GOVERNMENT ARTS COLLEGE,UDHAGAMANDALAM

DEPARTMENT OF PHYSICS

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Team member 1: Evangeline S

Team member 2: Indhu K

Team member 3: Lavanya C

Team member 4: Kirubakaran N

VEHICLE MANAGEMENT SYSTEM

1.INTRODUCTION

1.1 OVERVIEW

This project aims to develop a vehicle management system using the salesforce platform. This system helps to store the customer details in order to choose cars, bikes, and commercial vehicles for travel within the city. If any offers are provided for a customer this system will inform that customer in the form of message or mail. This makes travelling easy for the customer.

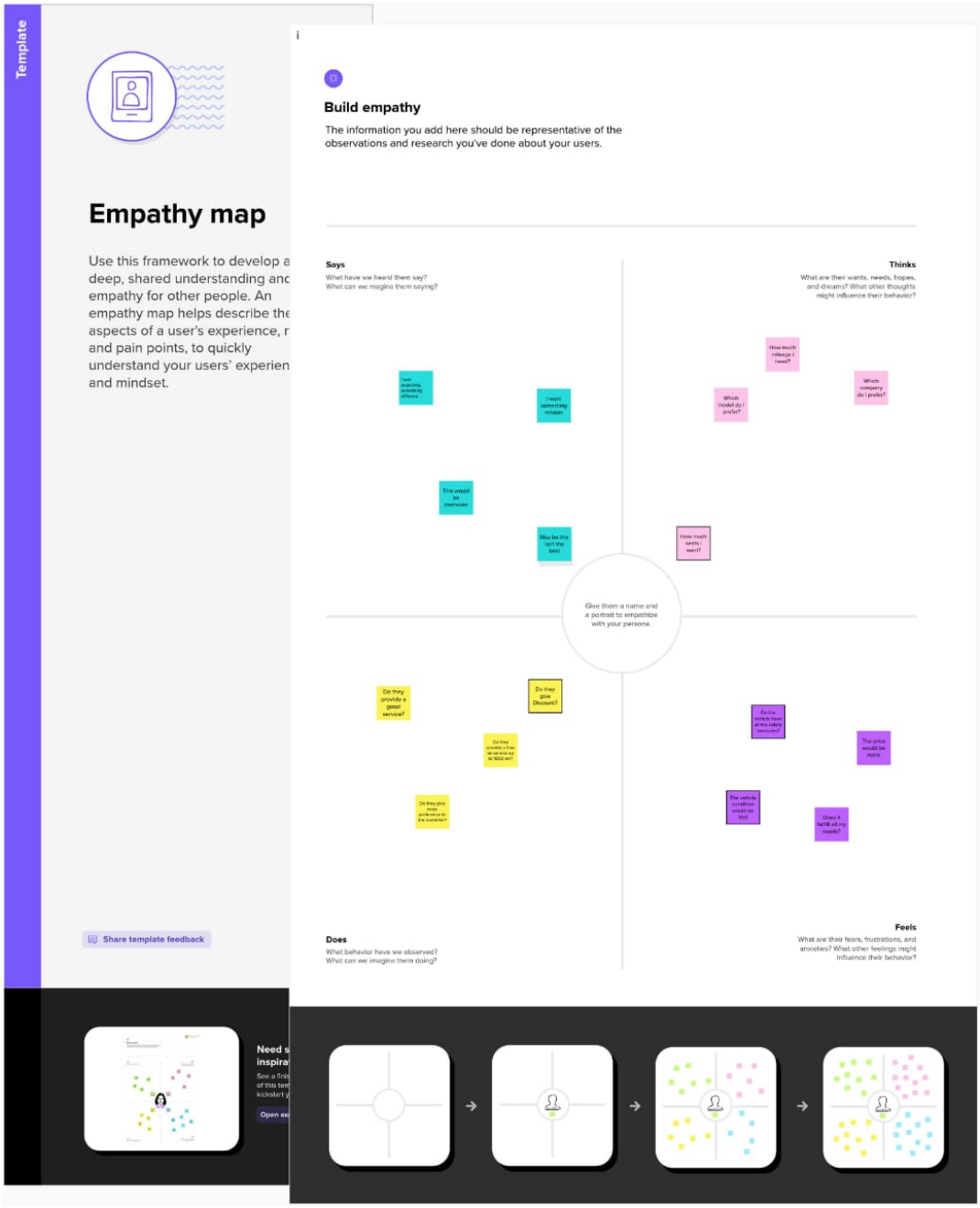
1.2 PURPOSE

A vehicle management project is a system or application that is used to track and manage a fleet of vehicles. It might be used by a company with a large number of vehicles, such as a rental car company or transportation company, to keep track of vehicles maintenance, availability and usage. It is used to manage vehicle to optimize the usage of your trucks and trailers

