CARS4U-ECOMMERCE PROJECT



Website- https://cars-06.herokuapp.com

Report

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APPROVAL

This project has been submitted to the following respected members, techno club (CODE FELLAS).

By the following students of Gautam Buddha University, batch (2019-2023) CSE:

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- > DEVANSH NARWARIYA

DECLARATION

This is to certify that this project is our original work. No part of this work has been submitted elsewhere partially or fully for the award of any other degree or diploma. Any material reproduced in this project has been properly acknowledged.

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ABSTRACT

CARS4U is a demo project that help users buy cars that are right for them. The website carries rich automotive content such as expert reviews, detailed specs and prices, comparisons as well as videos and pictures of all car brands and models available in India.

We tried to implement maximum features to enhance the user interaction to ensure that users get an immersive experience of the car model before visiting a dealer showroom. These include a feel the car tool that gives 360-degree interior/exterior views with sounds of the car and explanations of features with videos; search and comparison by make, model, price, features; and live offers and promotions in all cities. We have also incorporated a chatbot for any guidance or any query visitor wants to clear.

Our vision is to construct a complete ecosystem for consumers and car manufactures, dealers and related businesses such that consumers have easy and complete access to not only buying and selling cars, but also manage their entire ownership experience, be it accessories, tyres, batteries, insurance or roadside assistance.

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INTRODUCTION

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace.

CARS4U is the leading car search business in India that helps users to buy the right car for them. Its website has rich car content such as expert reviews, detailed information and prices, comparisons and videos and photos of all types of cars and models available in India. The company has connected with many car manufacturers, car dealers and many financial institutions to facilitate car purchases.

CARS4U has introduced many new features to ensure users get in-depth knowledge of the car model before visiting the retailer's exhibition site. These include the Feel the Car tool that provides 360-degree indoor and outdoor views with car sounds and descriptions of video features; search and comparison performance, model, price, features; and live offers and promotions in all cities.

Our vision is to build a complete ecosystem for car buyers and sellers, dealers and related businesses so that buyers can easily and completely access not only buy and sell cars, but also carry all their personal information, be it accessories, tires, batteries, insurance or road assistance.

PROJECT DESCRIPTION

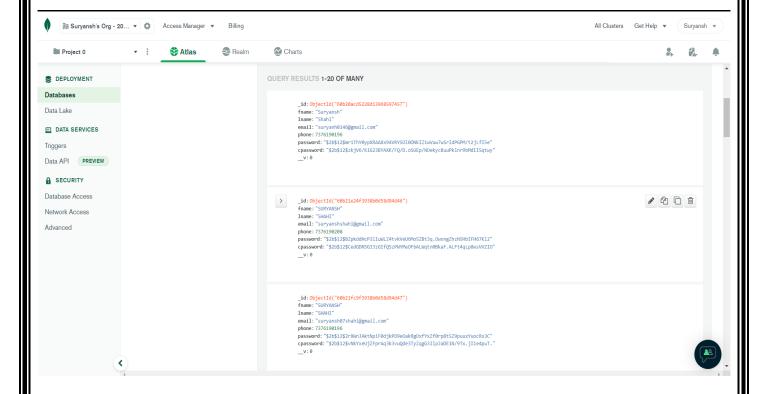
- ♣ Any visitor can register and view available cars.
- ♣ Not mandatory for visitor to Login or Sign-Up before accessing website.
- ♣ Contact Us page is available to contact Admin for queries.
- Visitors can view, search, compare available cars.
- ♣ Visitors can view and read all the specs.
- ♣ We have also incorporated a chatbot for any guidance or any query visitor wants to clear.
- ♣ Visitor can also book a test drive using chatbot.
- ♣ After successful Sign-Up, an email will also be sent automatically to the respective email used for signing Up.

