

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
JNANA SANGAMA, BELAGAVI- 590018, KARNATAKA, INDIA



A PROJECT REPORT

on

“A4Automotive”

Submitted in partial fulfilment of the requirements for the award of

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE & ENGINEERING

Submitted By

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
VIVEKANANDA COLLEGE OF ENGINEERING & TECHNOLOGY

[A Unit of Vivekananda Vidyavardhaka Sangha Puttur (R)]

Affiliated to Visvesvaraya Technological University and Approved by AICTE New Delhi & Govt., of Karnataka

Nehru Nagar, Puttur - 574 203, DK, Karnataka, India.

JULY, 2021

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**CERTIFICATE**

Certified that the project work entitled “**A4Automotive**” is carried out by **PAWAN BHARADWAJ N P, SAMPATH KUMAR P L** bearing USNs **4VP18CS059, 4VP18CS074** respectively Bonafede students of **Vivekananda College of Engineering & Technology, Puttur** in partial fulfilment for the award of **Bachelor of Engineering in Computer Science & Engineering** of the **Visvesvaraya Technological University, Belagavi** during the year 2020-21. It is certified that all corrections/suggestions indicated during Internal Assessment have been incorporated in the report deposited in the departmental library.

The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Signature of the Guide
Mrs. Bharathi K

Signature of the HOD
Mr. Krishna Mohana A J

ACKNOWLEDGEMENT

We take this opportunity to express our deep heartfelt gratitude to all those people who have helped us in the successful completion of the project.

First and foremost, we would like to express our sincere gratitude to our guides, **Mrs. Bharathi K**, for providing excellent guidance, encouragement and inspiration throughout the project work. Without their invaluable guidance, this work would never have been a successful one

We would like to express my sincere gratitude to our Head of the Department of Computer Science & Engineering, **Mr. Krishna Mohana A J** for his guidance and inspiration.

We would like to thank our Principal, **Dr. Mahesh Prasanna K a** for providing all the facilities and a proper environment to work in the college campus.

We are thankful to all the teaching and non-teaching staff members of Computer Science & Engineering Department for their help and needed support rendered throughout the project.

DECLARATION

We, **PAWAN BHARADWAJ N P (4VP18CS059)**, **SAMPATH KUMAR P L (4VP18CS074)** students of sixth semester B. E. in Computer Science & Engineering, **Vivekananda College of Engineering & Technology**, Puttur, hereby declare that the project work entitled “**A4AUTOMOTIVE**” has been carried out and duly executed by me at VCET, Puttur, under the guidance of **Mrs. Bharathi K**, Assistant Professor, Department of Computer Science & Engineering, Vivekananda College of Engineering & Technology, Puttur, and submitted in partial fulfillment of the requirements for the award of degree in **Bachelor of Engineering in Computer Science & Engineering** by **Visvesvaraya Technological University**, Belagavi during the academic year 2020-2021

NAME: PAWAN BHARADWAJ N P USN: 4VP18CS059

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Date: 20/07/2021

Place: VCET

ABSTRACT

This is an online car magazine facilitated to provide customers information about different types of cars available in Indian market with their specifications. The project “A4automotive” is developed according to the current need. This online website provides facility for booking cars from their official website. The customers can check every detail about the car like performance, safety, price etc. using this application.

Customers can create their account in this website by just providing username, email, password and few other credentials. Those users who have their account in our website can Buy or Sell second hand vehicles, also those customers who like a particular car can also add that car to the Wishlist so that later when needed they can access it easily.

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Chapter 1

Introduction: -

1.1 About web technology: -

In this IT world, we know that the internet is an important platform. Understand that websites look and function in a certain way. On one hand, HTML is the backbone of many webpages. In the past few decades, web technology has undergone a dramatic transition, from a few marked-up web pages to the ability to do very specific work on a network without interruption

Web technology is a method by which computers communicate with each other with the help of markup languages and multimedia packages. Further Web technology involves developing a web site for the Internet (World Wide Web) or an intranet (a private network). It may be easier to think of web technology as a gradual process of evolution, some stages of which are still in use today. First, try imagining a network without web technologies. While you'd have direct access to individual computers, you wouldn't have the ability to run anything off the cloud, so to speak. Any time you wanted to look at a piece of information, you would have to do it with a direct link to the host computer, which, simply put, would be pretty inefficient.

1.2 About Project: -

This project is designed so customers can view available cars, register, view profile and book car .using this website customers can get to know every detail of car like engine specification, braking system etc. Also, users can book their new car, also get appointment for test drive from official website. We have provided official car website link through which customers can check onroad price of car at their locations. We have also created platform where customers can sell or buy second hand vehicles.

Chapter 2

Requirement Analysis

2.1 Functional requirement: -

Login module:

This is the module from which we can make user access the complete content of our webpage like buying and selling options. Though it is not mandatory for our page it is still a very valuable function for trading and buying.

Input: email and password

Process: it checks database for given email and password and checks whether it is valid or not.

Output: the output of this module is the user is signed in and in home page it welcomes it else an error is thrown

Buy and sell module:

This module is for the users who are logged in and wants either to trade their car or buy them. this system works same like ecommerce site but it is for cars.

Input: the input for selling a car is image of a car, name of car, price, and about some comments of car.

Processing: the processing involves storing the car details in database and it will be visible to other users.

Output: the out of this module is that the car will be visible to other people for trading

Magazine module:

This module specifies all the cars that are to be visible to people who are looking for some details about cars.

Input: the input is not necessarily there but we can see the details of car.

Processing: if we press some car detail, we can see the information about the car

Output: the output specifies the details of the car which the user clicks

Wishlist module:

This module specifies the page where user wants to store some details of car so that he may decide to buy that car later

Input: the user must click on add to Wishlist button

Processing: the processing involves storing detail of car and person in database.

Output: the output gives the car detail that will be stored in database and can be accessed in Wishlist button

2.1 Non-Functional requirement: -

Performance requirements:

The performance of magazine mainly depends on speed of internet connection. If the user wants real time response, then this is the product to go for.

Safety Requirement:

The application is safe from any hazardous environment as per the connection in concern, the booking will be done by standard procedures and is safe to use.

Security Requirement:

We aim to provide high security features like encryption to user accounts, to provide security from illegal hacking and gaining access to system.

2.3 Hardware Requirement:

Processor	-	Pentium 4 & above
Hard Disk Capacity	-	2GB
RAM	-	512MB
Keyboard	-	Standard 101 keys Keyboard

Chapter 3

SOFTWARE REQUIREMENT SPECIFICATION

3.1 Software Requirement

Operating system	- windows 7 and above
Language	- Html, CSS, Bootstrap, JavaScript, Php, MySQL
Software	- Xampp, Notepad++
Database	- MySQL
Documentation Tool	- MS-WORD

3.2 About HTML and CSS

HTML :-

Hypertext Mark-up Language (HTML) is the standard mark-up language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as `` and `<input />` directly introduce content into the page. Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page..

CSS :-

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a mark-up language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colours, and fonts. This separation can improve

content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .CSS file, and reduce complexity and repetition in the structural content.