that carry inventories to stores. To track the vehicles that carry goods out of a warehouse, assigns them to that warehouse.

2 PROBLEM DEFINITION & DESIGN THINKING

2.1 EMPATHY MAP



2.2 IDEATION & BRAINSTROMING MAP

3 RESULT

3.1 DATA MODEL

Object name	Fields in the object
Vehicle	

Field name	Data type
2 wheelers	Picklist
4 wheelers	Picklist
Body type	Text
Chassic no	Text
Customer Name	Text
Customer Mobile No	Number
Vehicle Type	Picklist

Vehicle Name	Text
Vehicle No	Text
Colour	Text
Vehicle Includes	Multi Picklist
Condition	Picklist
Mileage	Text
Seats	Number
Start Date	Date/Time
End Date	Date/Time
Opportunity	Lookup(opportunities)
Owner	Lookup
Last Modified BY	Lookup

<table>
<tr>
<td>Driver</td>
<td>
<table>
<tr><th>Field Lable</th><th>Data Type</th></tr>
<tr><td>Driver Name</td><td>Text</td></tr>
<tr><td>Licence No</td><td>Text</td></tr>
<tr><td>Mobile No</td><td>Number</td></tr>
<tr><td>Fair Per Hour</td><td>Text</td></tr>
<tr><td>Vehicle</td><td>Lookup(Vehicle)</td></tr>
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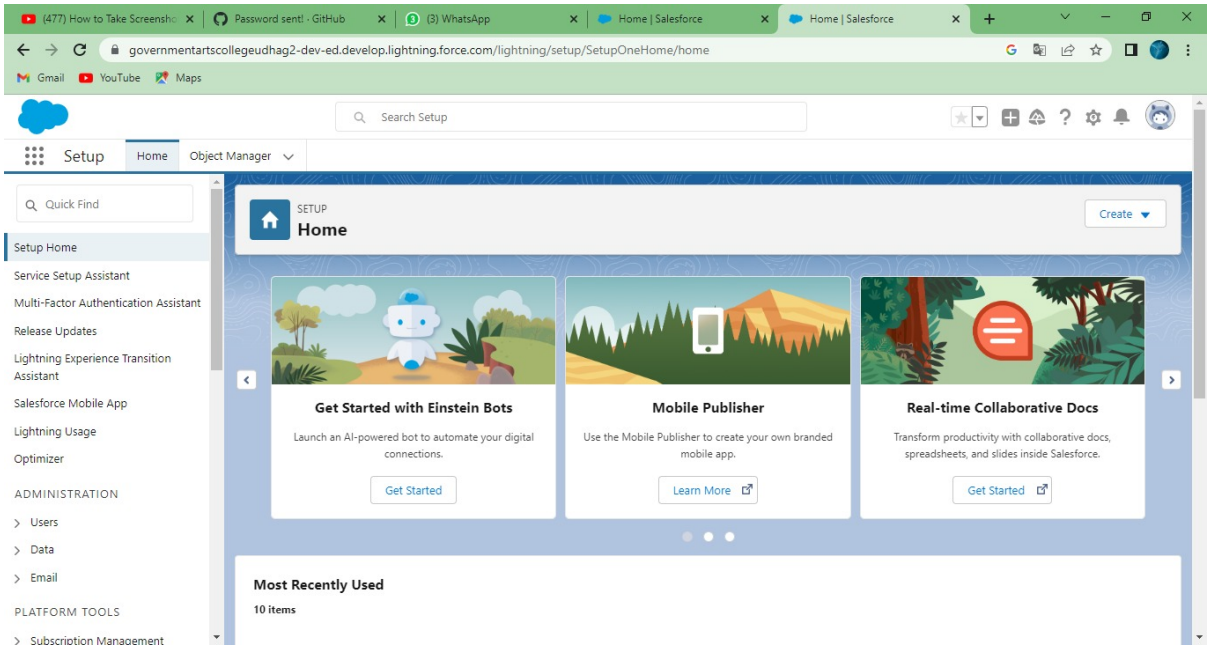
ACTIVITY AND SCREENSHOTS:

Milestone 1: Creation of Developer Account

Description:

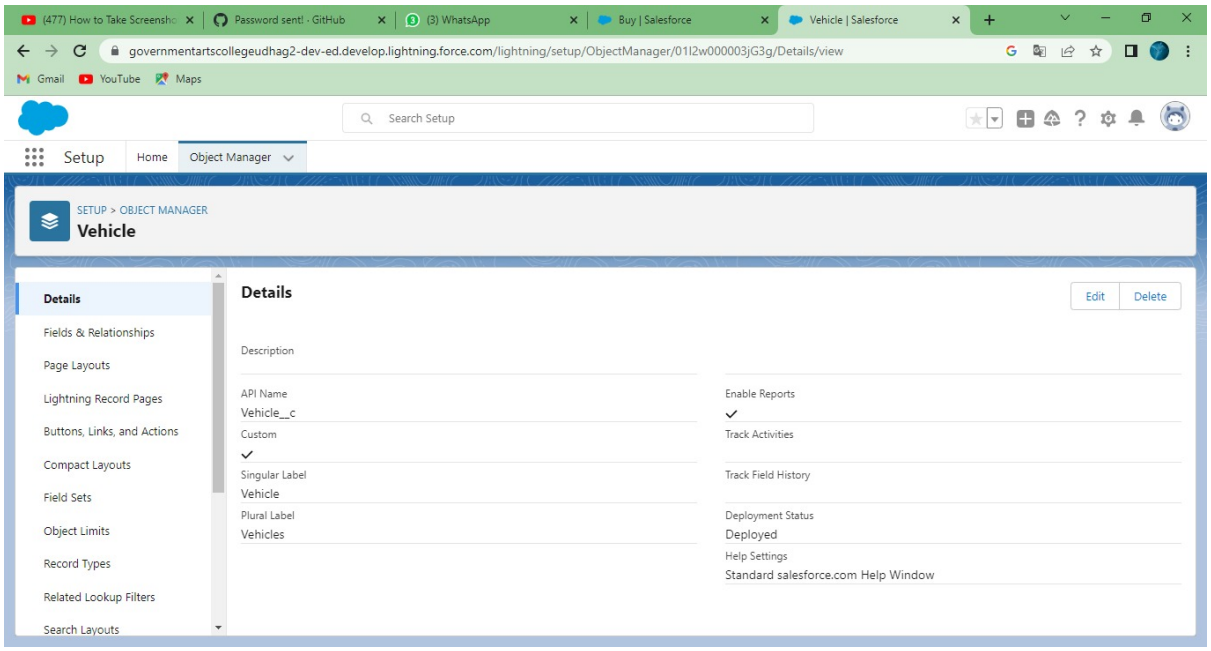
We had created a developer account and verified it for the salesforce project.