DESIGN AND DEVELOPMENT ENVIRONMENT

- Reactjs
- Nodejs
- ➤ MongoDB
- > Expressjs
- ➤ Bootstrap 5
- > Material UI

DATABASE DESIGN

We have used MongoDB Database for this project



- ➤ All the credential details are stored on MongoDB database(cluster).
- ➤ If user Sign-up, first it checks in the MongoDB database if the user is already registered or not.
- ➤ If not, it allows users to sign-up. Otherwise, it asks the user to login.
- For a successful login, it checks if the user is registered or not.
- ➤ If not, it asks to sign-up. Otherwise, it asks for user's login details and verifies whether the password entered by the user matches with the corresponding email registered by the user.

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All the data visible on the website is coming from an API created by us. Schema of API is as follows:

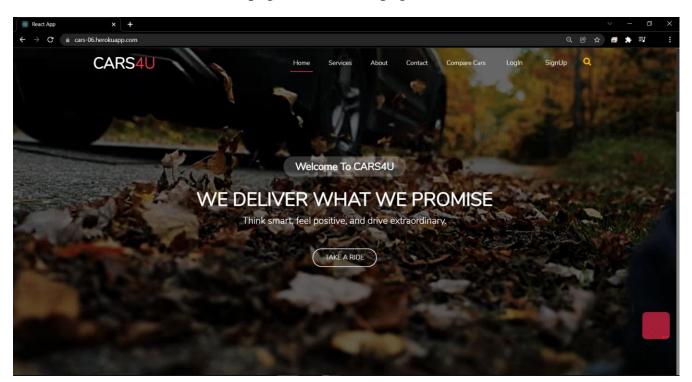
- o ID-This field is used for unique id of cars.
- Rate-It is a numeric field used for displaying rating of cars.
- o Image-This field is used for keeping types of car's pictures.
- o Image Slider-This is an image for slider.
- o Name-This field is used for keeping car's name.
- o Category-This field is used for keeping types of cars.
- o Price-This is a numeric field used for price of cars.
- o Description-This field is used to display details about cars.
- Exterior-This field is used to show 360-degree review of the exterior of car.
- o Interior-This field is used to show 360-degree review of the interior of the car.

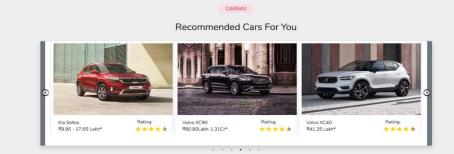
DESIGN AND IMPLEMENTATION OF CARS4U

Web Pages details:

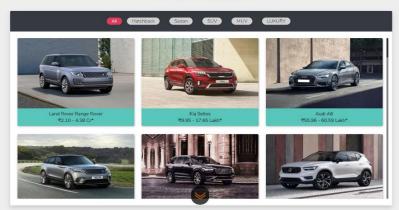
- I. Navbar Includes:
 - ➤ Home Page
 - > Services Page
 - Contact Page
 - Compare Cars
 - ➤ About Page
 - ➤ Login
 - ➤ Sign-Up
 - > Search
- II. Deployment

HOME PAGE: This is home page or welcome page.