CSS information can be provided from various sources. These sources can be the web browser, the user and the author. The information from the author can be further classified into inline, media type, importance, selector specificity, rule order, inheritance and property definition. CSS style information can be in a separate document or it can be embedded into an HTML document. Multiple style sheets can be imported. Different styles can be applied depending on the output device being used; for example, the screen version can be quite different from the printed version, so that authors can tailor the presentation appropriately for each medium. The style sheet with the highest priority controls the content display. Declarations not set in the highest priority source are passed on to a source of lower priority, such as the user agent style. The process is called cascading.

3.3 Java script / PHP

JAVASCRIPT :-

JavaScript often abbreviated as **JS**, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm. It has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions. Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. Over 97% of website use it client-side for web page behaviour, often incorporating third-party libraries' major web browsers have a dedicated JavaScript engine to execute the code on the users device.

PHP :-

PHP is a server-side language that can be used in conjunction with a database to create dynamic web pages. By the word "dynamic" it allows you to input or query data from a web page. These aren't the only things PHP allows you to do interaction with databases are a key feature of server-side languages.

PHP pages end with the .php extension, as opposed to the usual .html or .htm file normally used for websites. PHP website files are still HTML files (though editing a page's header can change a PHP file to many other file types), with the exeption that the server processes any PHP code before serving the file to you. In contrast, any HTML on the page is sent as code and rendered locally by a user's internet browser

3.4 Web server used

Chrome is based on the open-source code of the Chromium project, but Chrome itself is not open-source. The first beta version of Chrome was released on September 2, 2008, for personal computers (PCs) running various versions of Microsoft Corporation's Windows OS (operating system).

The development of Chrome was kept a well-guarded secret until a Web-based “comic book” describing the browser was released just hours before links appeared on Google's Web site to download the program. In its public statements the company declared that it did not expect to supplant the major browsers, such as Microsoft's Internet Explorer and Firefox (the latter an open-source browser that Google supports with technical and monetary help). Instead, Google stated that its goal was to advance the usefulness of the Internet by including features that would work better with newer Web-based technologies, such as the company's Google Apps (e.g., calendar, word processor, spreadsheet), that operate within a browser.

Chapter 4

ANALYSIS AND DESIGN

4.1 Flow Diagram

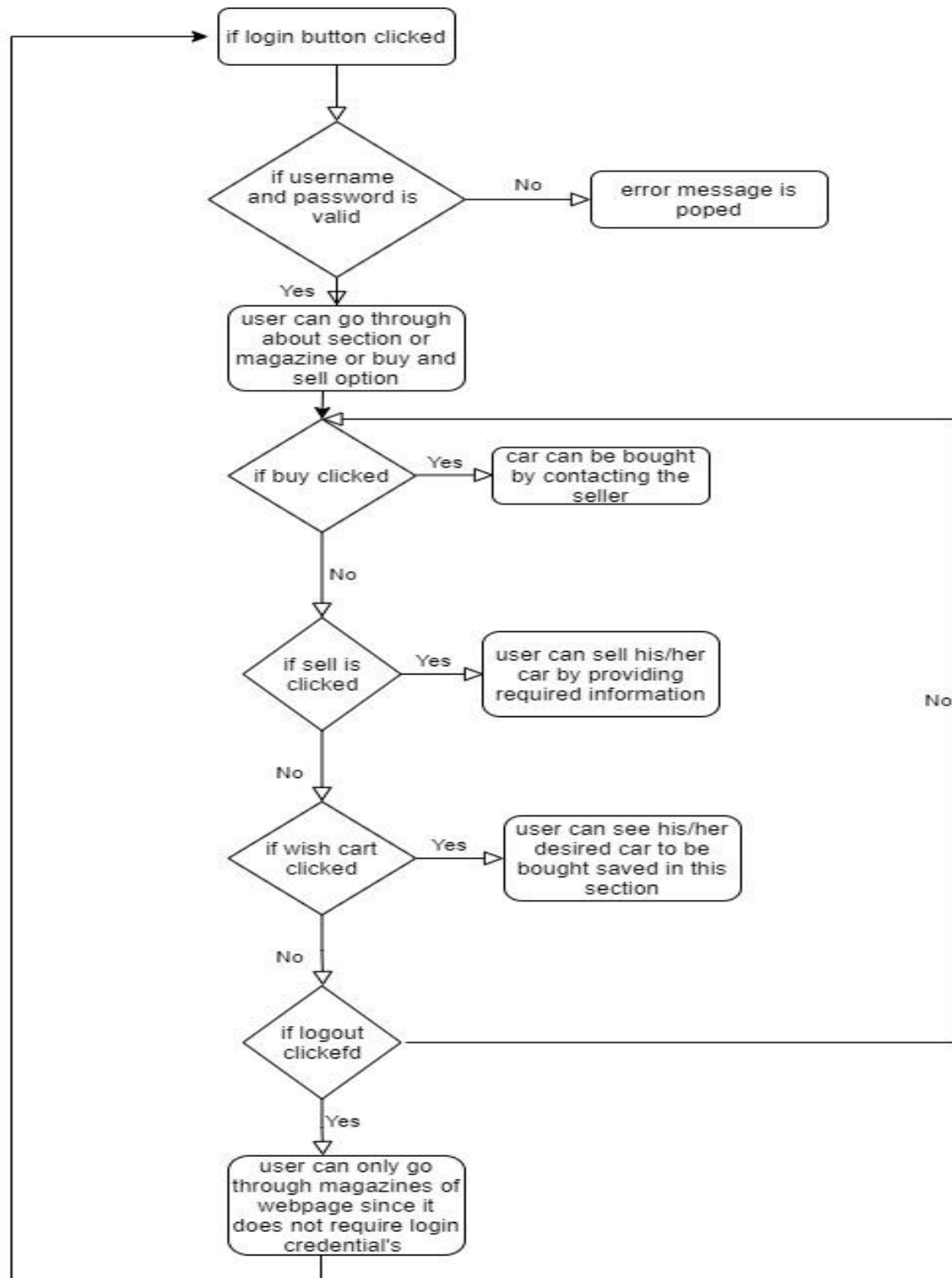


Fig 4.1: Flow Diagram

4.2 ER Diagram, Database Tables

It is graphical representation of an information system that depicts the relationship among people, objects, places, concepts or events within that system.

