MANAGEMENT SYSTEM USING SALESFORCE :

Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster. Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers.

Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud.

1.2 Purpose

- The Vehicle Management System (VMS) is an application for the Automotive industry.
- It supports, in the area of Sales & Services, the business processes that you require as vehicle importer when dealing with your original equipment manufacturers (OEMs) and your dealers in new and used vehicle sales .
- VMS offers you complete integration of all the relevant processes such as procurement, sales, rework, returns processing, trade-in and service processing.
- It also supports the archiving of vehicle data.
- In other words, it allows you to react flexibly to customers' requirements in the area of production (using the “pull strategy”) and fast delivery times with reduced warehouse stock and sales/distribution costs.
- Increased fuel consumption and bad mileage are dead giveaways for a low-performing vehicle; frequent malfunctions is another. Specifically, what all these things have in common is that they clearly indicate a poorly maintained vehicle.
- In a fleet, where a vehicle should be an asset, this is a cause for all sorts of trouble. And it can, in fact, range from damages and losses, to unsatisfied customers.
- Mileage tracking in a trip log, fuel consumption tracking, diagnostic trouble code (DTC) alerts and notifications

about bad driving behavior are bits of functionality that can help a fleet operator identify what needs to be dealt with and opt for repairs that are, in fact, required.

- Such functionality eliminates guesswork and allows fleet managers and operators to optimize their maintenance budget.
- Especially if they cannot afford an in-house repair shop
- **Better reporting on driver behavior, work hours and vehicle performance**
- There are so many aspects of business a fleet manager needs to keep tabs on.
- To that end, a vehicle management system can help tidy up their standard operating procedures by offering them meaningful, normalized insights.
- Additionally, automated, personalized reports can be made available to different people in the company, summarizing the information they actually need to improve their workflows and help grow the business.

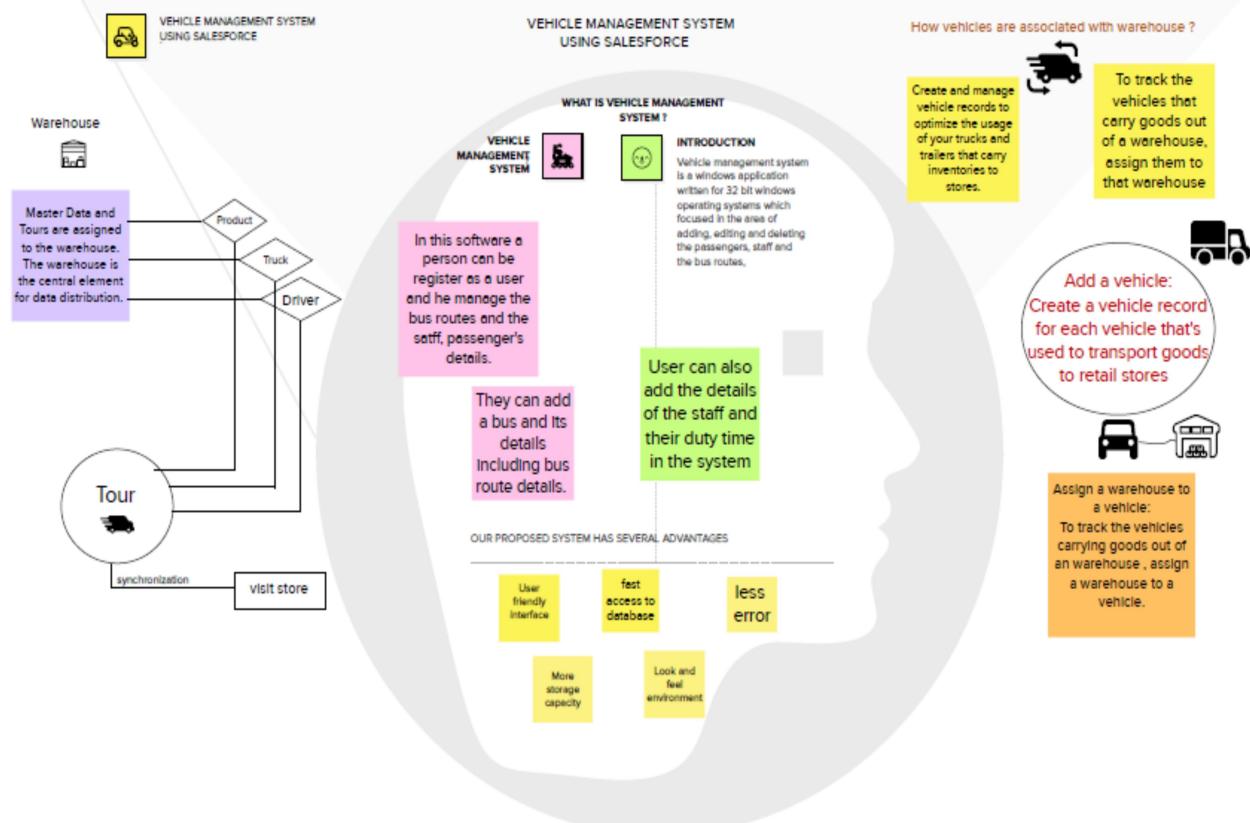
- **Customer retention**
- A happy customer can bring a double advantage.
- On one hand lies customer retention; on the other hand we have word-of-mouth recommendations.
- At any rate, for a fleet manager to gain this kind of advantage, they need to be able to track customer satisfaction.
- Besides crew evaluation functionality on the system, a trip log can offer insights on delays and route optimization, as well as driving events, such as speeding, which would indicate less than ideal time management or irritation on the driver's side.
- Besides, as mentioned, happy drivers and crew play a great role in keeping customers happy.
- And, surely, these valuable insights can help reach that goal; that is, retaining your customers and bringing new business, daily.