The Most Searched Cars



Popular Brands



Latest Cars

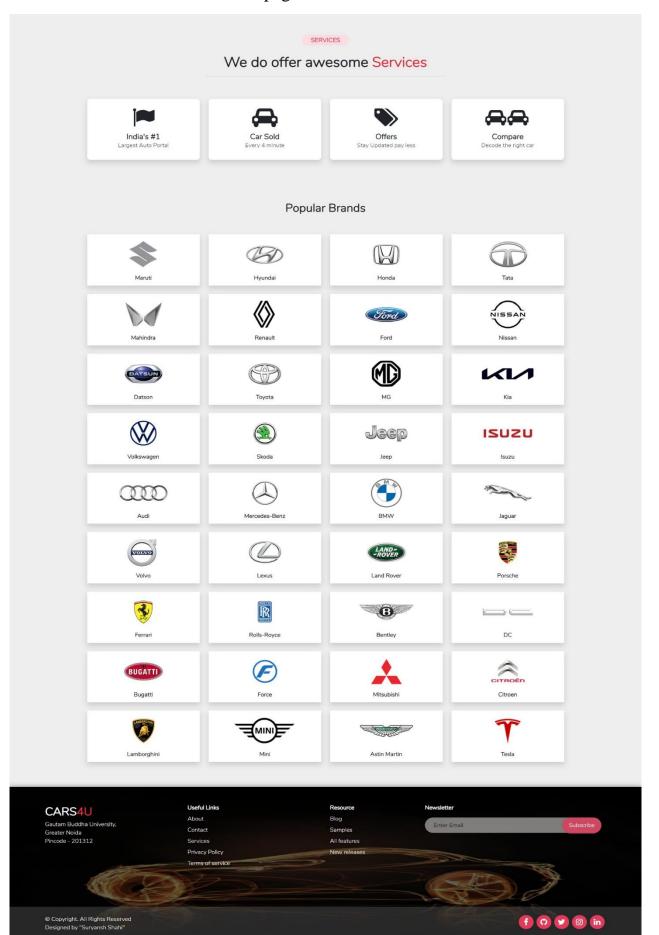


Upcoming Cars

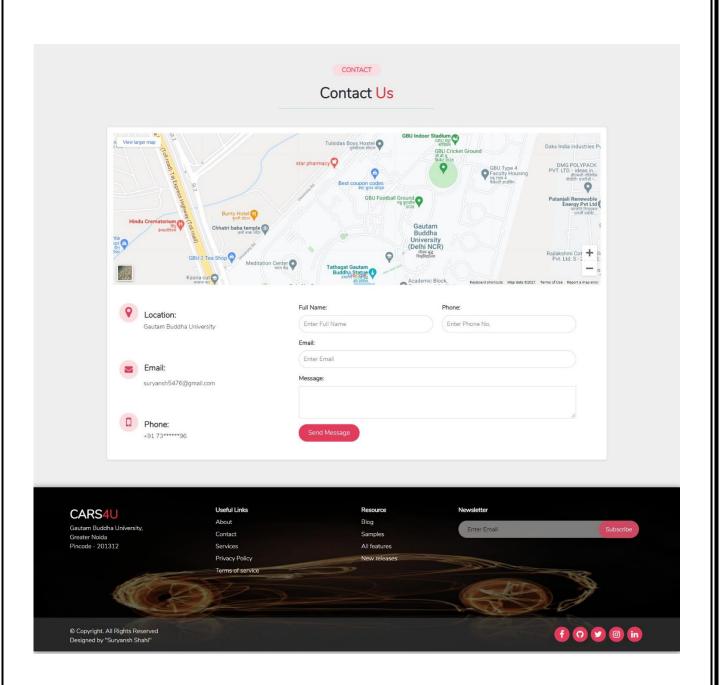




SERVICE PAGE: This is service page.