Milestone 2: Object

Description:

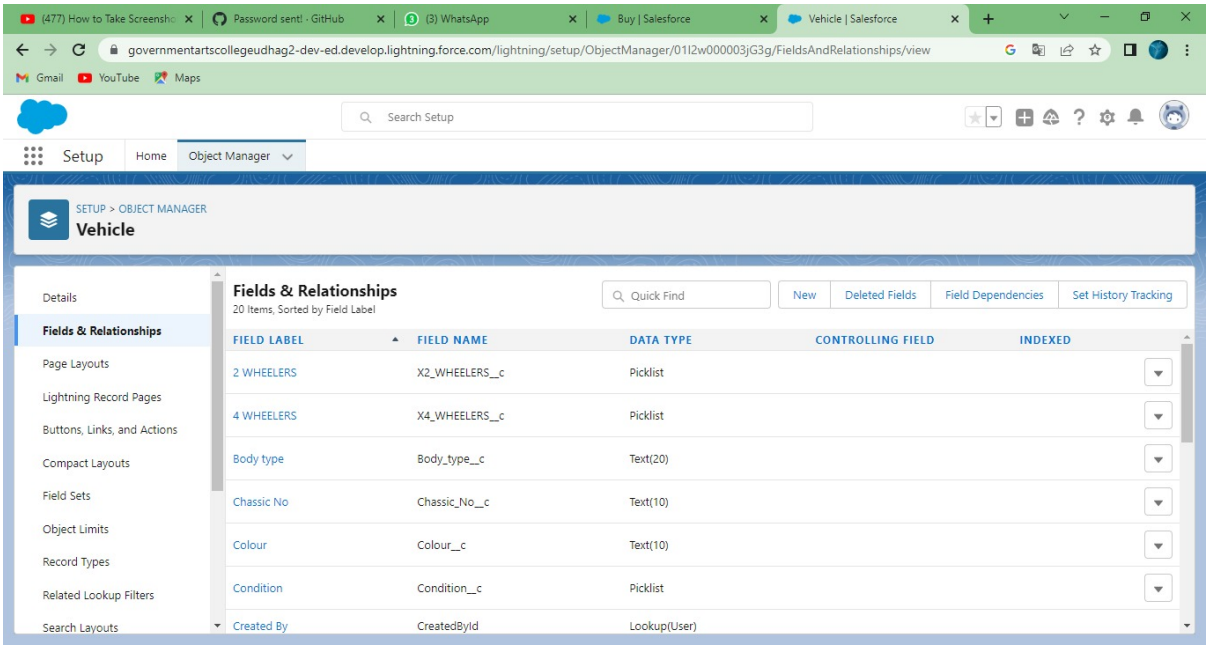
Created a custom object with label named “Vehicle” and “Driver”.



Milestone 3: Fields

Description:

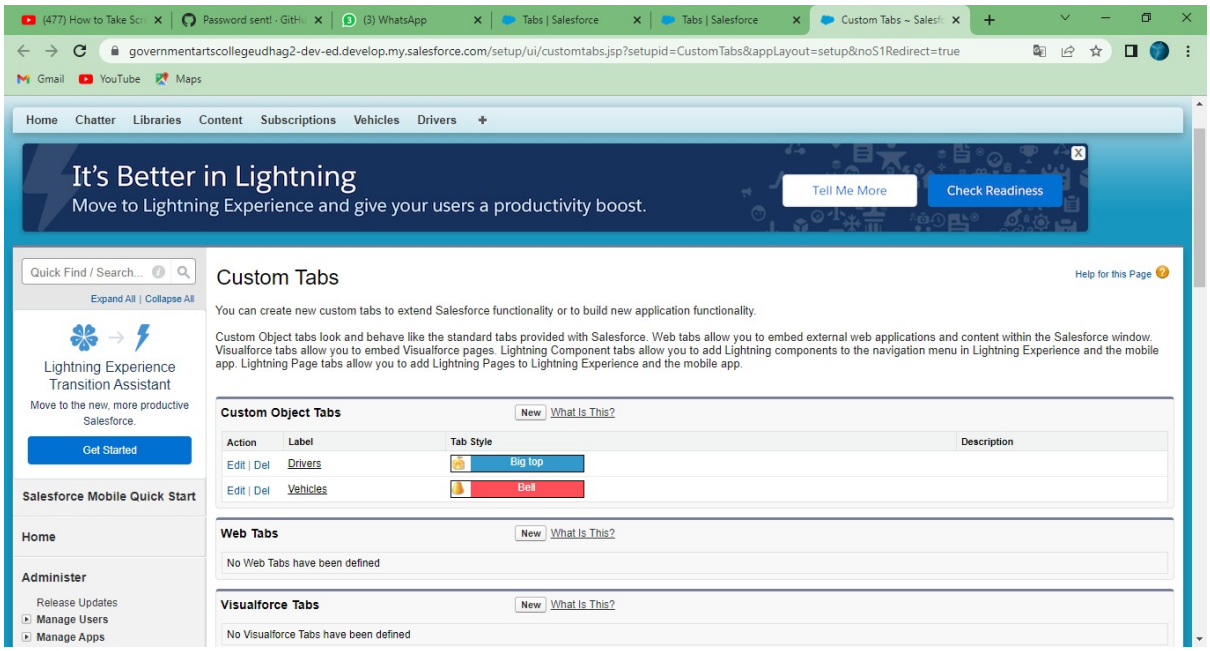
Created a Fields and Relationship for “Vehicle” and “Driver” Object.