2. PROBLEM DEFINITION AND DESIGN THINKING

2.1 Empathy Map

An empathy map is a widely-used visualization tool within the field of UX and HCI practice. In relation to empathetic design, the primary purpose of an empathy map is to bridge the understanding of the end user.

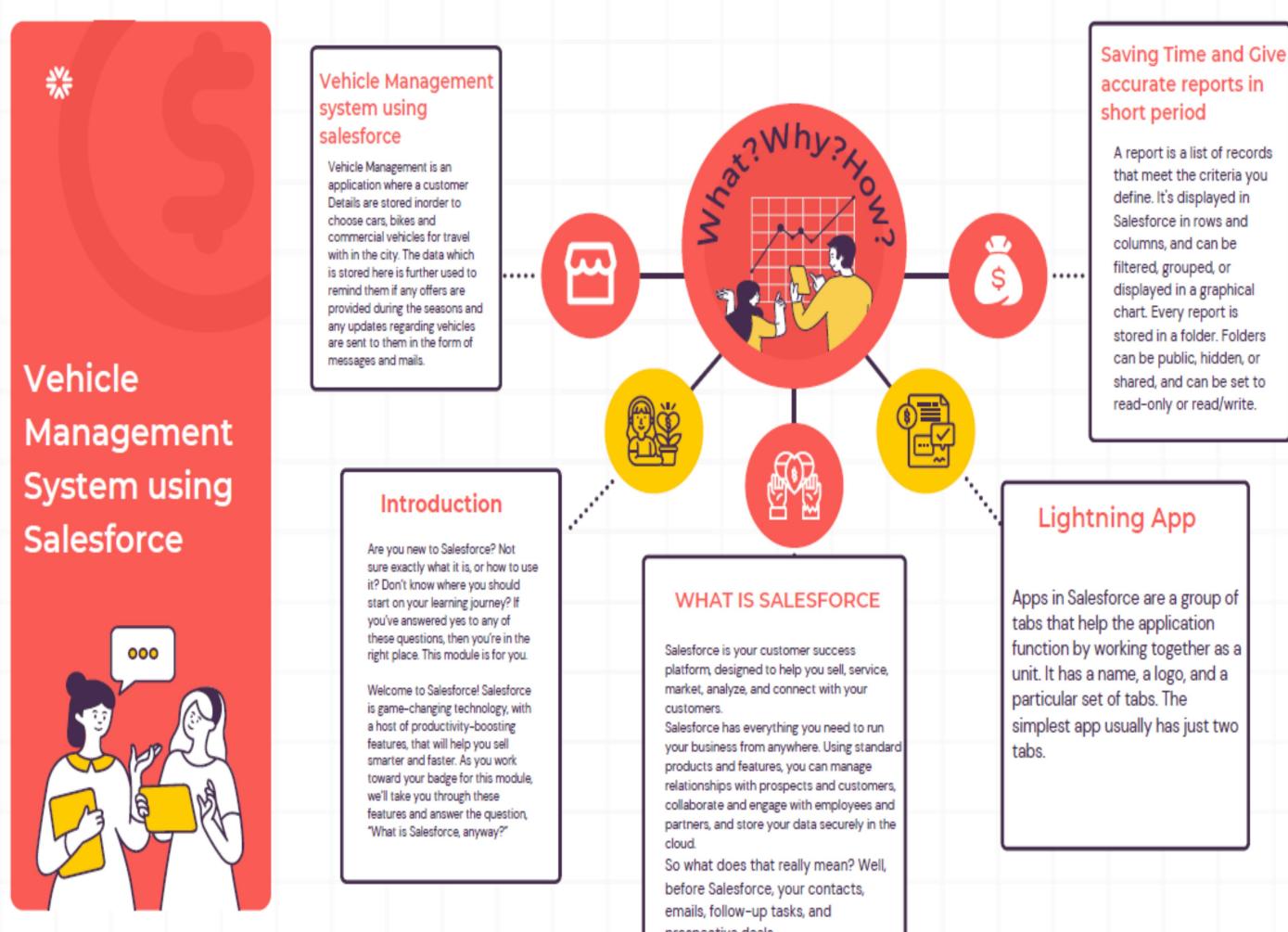
This tool helps to understand the reason behind some actions a user takes deeply. This tool helps build Empathy towards users and helps design teams shift focus from the product to the users who are going to use the product.



