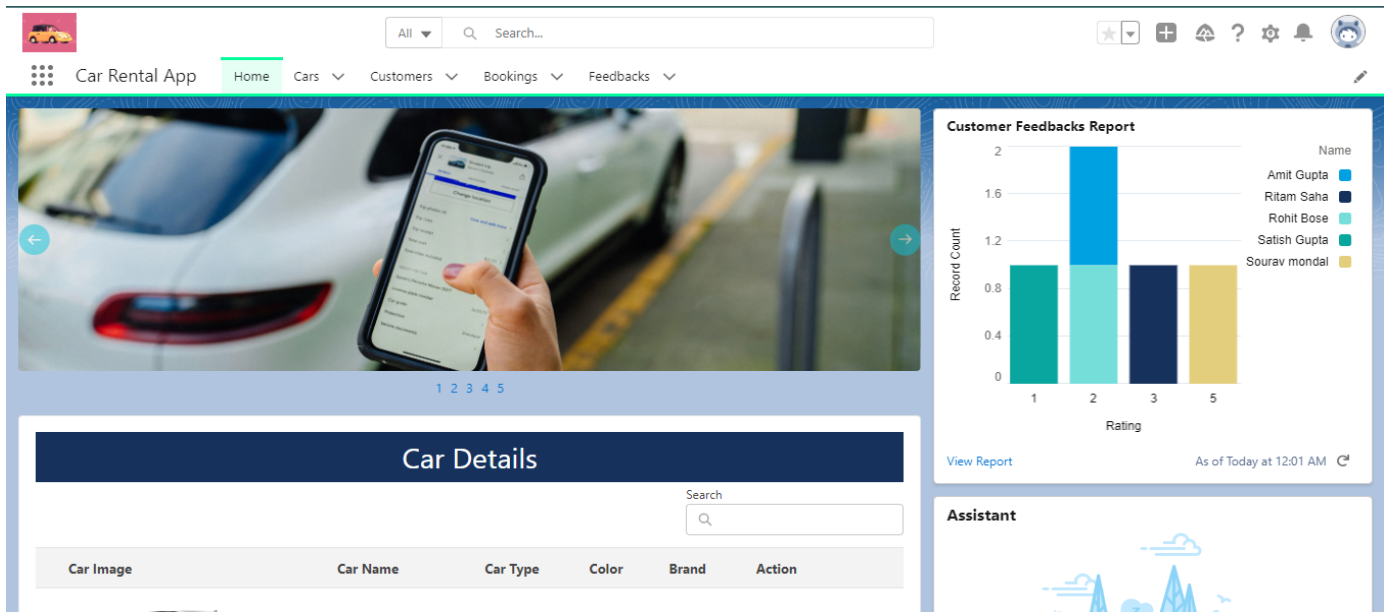


Roller Rentals (Car Rental App)

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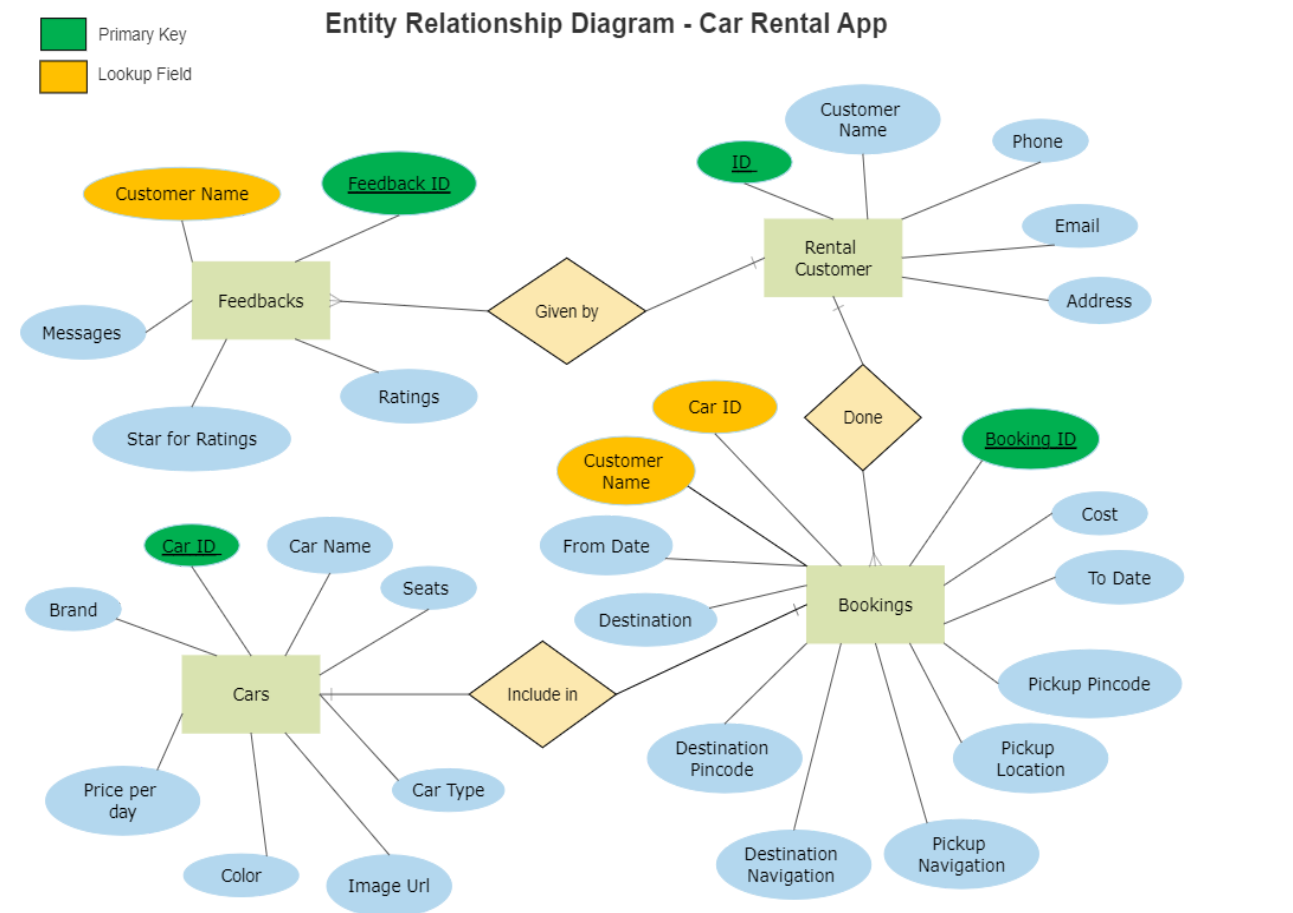
Overview :