Milestone 4: Tabs

Description:

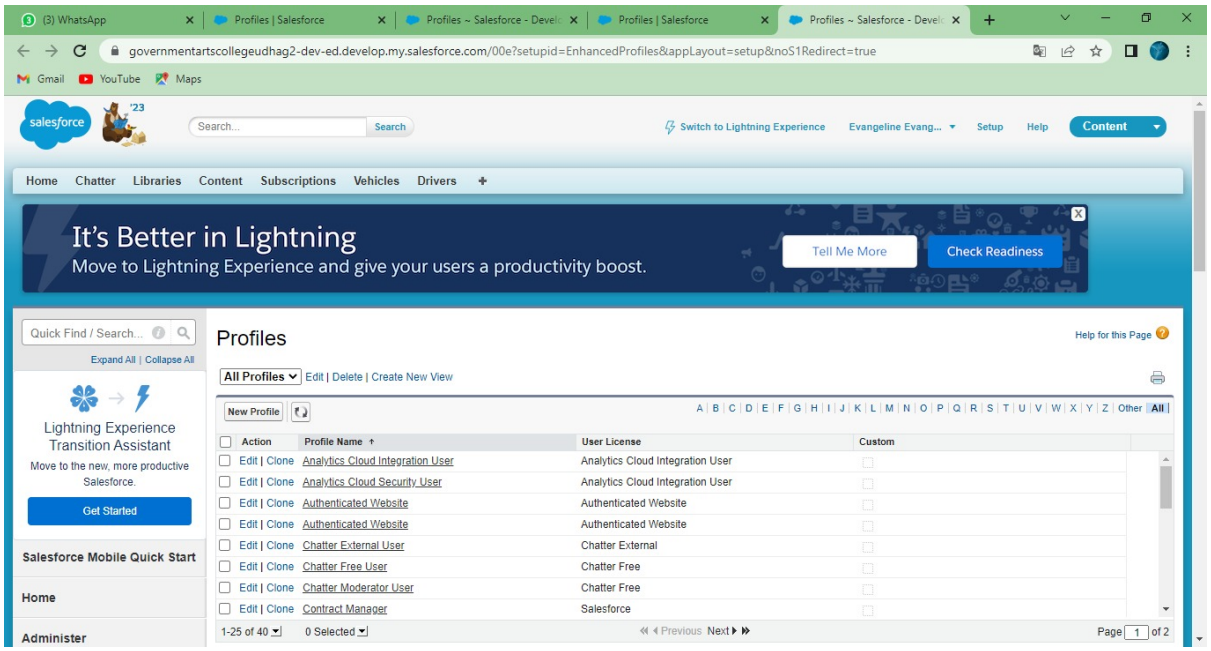
Created a tab for “Vehicle” and “Driver” object.