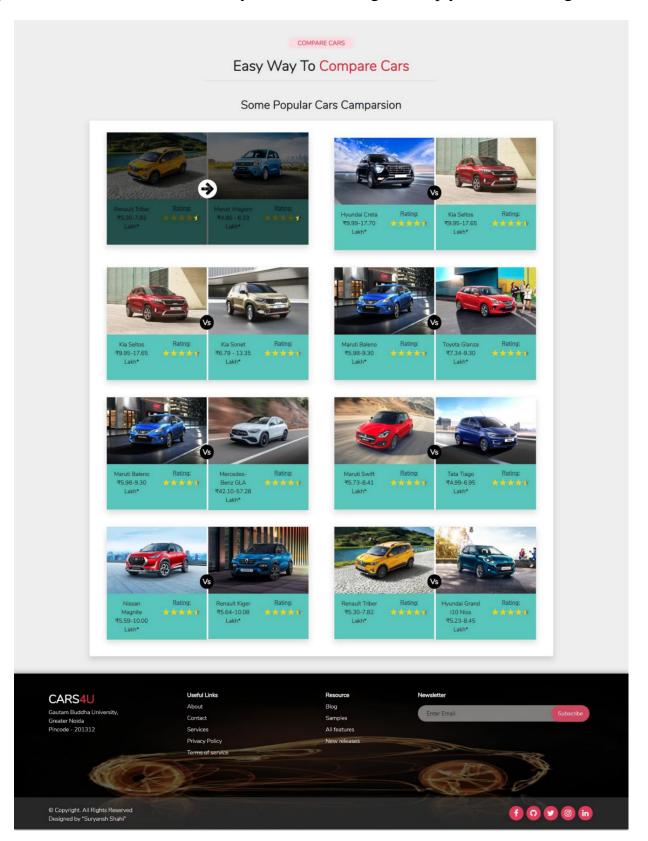


CONTACT PAGE: This is contact us page.



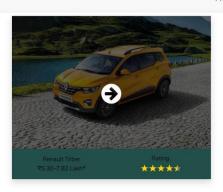
COMPARE CARS PAGE: This is compare cars page. Now you can compare cars before purchasing, to get you the best.

Compare two or more cars of your choice with the best car comparison tool in India on CARS4U. You can compare variant-wise prices, specifications, features, mileage, performance and more of as many as 2 cars at one go to help you make the right choice.



×

Welcome to CARS4U



CARS4U



Renault Triber Vs Maruti Wagonr

Should you buy Renault Triber or Maruti Wagon R? Find out which car is best for you - compare the two models on the basis of their Price, Size, Space, Boot Space, Service cost, Mileage, Features, Colours and other specs. Renault Triber price starts at Rs 5.30 Lakh exshowroom for RXE (Petrol) and Maruti Wagon R price starts Rs 4.80 Lakh ex-showroom for LXI (Petrol). Triber has 999 cc (Petrol top model) engine, while Wagon R has 1197 cc (Petrol top model) engine. As far as mileage is concerned, the Triber has a mileage of 20.0 kmpl (Petrol top model) and the Wagon R has a mileage of 32.52 km/kg (Petrol top model).

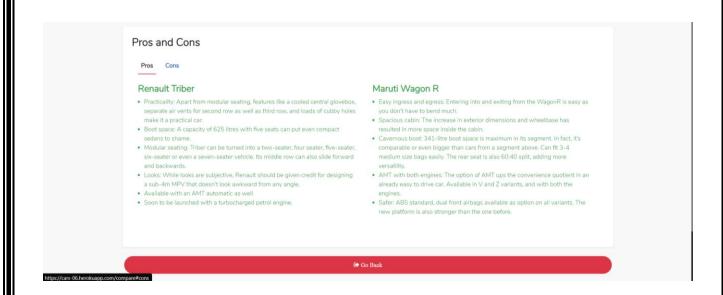
Basic Information	RXZ EASY-R AMT Dual Tone	ZXI AMT 1.2
On Road Price	₹8,71,686*	₹6,97,839
Offers & Discount	1 Offer View now	1 Offe Check Now
Finance Available (EMI)	₹16,595	₹13,729
insurance	₹34,946 Triber Insurance	₹31,325 Wagnor R Insurance
Service Cost (Avg. of 5 years)	₹2,034	₹3,169

Engine and Transmission		
Engine Type	1.OL Petrol Engine	K12M Petrol Engine
Displacement (cc)	999	1197
Max Power (bhp@rpm)	71bhp@6250rpm	81.80bhp@6000rpm
Max Torque (nm@rpm)	96Nm@3500rpm	113Nm@4200rpm