2.2 Ideation and Brainstorming Map

A brainstorming technique that can be used to organize thoughts and ideas.

The basic structure of a mind map is a central idea, with branches radiating out from the center. Each branch can then be further divided into smaller branches, creating a hierarchical structure.



3. RESULT

3.1 Data Model

Object name	Fields in the Objects		
1.Vehicle	S.NO	FIELD NAMES	DATA TYPES
	1.	Customer Name	Text
	2.	Customer Mobile Number	Number
	3.	Vehicle type i) 2 wheeler ii) 4 wheeler	Picklist
	4.	2WHEELERS i) HERO ii) HONDA iii) BAJAJ iv) ROYAL ENFIELD 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 vii) MAHINDRA vii) VOLKSWAGEN viii) BENZ	Picklist

	ix)AUDI x)VOLVO	
6.	Vehicle includes i)Fire Extension ii)First Aid Kit iii)Multi Charger Kit iv)Stepny v)Tool Kit vii)Traking Device viii)Tyre Jack	Multi Picklist
7.	Vehicle condition i)Good ii)Medium iii)Least	picklist
8.	Vehicle Name	Text
9.	Vehicle No	Text
10.	Colour	Text
11.	Body Type	Text
12.	Mileage	Text
13.	Seats	Number
14.	Chassic No	Text
15.	Start Date	Date & Time
16.	End Date	Date & Time
17.	Oppurtunity	Lookup(oppurtunities)

2.Driver

S.NO	FIELD	DATA TYPES
1.	Driver name	Text
2.	Licence Name	Text
3.	Mobile No	Number
4.	Fair Pen Hour	Text
5.	Vehicle	Lookup(vehicle)

3.2 Activity and Screenshots:

Creating salesforce Account Profile:

4/5/23, 11:40 PM ABIRAMI A | Salesforce

The screenshot shows the Salesforce Account Profile page for 'ABIRAMI A'. The profile header features a large circular placeholder for a profile picture, a camera icon for taking a photo, and edit and user detail buttons. Below the header, there's a section with a blue ribbon icon and a message encouraging users to share their awesomeness on Chatter. Two promotional links are displayed: one for Trailhead learning and another for connecting with Trailblazers on the Trailblazer Community.

ABIRAMI A

Share your awesomeness with the world.
(Or at least with your colleagues on Chatter.)

Details

Name: ABIRAMI A
Manager

Title

Company Name: Abi61@Vehicle Management

Email: abianbu6170@gmail.com (<mailto:abianbu6170@gmail.com>)

Phone

Address: IN

Mobile

About Me: Share your awesomeness with the world. (Or at least with your colleagues on Chatter.)