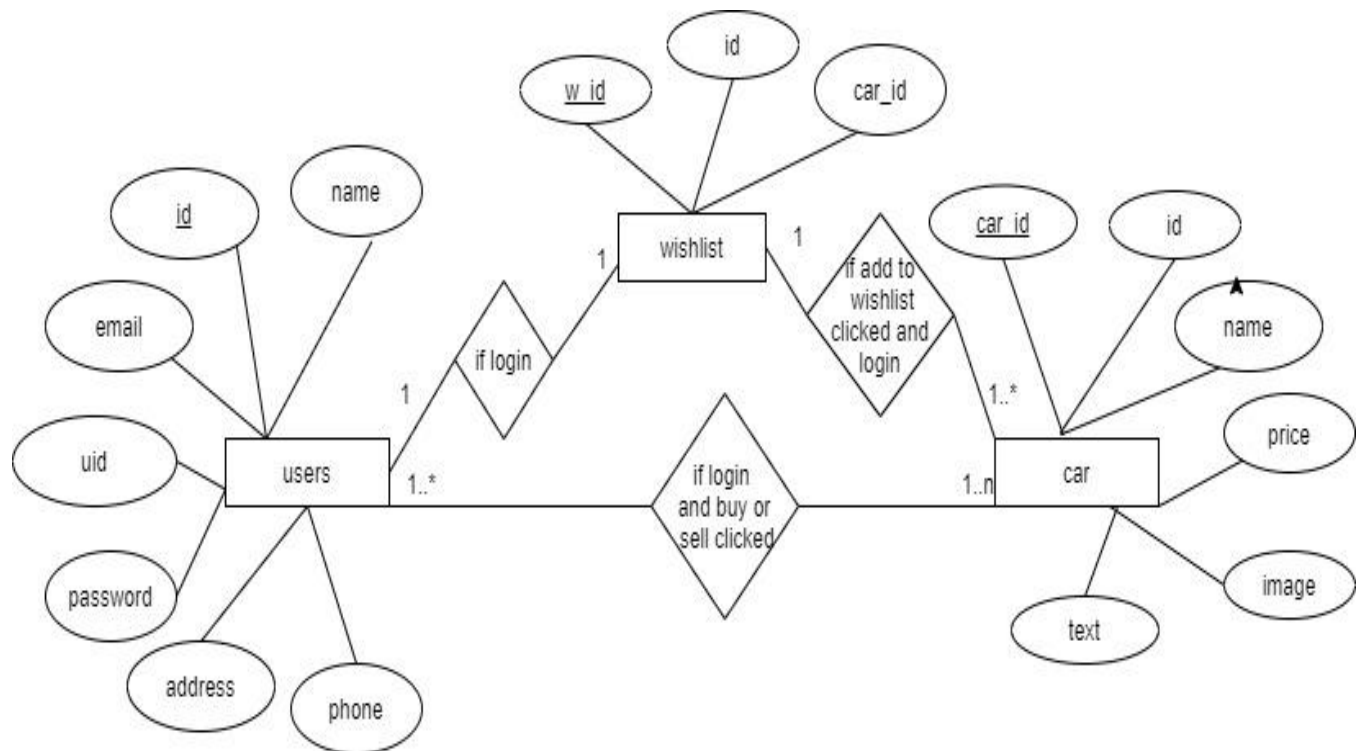


Fig 4.2: ER Diagram

Database Tables:**users table**

Field name	Data Type	Size	Constraint	Description
id	int	11	Primary key	Automatically created when user signs up
name	varchar	255	none	Name of user
email	Varchar	255	None	Email of user
Uid	Varchar	255	None	User name to be displayed in webpage
password	Varchar	255	None	Password to be set
address	Varchar	255	none	Address of user
phone	varchar	11	none	Phone number of users

Car

Field name	Data Type	Size	Constraint	Description
car_id	int	11	Primary key	Automatically incremented where a user inserts car

id	Int	11	Foreign key	References user(id) on delete cascade
name	Varchar	200	none	Name of car
price	Varchar	20	none	Price of car
image	Varchar(media type image/jpeg)	200	none	Image of car
text	text	500	none	Small description of car.

Wishlist

Field name	Data Type	Size	Constraint	Description
W_id	Int	11	Primary key	Automatically incremented where a user adds car to Wishlist.
Id	Int	11	Foreign key	References user(id) on delete cascade
Car_id	int	11	Foreign key	Reference's car(car_id) on delete cascade

Chapter 5

IMPLEMENTATION

5.1 Module Implementation

Implementation is stage of project where the theoretical design is turned into a working system.

Language used for the implementation

❖ For the fronted development of the a fore mentioned project:

- HTML5.
- CSS.
- JavaScript.

Features of Language used for implementation:

- ❖ HTML: Widely used for creating web page & pioneer with web application development.
- ❖ CSS: Widely used to describe the presentation and design of web pages including colors, fonts, and layouts.
- ❖ JavaScript: It is used both on the client-side and server-side that allows you to make web pages interactive. And it improves the user experience of web page by converting it form a static page into an interactive one.

User Module

User: Users can view the website and check out the information about car and they can also buy cars from official cars website.

Chapter 6

TESTING

6.1 Unit Testing

Unit testing is level of software testing where individual units or components of software are tested. The purpose is to validate that each unit of the software performs as designed. A unit is the smallest testable part of software. It usually has one or a few inputs and usually a single output. In this system customer login is done by providing username and password .Both username and password are tested separately.

6.2 Integration Testing

Integration testing is the phase in software testing in which individual software modules are combined and tested as a group. It occurs after unit testing and before validation testing. There are two major ways of carrying out an integration test, called the bottom-up method and the top-down method. Bottom-up testing is an approach to integrated testing where the lowest level components are tested first, then used to facilitate the testing of higher-level components. The process is repeated until the component at the top of the hierarchy is tested. Top-down testing is an approach to integrated testing where the top integrated modules are tested and the branch of the module is tested step by step until the end of the related module. Our system provides place for car magazine by using online. Users can check specifications of various car and can book their new car through our website..

6.3 System Testing

System Testing is a level of the software testing where complete and integrated software is tested. The purpose of this test is to evaluate the system's compliance with the specified requirements. System testing falls within the scope of black box testing, and as such, should require no knowledge of the inner design of the code or logic. The purpose of integration testing is to detect any inconsistencies between the software units that are integrated together or between any of the assemblages and the hardware. It is also concerned with validating that the system is working as per the functional and nonfunctional requirements. User can book their new car from official website .After providing required credentials they can also book for the test drive.