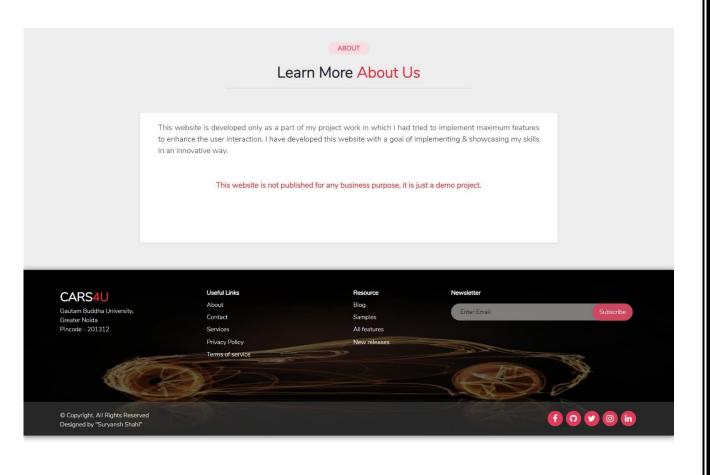
uel & Performance		
Fuel Type	Petrol	Petrol
Mileage (City)	×	×
Mileage (ARAI)	18.2 kmpl	20.52 kmpl
Fuel Tank Capacity	40.0 (Litres)	32.0 (Litres)

Suspension, Steering & Bra	kes	
Front Suspension	McPherson Strut with Lower Triangle & Coil Spring	MacPherson Strut with Coil Spring
Rear Suspension	Torsion Beam Axle	Torsion Beam With Coil Spring
Steering Type	Electric	Power

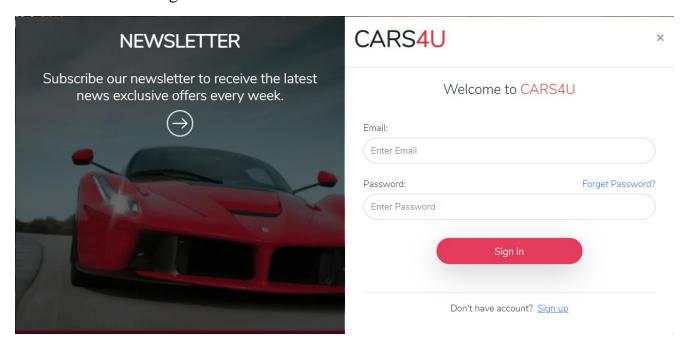
Dimensions & Capacity		
Length (mm)	3990	3655
Width (mm)	1739	1620
Height (mm)	1643	1675
Ground Clearance Unladen (mm)	182	-
Comfort & Convenience		
Power Steering	~	~
Power Windows Front	~	v
Power Windows Rear	~	~
Power Boot	•	-
Interior		
Tachometer	~	~
Electronic Multi Tripmeter	~	~
Leather Seats	×	×
Exterior		
Available Colors	~	v
Body Type	MUV All MUV Cars	Hatchback All Hatchback Cars
Adjustable Headlights	×	×
Safety		
Anti Lock Braking System	~	~
Brake Assist	×	×
Central Locking	✓	·
Power Door Locks	•	~
Entertainment & Communication		
Entertainment & Communication		×
Cd Player	×	
	×	х
Cd Player		×
Cd Player Cd Changer	×	
Cd Player Cd Changer Dvd Player	x x	×
Cd Player Cd Changer Dvd Player Radio	x x	×
Cd Player Cd Changer Dvd Player Radio	x x	×

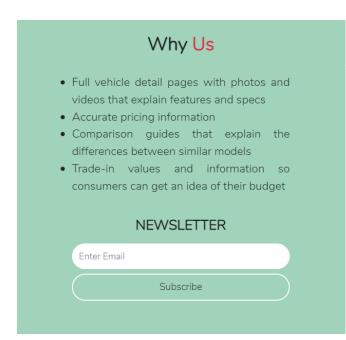


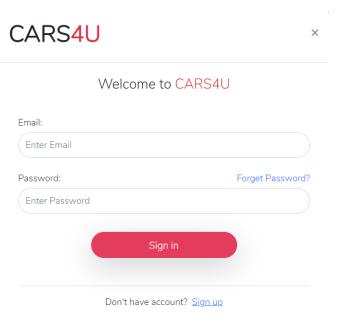
ABOUT PAGE: This is about us page.