Related

[\(0\) \(/lightning/r/User/0052w00000GSYKKA/\)](#)

[\(0\) \(/lightning/r/User/0052w00000GSYKKA/\)](#)

[\(0\) \(/lightning/r/User/0052w00000GSYKKA/\)](#)

[\(0\) \(/lightning/r/User/0052w00000GSYKKA/\)](#)

Chatter

Post Poll Question

Share an update... Share

Activity

Creating Object fields

4/5/23, 11:35 PM

Vehicle | Salesforce

SETUP > OBJECT MANAGER						
Vehicle						
Fields & Relationships						
		Quick Find	New	Deleted Fields	Field Dependencies	Set History Tracking
2 WHEELERS	X2_WHEELERS_c	Picklist	Vehicle type			
4 WHEELERS	X4_WHEELERS_c	Picklist	Vehicle type			
Body Type	Body_Type_c	Text(50)				
Chassis No.	Chassis_c	Text(50)				
Colour	Colour_c	Text(50)				
Condition	Condition_c	Picklist				
Created By	CreatedBy	Lookup(User)				
Customer Name	Customer_Name_c	Text(50)				
End Date	End_Date_c	Date/Time				
Last Modified By	LastModifiedBy	Lookup(User)				
Message	Message_c	Text(50)				
Mobile Number	Mobile_Number_c	Number(18, 0)				
Opportunity	Opportunity_c	Lookup(Opportunity)				
Owner	Owned	Lookup(User Group)				
Seats	Seats_c	Number(18, 0)				
Start Date	Start_Date_c	Date/Time				
Vehicle Includes	Vehicle_Includes_c	Picklist(MultiSelect)				
Vehicle name	Vehicle_name_c	Text(50)				
Vehicle Name	Name	Text(50)				
Vehicle Number	Vehicle_Number_c	Text(50)				
Vehicle type	X4_c	Picklist				

Creating field Dependencies:

4/5/23, 11:50 PM

Vehicle | Salesforce

SETUP > OBJECT MANAGER

Vehicle

[Details](#) [/one/one.app#/setup/Object](#)

[Fields & Relationships](#) [/one/one.app#/setup/Relationships](#)

[Page Layouts](#) [/one/one.app#/setup/ObjectLayouts](#)

[Lightning Record Pages](#) [/one/one.app#/setup/ObjPages](#)

[Buttons, Links and Actions](#) [/one/one.app#/setup/ObjectActions](#)

[Compo Layouts](#) [/one/one.app#/setup/ObjectLayouts](#)

[Field Sets](#) [/one/one.app#/setup/ObjectSets](#)

[Object Limits](#) [/one/one.app#/setup/ObjectTypes](#)

[Record Types](#) [/one/one.app#/setup/ObjectTypes](#)

[Related Lists](#) [/one/one.app#/setup/ObjectFilters](#)

[Search Layouts](#) [/one/one.app#/setup/ObjectLayouts](#)

[List View](#) [/one/one.app#/setup/ObjectLayouts](#)

[Restrictions](#) [/one/one.app#/setup/ObjectRules](#)

[Scoping Rules](#) [/one/one.app#/setup/ObjectRules](#)

[Triggers](#) [/one/one.app#/setup/ObjectTriggers](#)

[Flow Triggers](#) [/one/one.app#/setup/ObjectTriggers](#)

[Validation Rules](#) [/one/one.app#/setup/ObjectRules](#)

Edit Field Dependency [Help for this Page](#)

Controlling Field: Vehicle type
Dependent Field: 2 WHEELERS

Instructions

- Double click on a cell to toggle its visibility for the Controlling Field value shown in the column heading.
- To change multiple cells at once, select multiple cells and then click the **Include Values** or **Exclude Values** buttons to toggle visibility of all selected cells at once.
- Use SHIFT + click to select a range of adjacent cells. Use CTRL + click to select multiple cells that are not adjacent.
- Use the Preview button to test the results.