This project is designed so as to be used by Car Rental Company specializing in Renting Cars to customers. It is an online system through which customers can view available cars, register, view profiles and book cars.

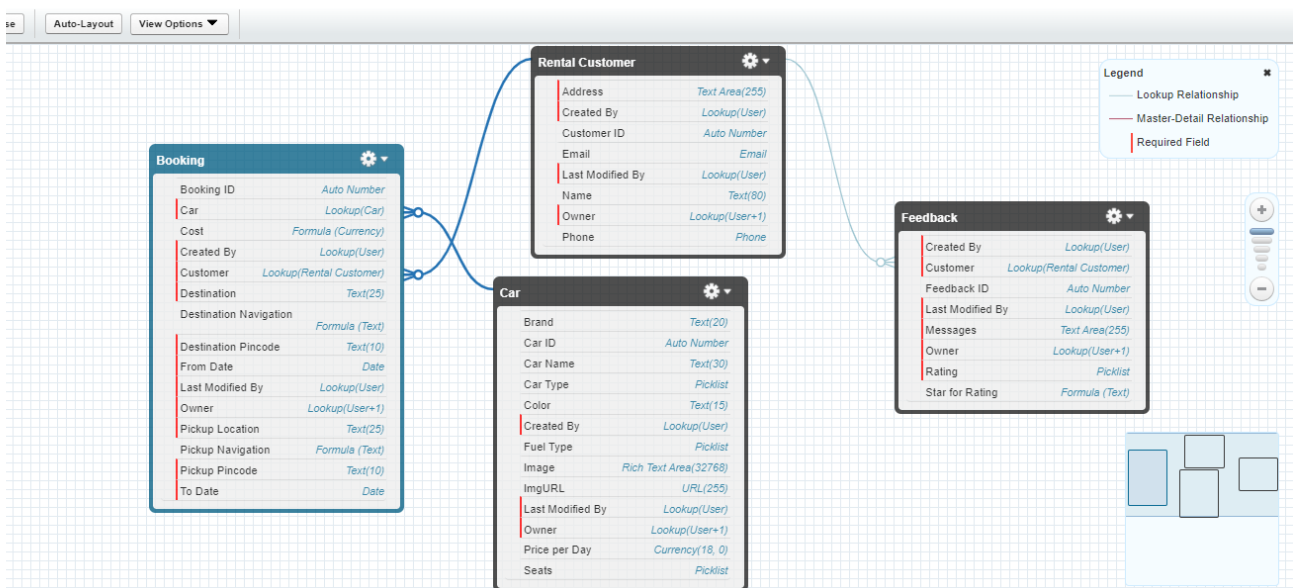
Functionality :

1. Create and maintain Car records.
2. Search Car details by Car Name, Car type, Color, Brand.
3. Register and maintain Customer records.
4. One Customer cannot Create two Customer records using the same details (Name, Email, Phone).
5. Allows the customer to rent available cars online prior to their expected pick-up date.
6. Two Customers cannot book the same car for the same date.
7. Customers cannot give Present day as Booking date.
8. For Booking, 'To-Date' always greater than 'From-Date'
9. Customers can provide feedback on the overall experience.
10. Report is generated based on the customer's feedback.