LOGIN: This is Login Modal.

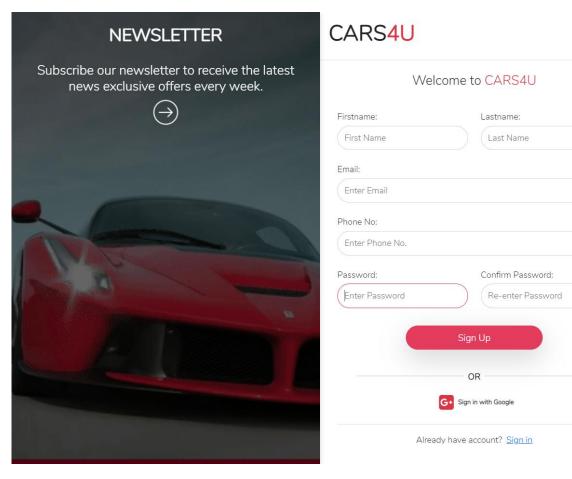


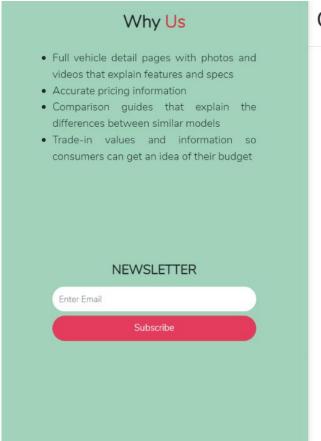


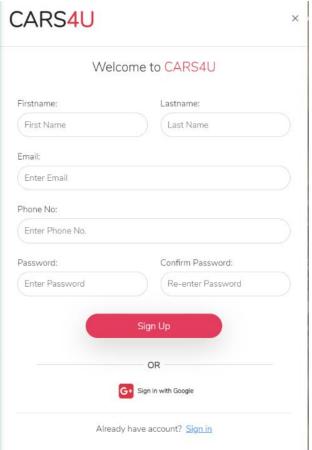


- For a successful login, the user must have already signed up. Otherwise, visitor have to sign-up first in order to login.
- ➤ If any credentials are invalid, a pop-up will appear saying "Invalid Credentials".
- > If any field is left empty, a pop-up will appear saying "Invalid Credentials".

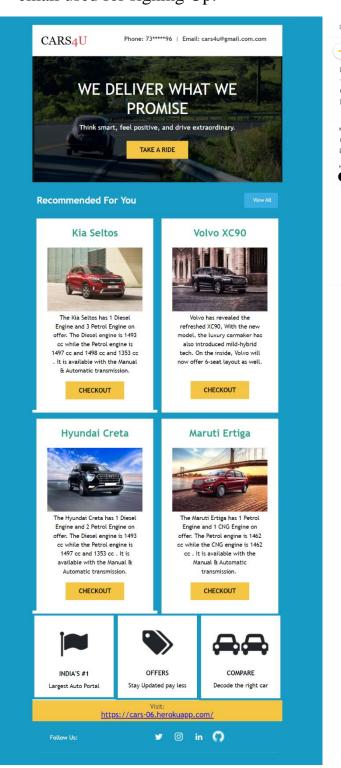
SIGN-UP: This is Sign-Up Modal.

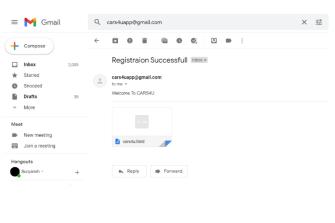






- All field are mandatory and if visitor enters any invalid credentials a pop-up will appear saying "Invalid Credentials".
- ➤ If visitor leaves any field empty, a pop-up will appear saying "All fields are mandatory".
- ➤ If the Visitor is already registered, a pop-up will appear saying "User already exists".
- After successful sign-Up, an email will also be sent automatically to the respective email used for signing Up.