Chapter 7

RESULT

7.1 Screenshots

7.1.1 Index page

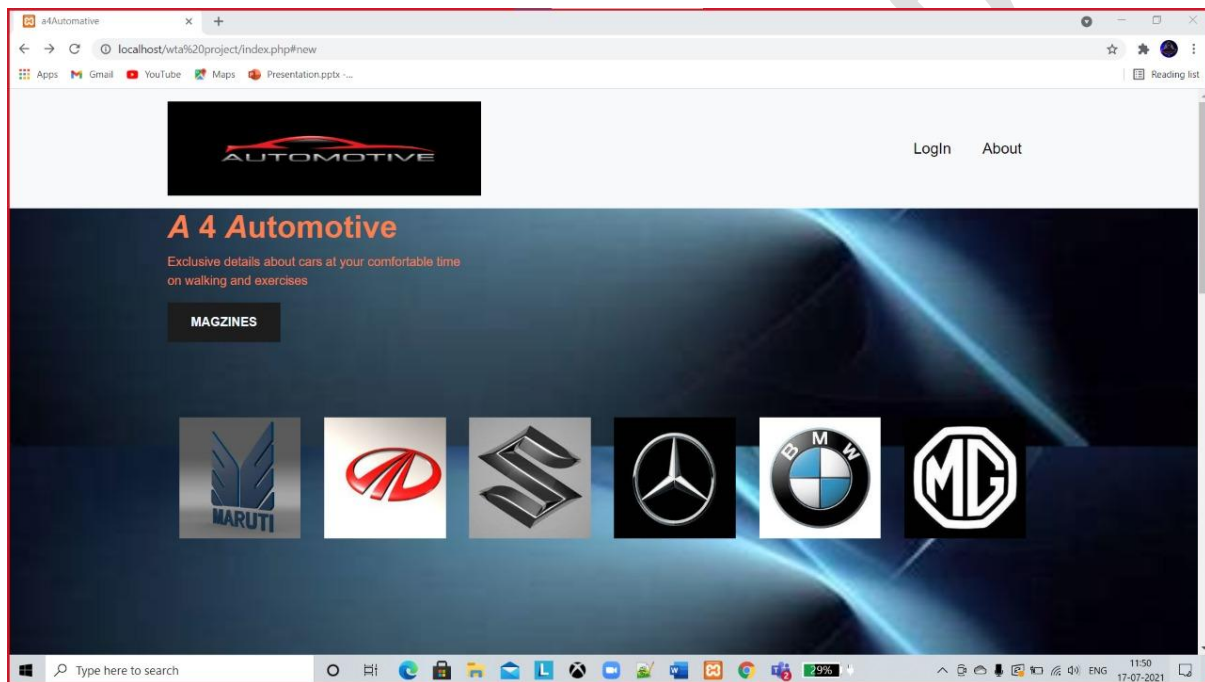


Fig 7.1.1: Index Page

7.1.2 index page2

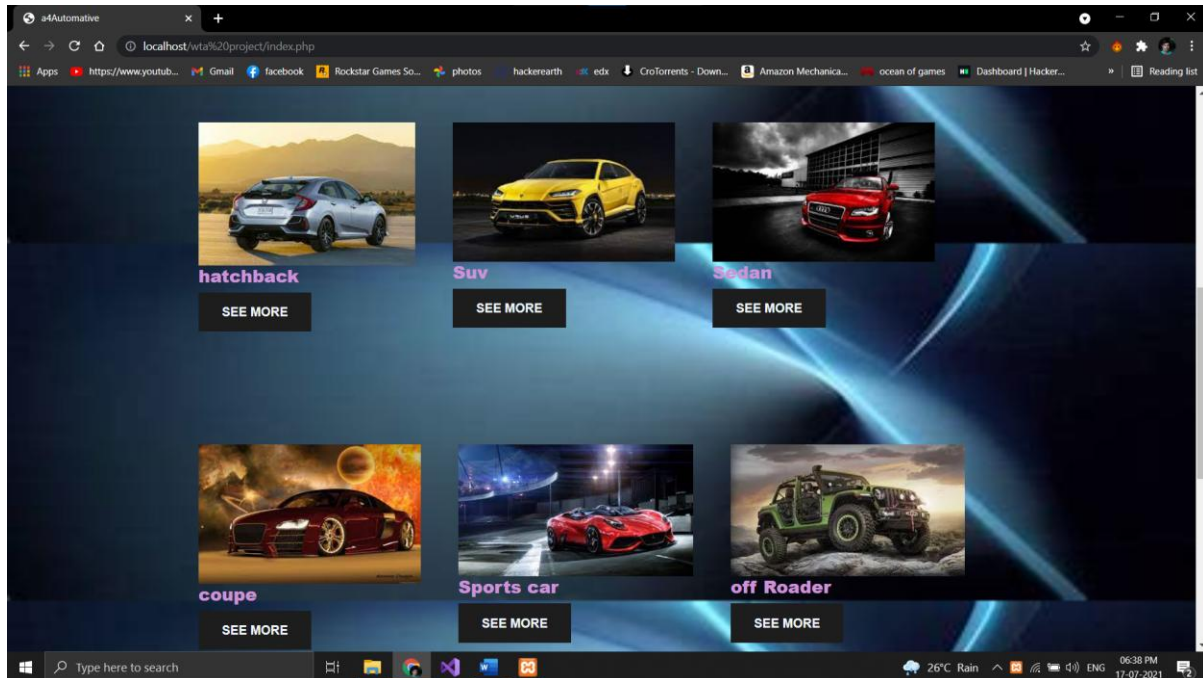


Fig 7.1.2: index page2

7.1.3 index page3

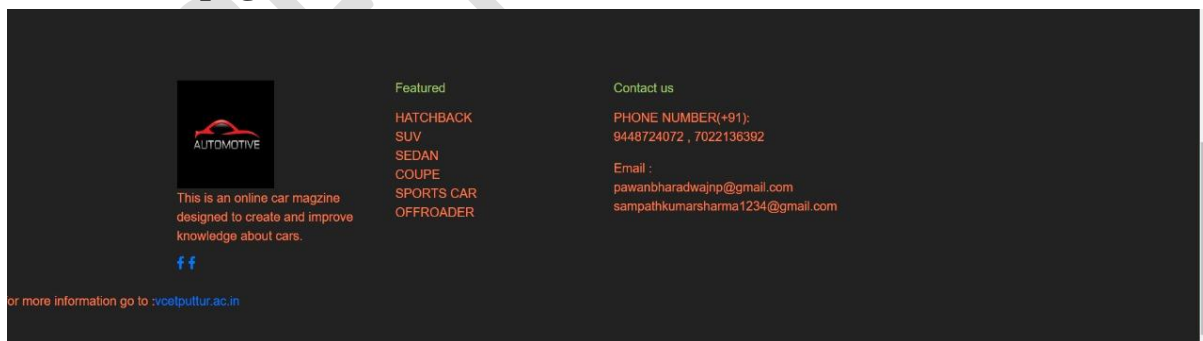


Fig 7.1.3: index page3

7.1.4 Sign in page

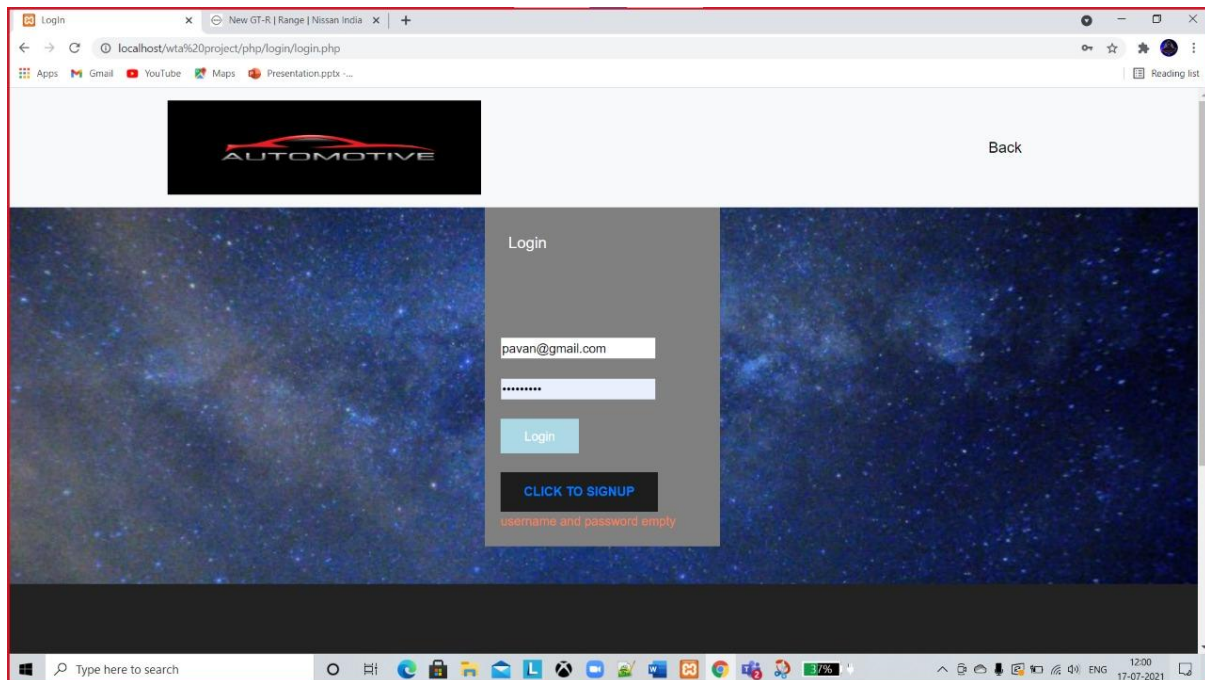


Fig 7.1.4: Sign in page

7.1.5 Sign up page

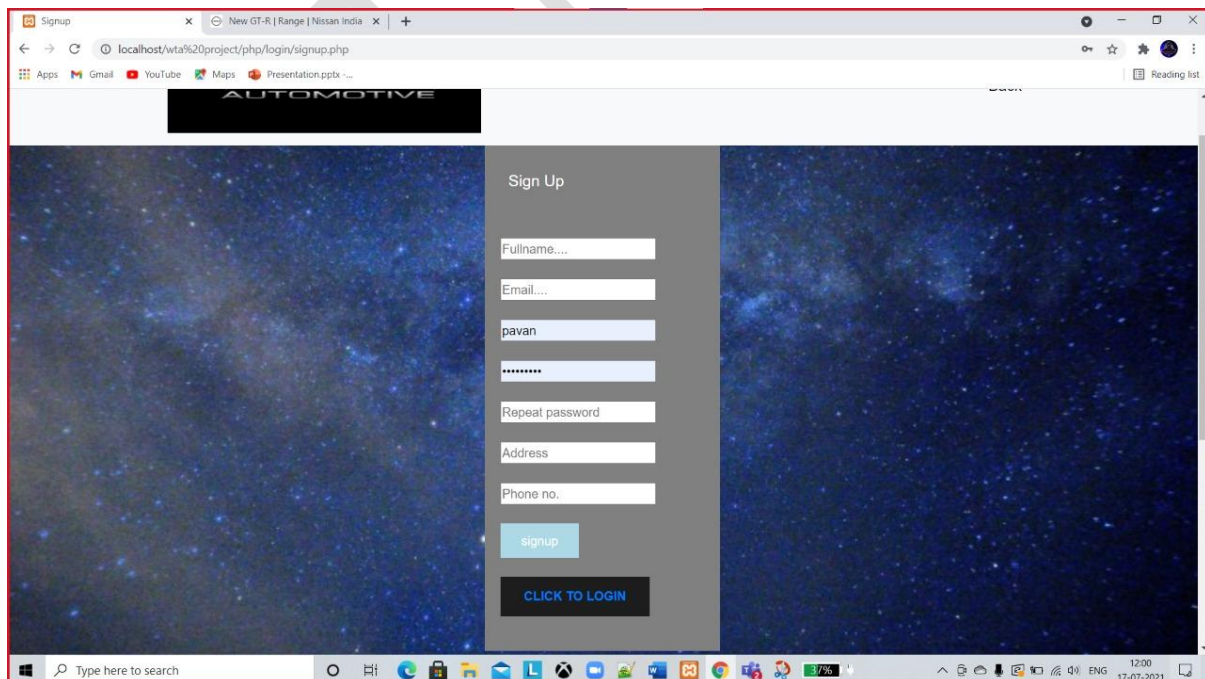