Data Modeling :



Schema Builder



Profile :

- **Admin** : Cloned from System Administrator.
- **Rental Customer** : Cloned from Standard User.

User Setup :

Create users for the testing purpose

Object Permission Set-up :

Please provide the objects & fields level permission at the Profile level as per the table below.

Note: -

C - Create

R - Read

E - Edit

D - Delete

Object Name	Profile	
	Admin	Rental Customer
Car	CRED	R
Rental Customer	CRED	CRE
Booking	CRED	CRE
Feedback	CRED	CR

Organization Wide Default :

Object Name	Organization Wide Default
Car	Public Read/Write
Rental Customer	Private
Booking	Private
Feedback	Public Read/Write

Objects and fields :

Cars

Field	Type	Values
Car ID	AutoNumber	
Car Name	Text	
Car Type	Picklist	SUV, Sedan, Hatchback
Color	Text	
Brand	Text	
Image	Rich Text Area	
Image Url	URL	
Price per day	Currency	
Seats	Picklist	5, 7

Rental Customer

Field	Type	Values
ID	AutoNumber	
Customer Name	Text	
Email	Email	
Phone Number	Number	
Address	Text Area	

Bookings

Field	Type	Values
Booking ID	AutoNumber	
Car ID	Lookup	Car
Customer Name	Lookup	Customer
From Date	Date	
To Date	Date	
Pickup Location	Text	
Pickup Pincode	Text	
Pickup Navigation	Formula-Text	
Destination	Text	
Destination Pincode	Text	
Destination Navigation	Formula-Text	
Cost	Formula-Currency	

Feedbacks

Field	Type	Values
Feedback ID	AutoNumber	
Customer Name	Lookup	Rental Customer
Messages	Text Area	
Ratings	Picklist	1,2,3,4,5
Start for Ratings	Formula	Text

Field level security :

Rental Customer on Car - Customer should not edit any Car details. Customers can only see Car details.

Page Layout :

Create two custom page Layouts for Car object:

- Car Layout for Admin : Assigned to Admin & System Administrator profiles
- Car Layout for Customer : Assigned to Rental Customer profile

Tab settings :

Custom Tab used:

Cars, Rental Customers, Booking, Feedbacks.

All Custom tabs are Default On in 2 profiles.

Validations rules :

- Validation rule to make a field conditionally required - Validation rule to make Rental Customer's Phone and Email mandatory.
- Validation Rule on Booking duration - Validation rule to check if 'To-Date' is greater than 'From-Date'.
- Validation Rule on Booking duration - Validation rule to check From date should be more than Today .

Formula :

- Create a Formula to Calculate the total car rental cost depending on the duration of From_Date and To_Date .
- Create a Formula to generate a Hyperlink to redirect to Google Map for customer given pickup and destination locations (Pickup Navigation, Destination Navigation).
- Create a Formula to show the rating stars based on the given rating value of pick-list.

Flows :

- Create a Record-Trigger Flow to send Confirmation Mail to Customers.
- Create a Record-Trigger Flow to send Reminder Mail to Customers.
- Create a Record-Trigger Flow to send Updated Confirmation Mail to Customers when Booking record is updated (From date, To date, Pickup & Destination Location).

LWC :

- Create a custom data-table to show Car details in the Homepage with Search feature where search can be done with Car name, Car Type, Color, Brand.
- Create a custom modal (pop-up) for booking. Which will help to book a car from the homepage.

Apex Class & trigger :

- **CarController :**

Apex Class CarController can be imported into JavaScript Classes by Lightning web Components using import.

After which, CarController can be called into the components as functions either via using the wire service (@wire) or imperatively wherein the Apex Method should be marked with @AuraEnabled(cacheable=true).

To get this data the component will wire an Apex method. The Apex method makes a SOQL query that returns a list of Cars in the Home page.

To return list of Cars We use a SOQL query to select certain records Car Name,Car Type ,Colour,Brand,ImgURL,Price from Car with limit 10.

```
public with sharing class CarController {
    @AuraEnabled( cacheable = true )
    public static List< Car__c > fetchCars() {
        return [
            SELECT Car_Name__c,Car_Type__c,Colour__c,Brand__c,ImgURL__c,Price__c
            FROM Car__c
            LIMIT 10
        ];
    }
}
```

- **Duplicate Booking :**

Create an Apex Trigger to prevent duplicate booking when a car has identical booking details such as From Date and To date on both booking.

- **Duplicate Customer :**

Create an Apex Trigger to prevent duplicate customer profiles when a customer has identical Email or Contact Number on both profiles .

Reports :

Create a report to visualize Customer Feedbacks based on the ratings provided by Customers.