Legend

Excluded Value
Included Value

Click button to include or exclude selected values from the dependent picklist

[Include Values](#) [Exclude Values](#)

Showing Columns: 1 = 2 (of 2) < Previous | Next > | View All | Go

Vehicle type:	1.2 WHEELER	2.4 WHEELER
2 WHEELERS:	1.HERO	1.HERO
	2.HONDA	2.HONDA
	3.BAJAJ	3.BAJAJ
	4.ROYAL ENFIELD	4.ROYAL ENFIELD
	5.TVS	5.TVS
	6.KINETIC	6.KINETIC
	7.GLA	7.GLA
	8.JAWA	8.JAWA
	9.BD	9.BD
	10.BATTERY	10.BATTERY

Showing Columns: 1 = 2 (of 2) < Previous | Next > | View All | Go

Click button to include or exclude selected values from the dependent picklist

[Include Values](#) [Exclude Values](#)

Creating Lightning App:

APP NAME: Vehicle Management

The screenshot shows the Lightning App Builder interface with the following details:

- Header:** Vehicle Management - Lightning App Builder
- Left Sidebar (App Settings):**
 - App Details & Branding** (selected)
 - [App Options](#)
 - [Utility Items \(Desktop Only\)](#)
 - [Navigation Items](#)
 - [User Profiles](#)
- App Details & Branding Section:**
 - App Details:**
 - * (required) App Name: Vehicle Management
 - * (required) Developer Name: Vehicle_Management
 - App Branding:**
 - Image:
 - Primary Color Hex Value: #0070D2
 - Description:** Enter a description...
 - Org Theme Options:**
 - Use the app's image and color instead of the org's custom theme
 - App Launcher Preview:** Shows a preview card with the letters "VM" and the text "Vehicle Management".

At the bottom left, there is a URL: <https://aagacvillupuram4-dev-ed.develop.lightning.force.com/visuals/Editor/appBuilder/app?id=02u2w000004SjKAA0&relUrl=https%3A%2F%2Faagacvillupuram4-dev-ed.develop.lightning.force.com%2F...> 1/2

Creating profile as Vehicle Manager:

The screenshot shows the Salesforce Setup interface. On the left, a sidebar navigation bar is open, showing a search bar at the top with the text "user". Below it, there are two main sections: "Users" and "Feature Settings". Under "Users", several items are listed: "Permission Set Groups", "Permission Sets", "Profiles", "Public Groups", "Queues", "Roles", "User Management Settings", and "Users". Under "Feature Settings", there is a single item: "Data.com". Under "Data.com", there is one item: "Prospector Users". Under "User Interface", there are five items: "Action Link Templates", "Actions & Recommendations", "App Menu", "Custom Labels", and "Density Settings".

The main content area is titled "SETUP" and "Users". It has a sub-section titled "Admin Users". The sub-section title is "Admin Users" and there is a "Help for this Page" link. Below the title, a message says: "On this page you can create, view, and manage users. In addition, download SalesforceA to view and edit user details, reset passwords, and perform other administrative tasks from your mobile devices: iOS | Android".

Below the message, there is a "View:" dropdown set to "Admin Users", an "Edit" button, and a "Create New View" button. A navigation bar with letters A through Z and an "Other" option is present. At the bottom of the navigation bar, there are three buttons: "New User", "Reset Password(s)", and "Add Multiple Users".

A table is displayed with columns: Action, Full Name, Alias, Username, Role, Active, and Profile. One row is selected, showing "Edit" for "A_ABIRAMI", "A", "abirami@gmail.com", "System Administrator", and "Active". Below the table, another navigation bar with letters A through Z and an "Other" option is present, along with three buttons: "New User", "Reset Password(s)", and "Add Multiple Users".

The screenshot shows the Salesforce 'Profiles' page. At the top, there's a search bar with 'Q profile' and a 'New' button. Below the search bar, there's a message: 'Didn't find what you're looking for? Try using Global Search.' A sidebar on the left lists 'Recent' and '常用 (常用)' (常用) sections. The main area is titled 'Profiles' and contains a table with columns for 'Action', 'Profile Name', 'User License', and 'Custom'. The table lists various profiles, including 'System Administrator', 'Standard System User', 'Customer Portal User', 'External App Login', 'Salesforce', 'Salesforce Platform', 'Customer Community Login User', 'Xing Profile User', 'Authenticated Website', 'Work.com Only', and 'Customer Portal Manager Custom'. Most profiles have the 'Custom' license selected.