Fig 7.1.5: Sign up page

7.1.6 Signed in page

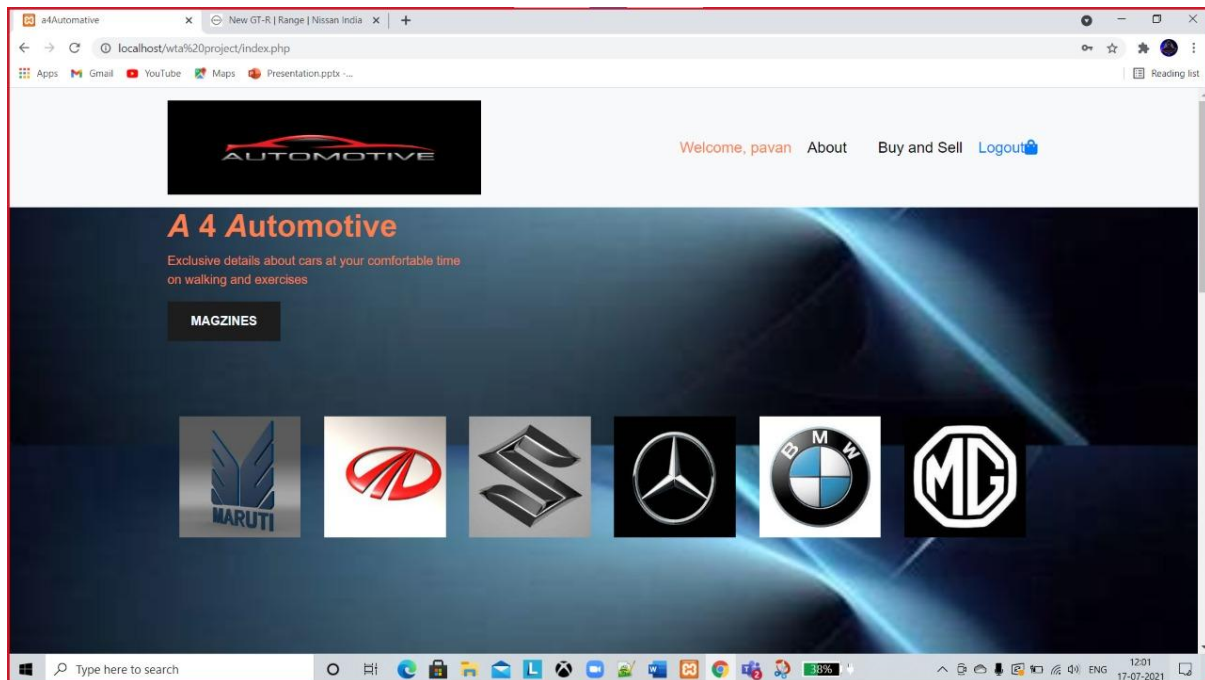


Fig 7.1.6: Signed in page

7.1.7 Hatchback page

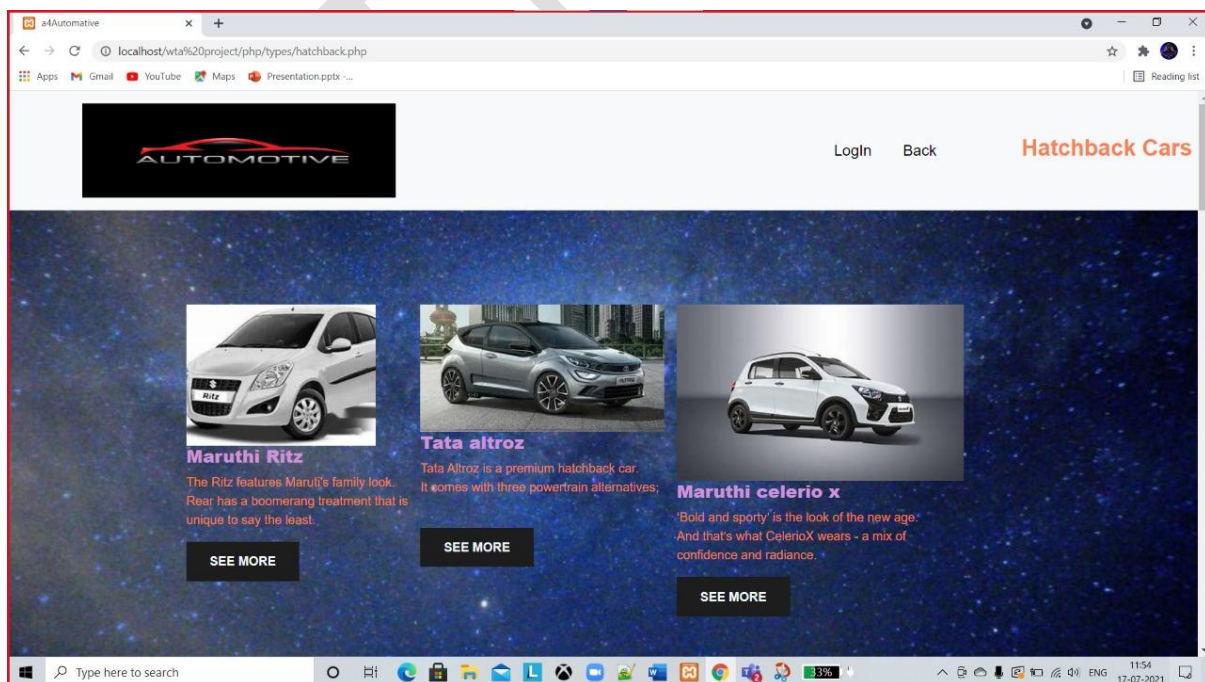


Fig 7.1.7: Hatchback page

7.1.8 Hatchback page2

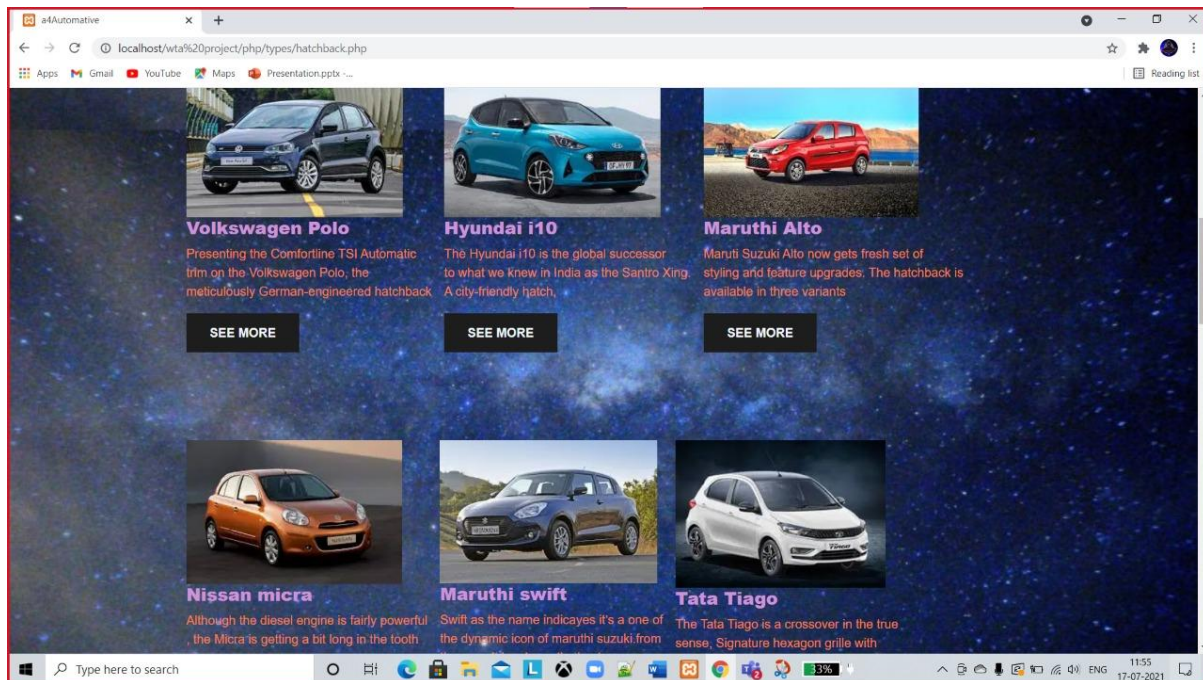


Fig 7.1.8: Hatchback page2

7.1.9 off Roder page

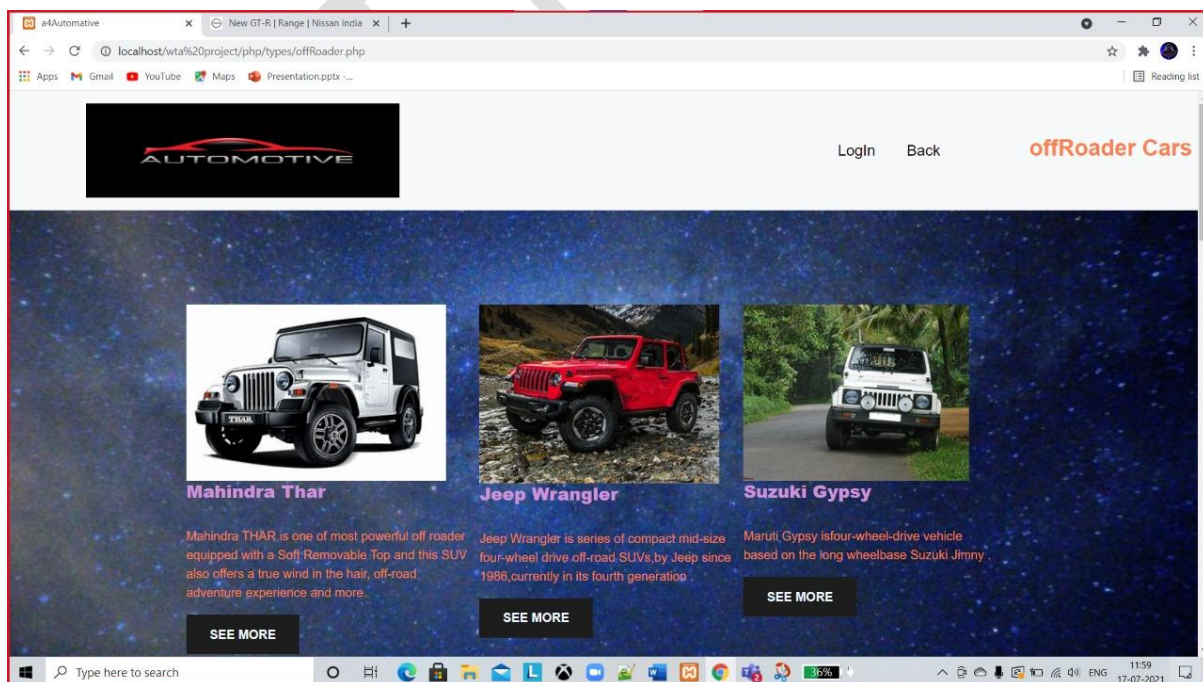


Fig 7.1.9: off Roder page

7.1.10 car detail page