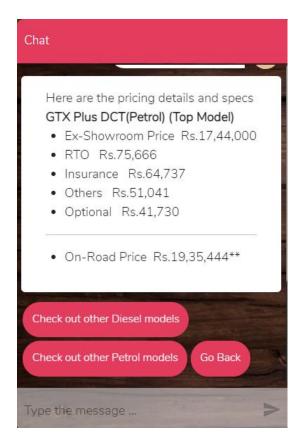


CHATBOT: We have also incorporated a chatbot for any guidance or any query visitor wants to clear.

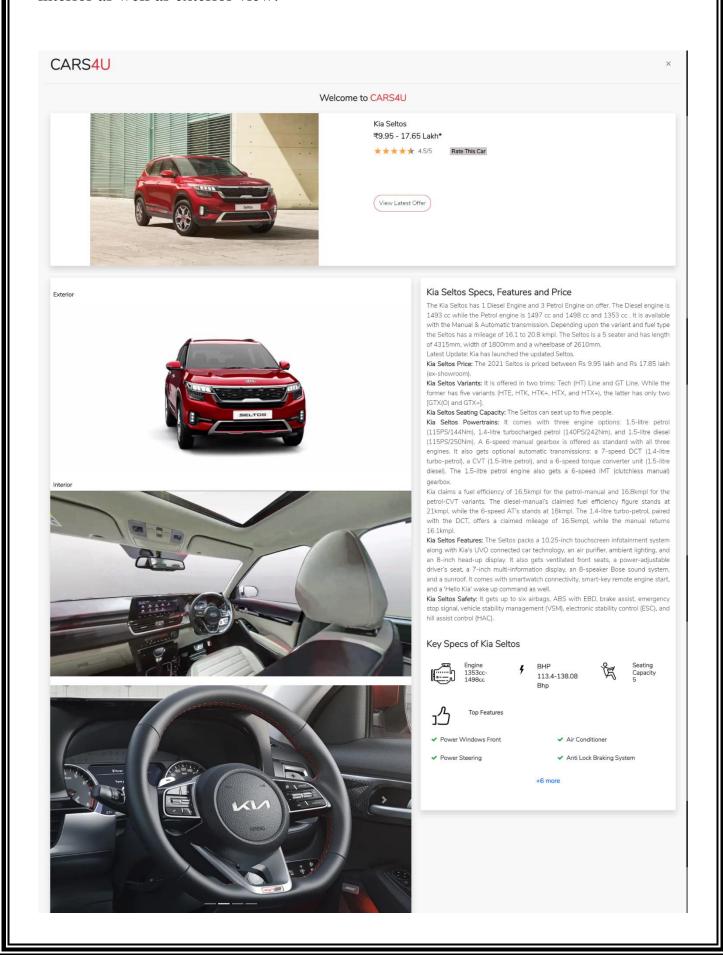
What is a Chat-bot?

At the most basic level, a chatbot is a computer program that simulates and processes human conversation (either written or spoken), allowing humans to interact with digital devices as if they were communicating with a real person. Chatbots can be as simple as rudimentary programs that answer a simple query with a single-line response, or as sophisticated as digital assistants that learn and evolve to deliver increasing levels of personalization as they gather and process information.





CAR DETAILS: Here are some car specifications. Visitors can check the 360-degree interior as well as exterior view.





K



Key Specification of Kia Seltos

ARAI Mileage	17.8 kmpl
Engine Displacement (cc)	1493
Max Torque (nm@rpm)	250nm@1500-2750rpm
TransmissionType	Automatic
Fuel Tank Capacity	50.0
Service Cost (Avg. of 5 years)	₹4,628

Diesel
113.4bhp@4000rpm
5
433
SUV

Key Features of Kia Seltos

Power Steering	•
Anti Lock Braking System	•
Driver Airbag	•
Fog Lights - Front	•
Automatic Climate Control	•