Action	Profile Name	User License	Custom
<input type="checkbox"/>	System Administrator	Salesforce Integration	<input type="checkbox"/>
<input type="checkbox"/>	Standard System User	Salesforce	<input type="checkbox"/>
<input type="checkbox"/>	Customer Portal User	Customer Free	<input type="checkbox"/>
<input type="checkbox"/>	External App Login User	Kingfisher Cloud Integration User	<input type="checkbox"/>
<input type="checkbox"/>	External App Login User	Amadeus Cloud Integration User	<input type="checkbox"/>
<input type="checkbox"/>	External App Login	External App Login	<input type="checkbox"/>
<input type="checkbox"/>	Salesforce	Salesforce	<input type="checkbox"/>
<input type="checkbox"/>	Standard System User	Salesforce Platform	<input type="checkbox"/>
<input type="checkbox"/>	Customer Community Login User	Customer Community Login	<input type="checkbox"/>
<input type="checkbox"/>	Xing Profile User	Xing Profile User	<input type="checkbox"/>
<input type="checkbox"/>	Authenticated Website	Authenticated Website	<input type="checkbox"/>
<input type="checkbox"/>	Work.com Only	Work.com Only	<input type="checkbox"/>
<input type="checkbox"/>	Customer Portal Manager Custom	Customer Portal Manager Custom	<input type="checkbox"/>

4. Trailhead Profile Public URL:

Team Leader : <https://trailblazer.me/id/abira16>

Team member 1: <https://trailblazer.me/id/abirr23>

Team member 2: <https://trailblazer.me/id/akumar8291>

5. Advantages and Disadvantages

Advantages

- Improve fleet safety and working conditions
- Improve the behavior 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
- Keep track of malfunctions
- Track mileage and manage deductible expenses
- Produce individualized reports for all parties involved

Drawbacks

- It's a time-consuming process.
- Vulnerable storage of documents.
- There is a great possibility that agents incur a lot of money from poor people without their knowledge of actual expenditure as people have less information reach in the manual system.
- Maybe outdated information gets passed.
- Sometimes it is the spelling error in the manual system that gets saved and after that, while we check it in the final phase it gets rejected.

So, above this is the whole process of getting vehicle insurance by our system we can make it a little bit simpler and the fast process of automating it. things in a fully functional way and the application will include the following entities (an entity is a real-world object).

6. Applications

For the **vehicle importer** , VMS serves as a central tool for managing, procuring, sales/distribution and tracking of vehicles. Your **dealers** use it as a workplace for configuration, searching, purchasing, and tracking of vehicles for your end customers. The dealers can log in to your system remotely via the Internet and access your data. You do not require your own SAP system for this. You only need an Internet browser, via which you work with a simplified **VMS internet interface** .

There is a **one screen transaction** (based on the vehicle as object) with an integrated interface for vehicle master data, vehicle searches and actions ([Transaction Codes for VMS](#)). To access this transaction,

choose **Logistics Execution Vehicle Management System** **Vehicle Manager** or [transaction VEL0](#) from the **SAP Easy Access** screen.

Also can be using a Salesforce Application for the easy and fastest accessing,

Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster. Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers.

Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud.

7. Conclusion

Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a framework that enables the manager to make reasonable estimates made within a limited frame at the beginning of the software project and should be updated regularly as the project progresses.

At the end it is concluded that we have made effort on following points ...

- A description of the background and context of the project and its relation to work already done in the area.
- Made statement of the aims and objectives of the project.
- The description of purpose, scope, and applicability.
- We define the problem on which we are working in the project.
- We understand the problem domain and produce a model of the system, which describes operations that can be performed on the system.
- We included features and operations in detail, including screen layouts.
- We designed user interface and security issues related to system.
- **Finally the system is implemented and tested according to test cases.**

8. Future Scope

- We can add printer in future.
- We can give more advance software for vehicle management system including more facilities.
- We will host the platform on online servers to make it accessible worldwide .
- Integrate multiple load balancers to distribute the loads of the system.
- Create the master and slave database structure to reduce the overload of the database queries .
- Implement the backup mechanism or taking backup of codebase and database on regular basis on different servers.

The above mentioned points are the enhancements which can be done to increase the applicability and usage of this project. Here we can maintain the records of vehicle and driver. Also as it can be seen that now a days the players are versatile, i.e., so there is a scope for introducing a method to maintain the Vehicle Management System. Enhancements can be done to maintain all the Vehicle, Driver, Insurance , Maintenance , Fuel.