Milestone 4: Profile

Description:

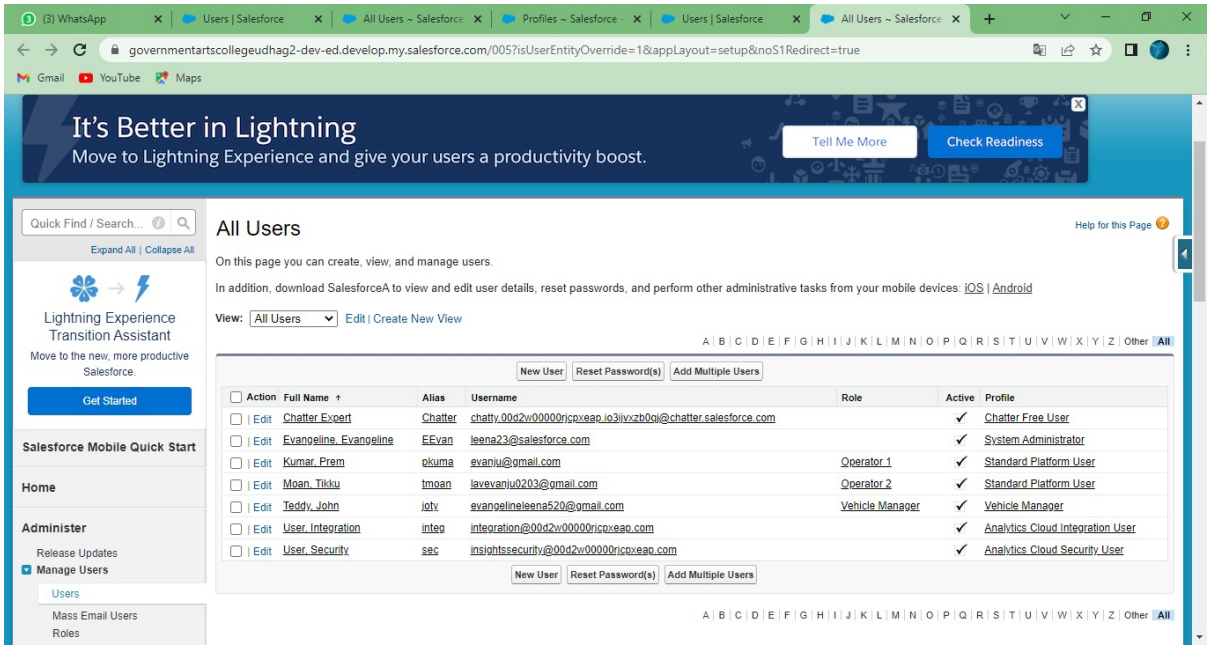
Created a custom profile for " Vehicle" and "Driver".



Milestone 6: Users

Description:

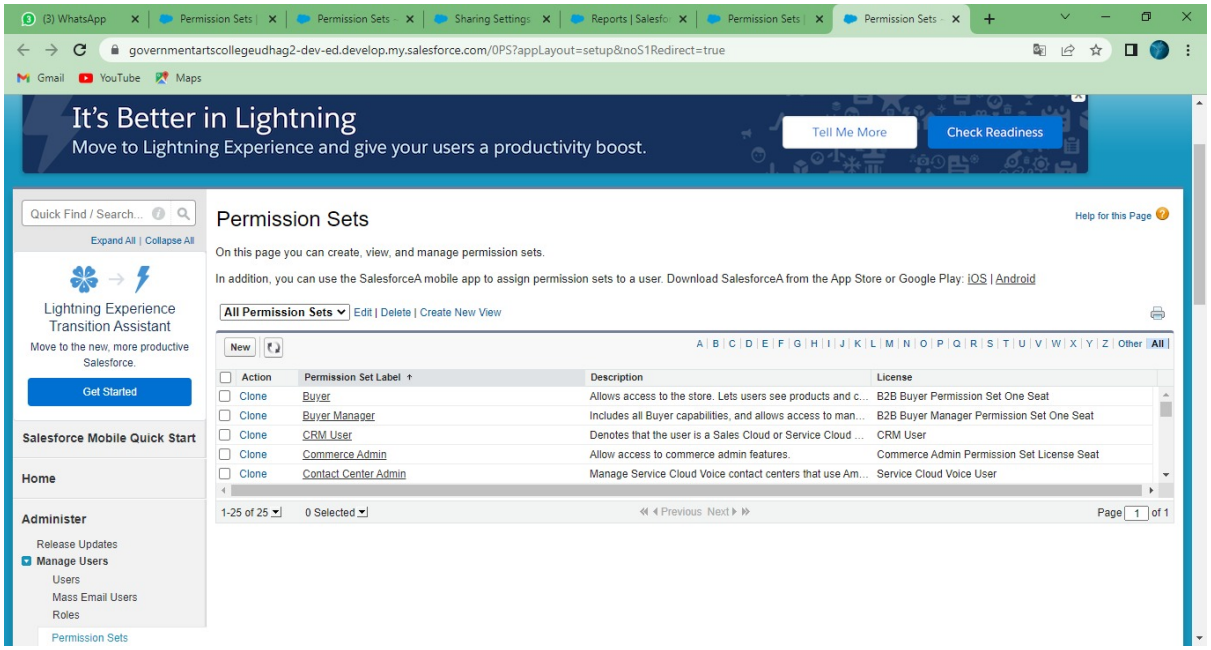
Created a user for Vehicle Manager as " John Teddy".



Milestone 7: Permission set

Description:

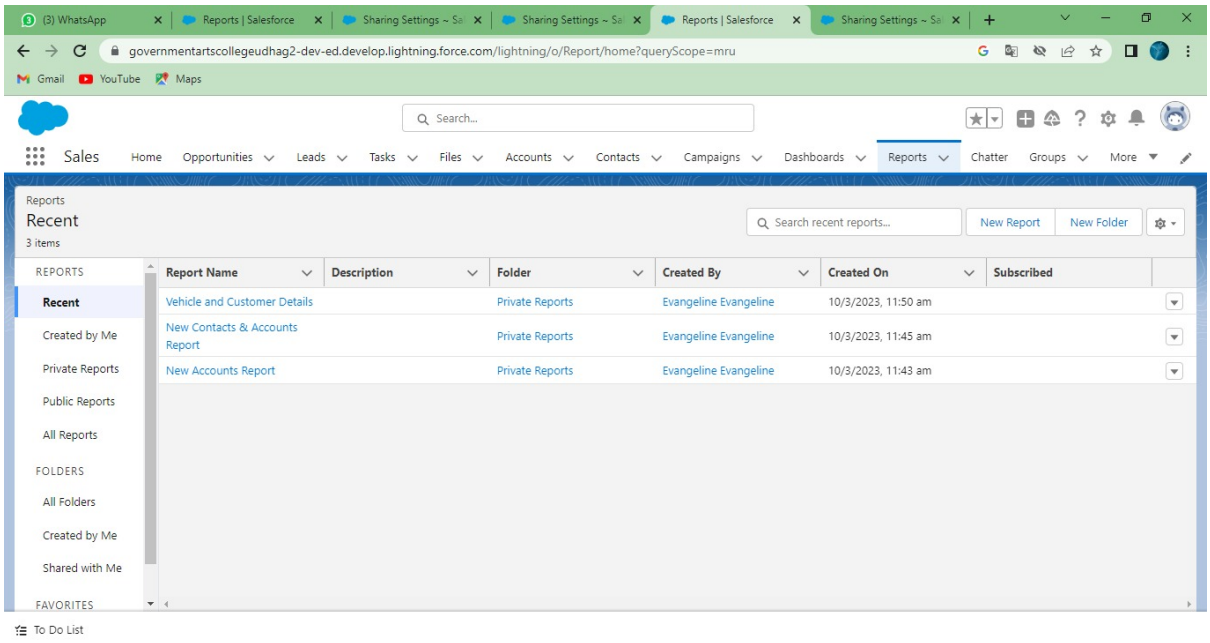
Created a Permission set for object "Vehicle" and "Driver".