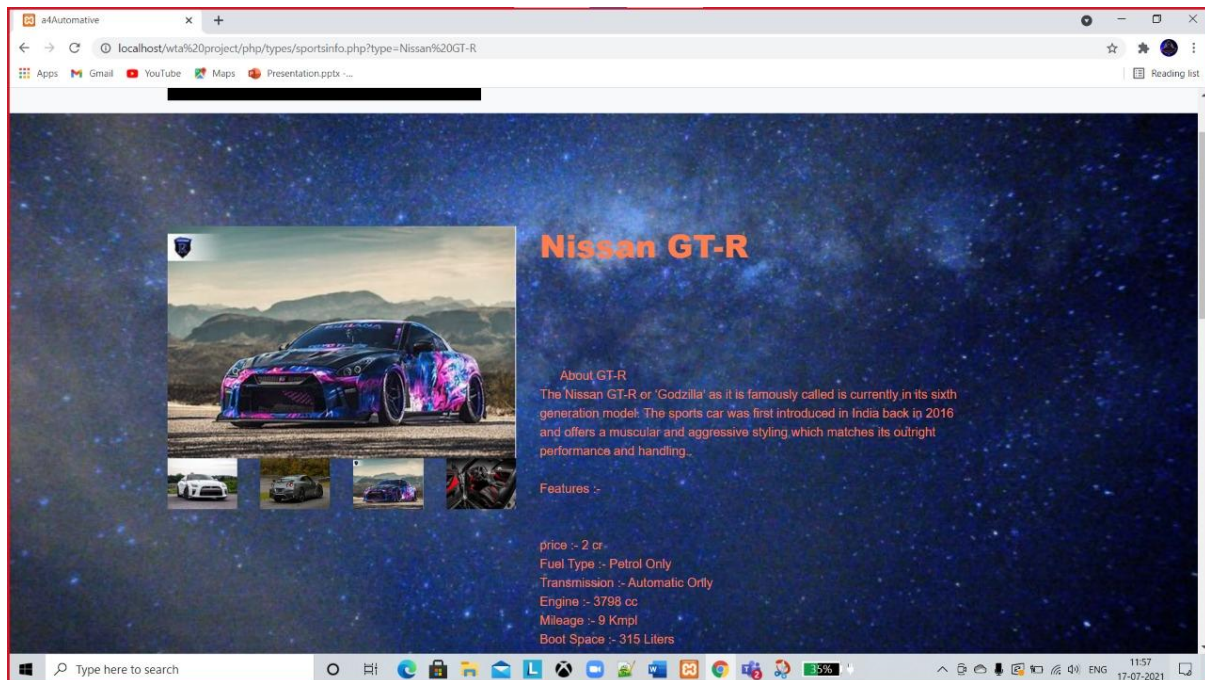


Fig 7.1.10: car detail page

7.1.11 car detail page2

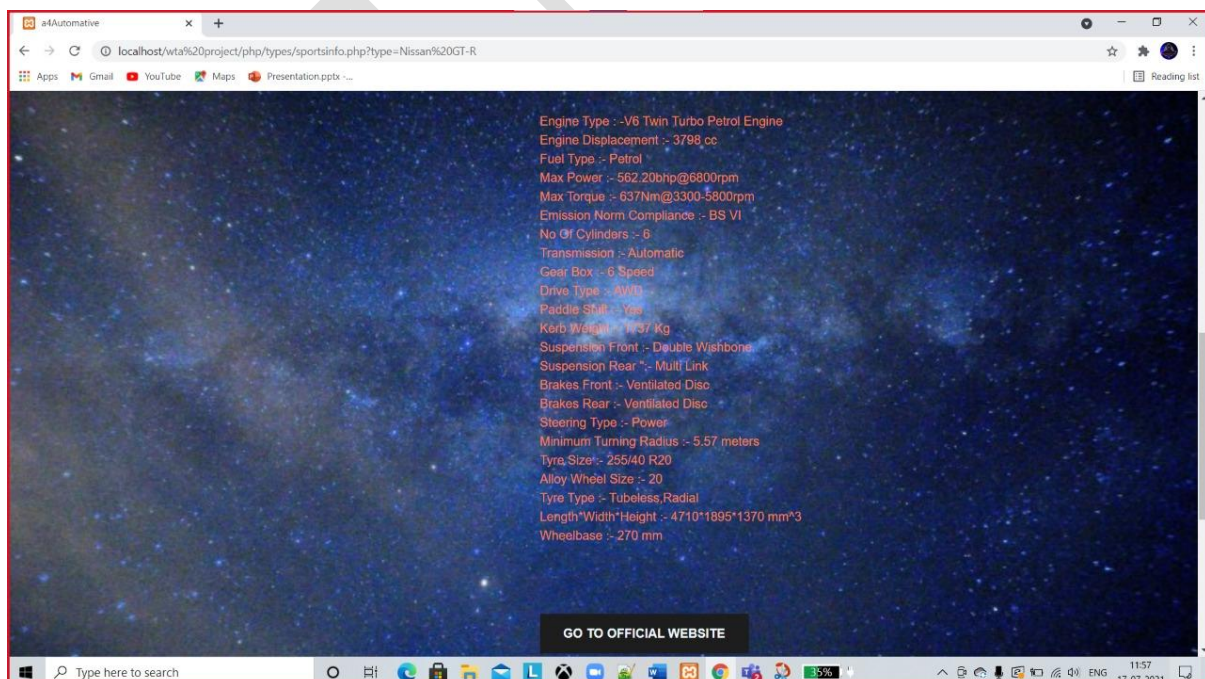


Fig 7.1.11: car detail page2

7.1.12 Buy car page

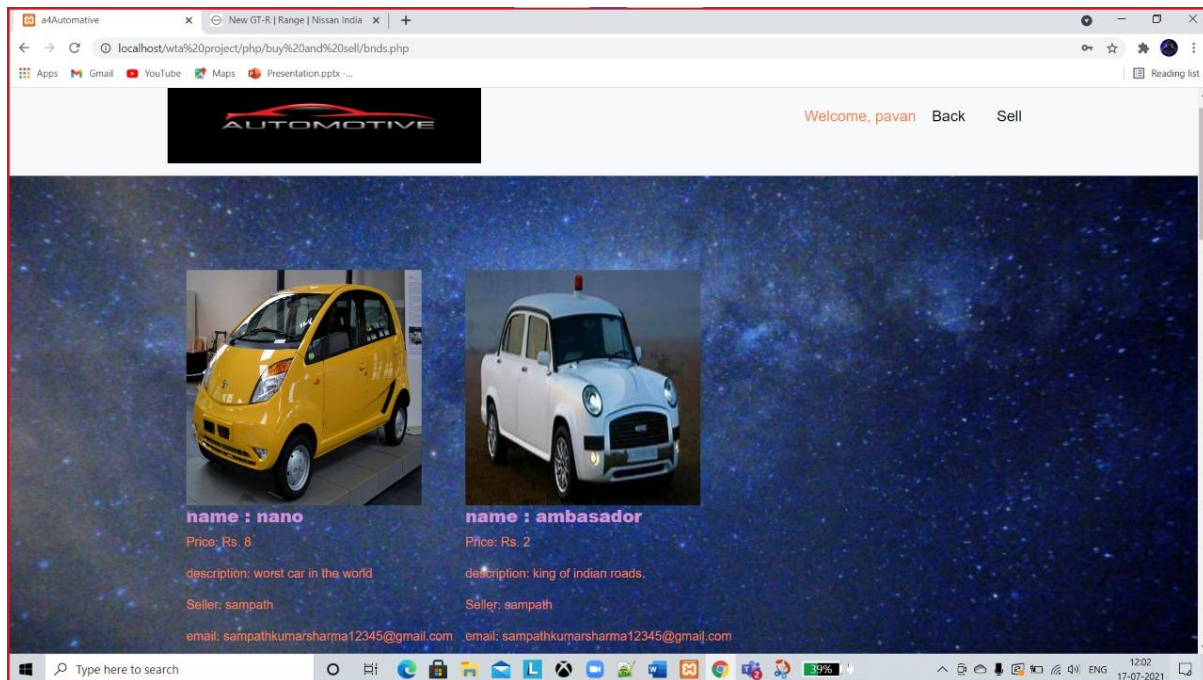


Fig 7.1.12: Buy car page

7.1.13 Buy car page2

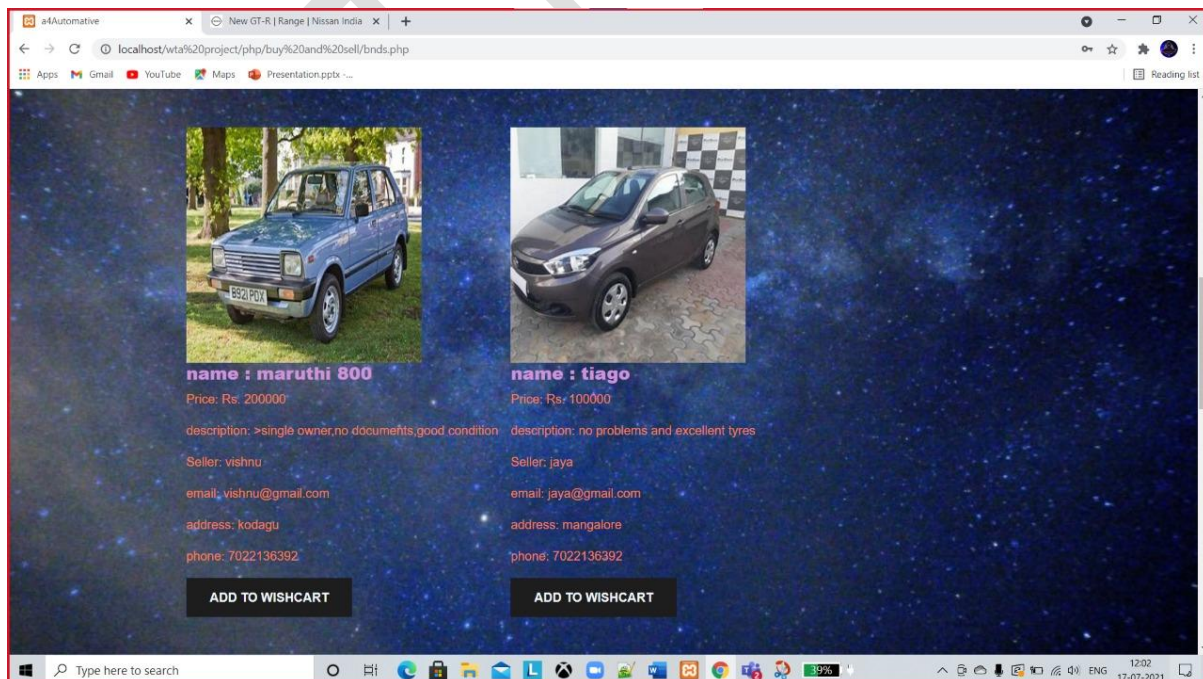


Fig 7.1.13: Buy car page2

7.1.14 sell car page

upload photo

Choose File No file chosen