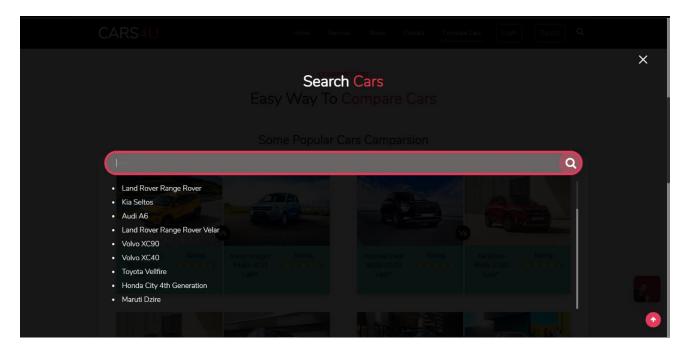
Power Windows Front	•
Air Conditioner	~
Passenger Airbag	~
Alloy Wheels	~

Rate This Car

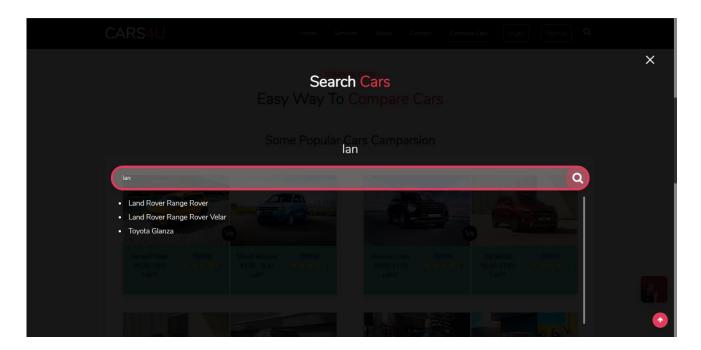


Go Bacl

SEARCH: Using the search bar, you can look for your favourite car without any hassle.



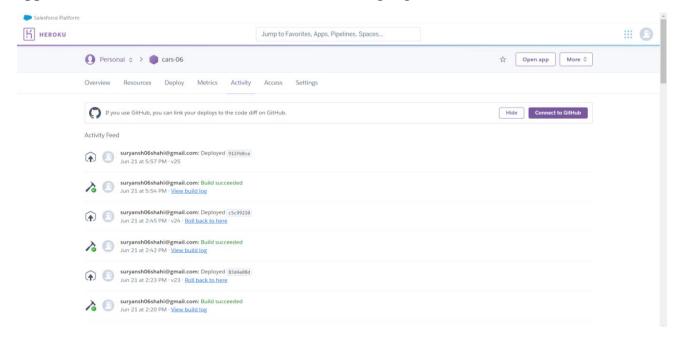
The search results will be sorted alphabetically.



DEPLOYMENT: We have deployed our project on Heroku which can be accessed on https://cars-06.herokuapp.com

What is Heroku?

Heroku is a cloud <u>platform</u> as a <u>service</u> (PaaS) supporting several <u>programming languages</u>. One of the first <u>cloud platforms</u>, Heroku has been in development since June 2007, when it supported only the <u>Ruby programming language</u>, but now supports <u>Java</u>, <u>Node.js</u>, <u>Scala</u>, <u>Clojure</u>, <u>Python</u>, <u>PHP</u>, and <u>Go</u>. For this reason, Heroku is said to be a <u>polyglot platform</u> as it has features for a <u>developer</u> to build, run and scale applications in a similar manner across most languages.



CONCLUSION

We tried to present CARS24 as a next generation car search venture helping users to buy cars that are right for them.

The goal of this project is to bring delight in car buying, we offer a bouquet of reliable tools and services to help car consumers decide on buying the right car, at the right price.

The platform provides readers with multi-dimensional insights in the search venture. The platform publishes content such as expert reviews, detailed specs and prices, comparisons as well as videos and pictures of all car brands and models available in India. We have also incorporated a chatbot for any guidance or any query visitor wants to clear.

Websites like https://www.cardekho.com were very helpful for the completion of this project.