Milestone 8:

Description:

Created a report using object “Vehicle” and “Driver”.



4. TRAILHEAD PROFILE PUBLIC URL:

Team Lead (Yasshwanth J): https://trailblazer.me/id/yaashwanthj

Team Member 1(Evangeline S): https://trailblazer.me/id/evangelineleena

Team Member 2(Indhu k): https://trailblazer.me/id/indhu03

Team Member 3(Lavanya C): https://trailblazer.me/id/lchinraj

Team Member 4(Kirubakaran N): https://trailblazer.me/id/kkaran69

5. ADVANTAGES AND DISADVANTAGES:

ADVANTAGES:

1. **Low fuel consumption** – By implementing fleet management techniques This Solution continually updates the energy consumption, which reduces the use of fuel over the long term. The solution also includes the forecast of the path to the destination that

determines the shortest distance that will get you to the destination while minimizing traffic. One of the primary factors in determining the most efficient path is the time it takes to get to the destination.

2. **Tracking in real-time –** The solution offered by Vehicle Management in Salesforce makes it possible to monitor vehicles in real-time, thereby increasing efficiency and reliability. Additionally, sharing real-time information with customers aids in facilitating the process of estimating pick-up times and time to the location, and the transfer of location information to customers' mobile phones.

3. Safe and secure – The safety of passengers is assured by storing details about the drivers who operate the vehicles. The company keeps the contact information that allows them to contact the driver concerned if a difficulty or problem arises. This will also ensure the security that the driver is protected in event of any threat from the client. The fleet management system tracks the operating vehicle. If any anomalies are identified, it immediately alerts the head of the team over the heads. This ensures the safety of both parties and security.

DISADVANTAGES:

- **Learning Curve:** As with all software systems, fleet management software also comes with a certain learning curve. Some systems can be so complicated that without aid from the software provider, you might not unlock the true potential of the tool at hand.

- **Extra Cost:** Sure, you are bound to gain a lot from using a fleet management software system. The profits you'll make due to the software aid will eventually make up for the initial subscription cost. However, if you are a small business owner, the initial cost might seem like too much.

- **Infrastructure Needs:** You'll face issues using fleet management software systems if you don't have proper network infrastructure. Without a stable Internet connection at all times, you will be missing out on the 'real-time' aspect of these systems. However, you can hardly do anything effectively without proper network infrastructure anyway.

- **Resistance From Staff:** At least initially, your staff might resist adopting fleet management software systems because they will be under complete surveillance. However, once you explain the benefits they get from automation, the integration process should become smoother.

6. APPLICATIONS:

- **Improved Fuel Economy** — Tracking fuel usage encourages drivers to conserve fuel, reducing use by a substantial amount.
- **Less Engine Idle Time** - An idle engine wastes both time and fuel. Tracking idle time allows managers to correct driver behaviors to reduce waste.
- **Improved Driver Performance** - A driver's harsh braking, quick turns, and excessive speed are tracked so these actions can be addressed by management.
- **Reduced Overtime** - Tracking driver's hours in real-time helps avoid unwarranted over-time and HOS violations and extra costs.
- **Improved Efficiency** - Location tracking helps dispatchers and route planners create efficient routes and correct wayward vehicles instantly.

7. CONCLUSION:

Vehicle management is essential to a smooth operating fleet of vehicles, no matter the size. Tracking the location and condition of the vehicles, maintenance schedules, and fuel usage helps manage costs and keeps the equipment working longer.

Likewise, tracking the behaviors and habits of drivers ensures the vehicles are operated safely and efficiently which helps keeps costs low. If you're interested in learning more about fleet management, please contact us at Wilmar Inc. Our Vehicle management specialists will be happy to answer any questions you have.

8. FUTURE SCOPE:

To assist in the tracking of vehicles operation and the planning of maintenance (i.e.: replacement of spare parts, etc.) that is important to avoid any damage/unexpected problem that might occur in the future that

may cause hindrance to the operation and/or risking the safety of the drivers and passengers.

THANK YOU