enter name of the car car_name

Price of car in (Rs) price

Describe about your car

submit

Fig 7.1.14: Sell car page

7.1.15 Wish cart page

name : Audi

Price: Rs. 20000

Fig 7.1.15: Wish cart page

7.1.16 About page

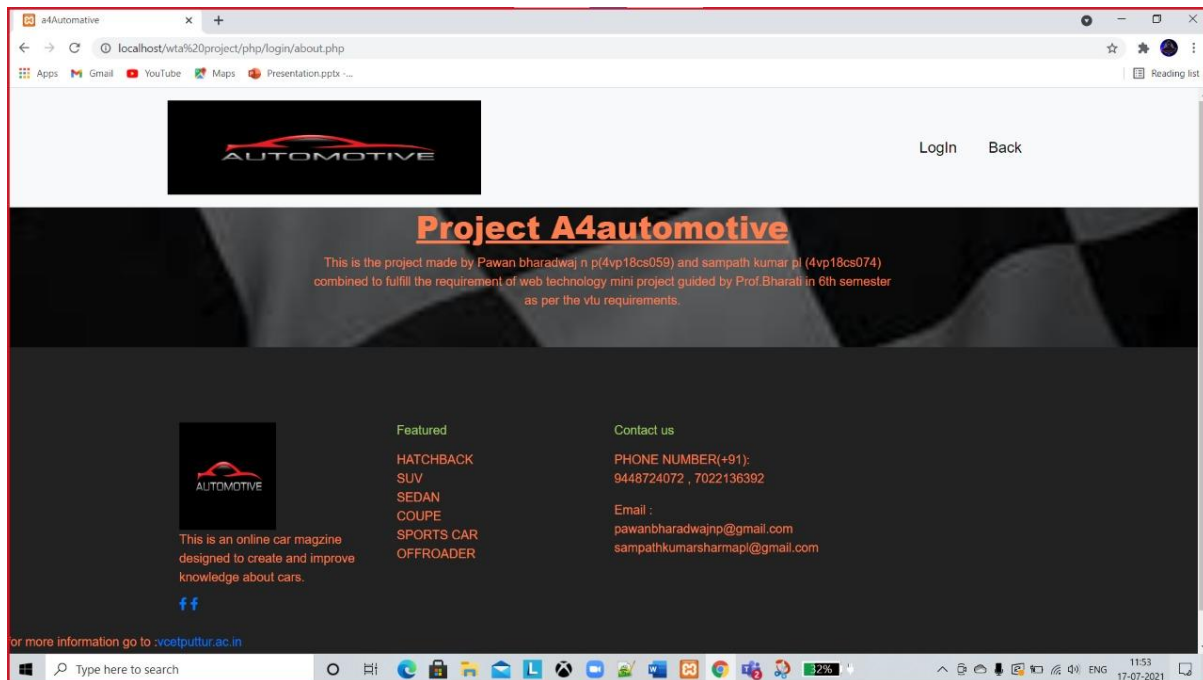


Fig 7.1.16: About page

CONCLUSION

Whether it's information on a **car** that they already own, or a **car** that they aspire to own one day, this online **car magazines** have helped us all discover our passion about **cars**. India is the country's leading authority for **car** buyers.

So overall this website provides A-z information about many cars, so that it will facilitate customers to improve their knowledge about car and also assist them to decide which car to buy.

Also, Customers can own old vehicles if interested.

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