

E-RIDE: Carpooling Website

Bhumi Rakeshkumar Patel¹, Vivek Rajivkumar Patel²

¹Software Developer at Shree Harsh Peripherals PVT. LTD., Vadodara, Gujarat, India

²PG Student n in Artificial Intelligence and Smart sensors and actuators at DIT, Deggendorf, Germany

Abstract -A E-Ride or you can refer it to as car sharing is the sharing of car journeys so that more people can travel in a car and prevents other people to have to drive to their destination by their own. Our main purpose to build a E-Ride website is to help people needs, make benefits and help save our Environment. It reduces Fuel Costs, tolls and stress of driving. It helps you reduce air pollution, carbon emissions, traffic congestion on roads and mostly the need of parking spaces. We should encourage E-Ride as it would be very beneficial during periods of high pollution or high fuel prices.

Key Words: Car, Travel, Fuel Reduction, Pollution, Application, Website

1. INTRODUCTION

E-Ride cuts down at the variety of vehicles and automobiles at the road. Fewer vehicles imply there's much less carbon and different gasses and pollutants entering into the air. This protects the surroundings with the aid of using retaining the air, water, and land cleaner. SO, it helps us to keep our environment safe.

According to numerous health reports and research, the harmful air emitted by the automobiles leads to various health issues like asthma, allergies, lung cancer, etc. From a research data we found that using carpool is far less STRESSFULL then commuting on your own.

E-Ride is an alternative which can come up with tremendous flexibility. The flexibility makes it a totally handy alternative for any lengthy commute. For the destiny invention of driverless motors or system drivers it is able to show handy due to its flexibility.

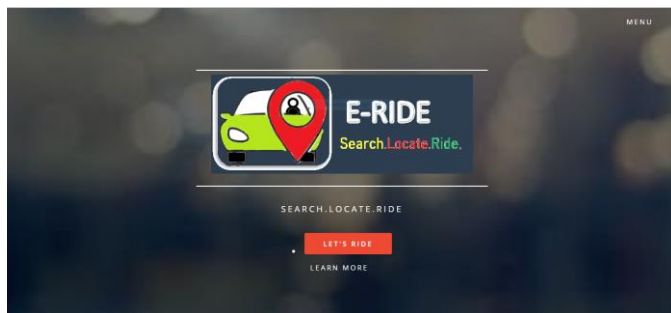


Figure 1 Home page of Website

2. Technology Utilized

2.1 Front End Details

For front end the following libraries and frameworks were used along with basic web development technologies. We made use of HTML, ASP.NET, JavaScript, CSS, Bootstrap, Font Awesome, and JQuery.

HTML and ASP.NET was used to structure the website and its contents whereas JavaScript, CSS, Bootstrap was used to add styling and formatting the content and making it responsive to make it work on different devices. Font Awesome is an icon toolkit and was used to add icons and make the website more user-friendly. JQuery is a JavaScript library.

2.2 Back-End Details

Technologies like ASP.NET has been used for multiple roles. Along with designing front end, we used it for mapping of our backend and front end. .NET is a framework which can be used by using multiple languages. Here we used C#. SQL management was used to create the database for login, sign up, ride owner, and riders.

2.3 OBJECTIVE

The main objectives of our E-Ride is as follows:

1. Reducing overall traffic congestion on the roads.
2. Reducing single occupancy car trips by implementing E-Ride system.
3. Promoting alternative modes of transport.
4. Improve parking in areas that are experiencing parking congestion.
5. Saving money by sharing the cost of driving one car.
6. Reducing number of cars on the road.
7. Reduce pollution and Carbon dioxide emissions.
8. Reduce driving-related stress for people.
9. Useful to build up Social Level Confidence and connections in society.

3. Methodology

The basic Methodology of website building is a very logical four steps process: LEARN, DESIGN, BUILD and MANAGE.

Before starting work on our carpool website we learnt about it, we identified the problems that we want to study, then we did research on what extent search already has been done in that area. We planned how we will research, how and from where we will collect our relevant data. So we have enough knowledge and clarity to what we have to work.

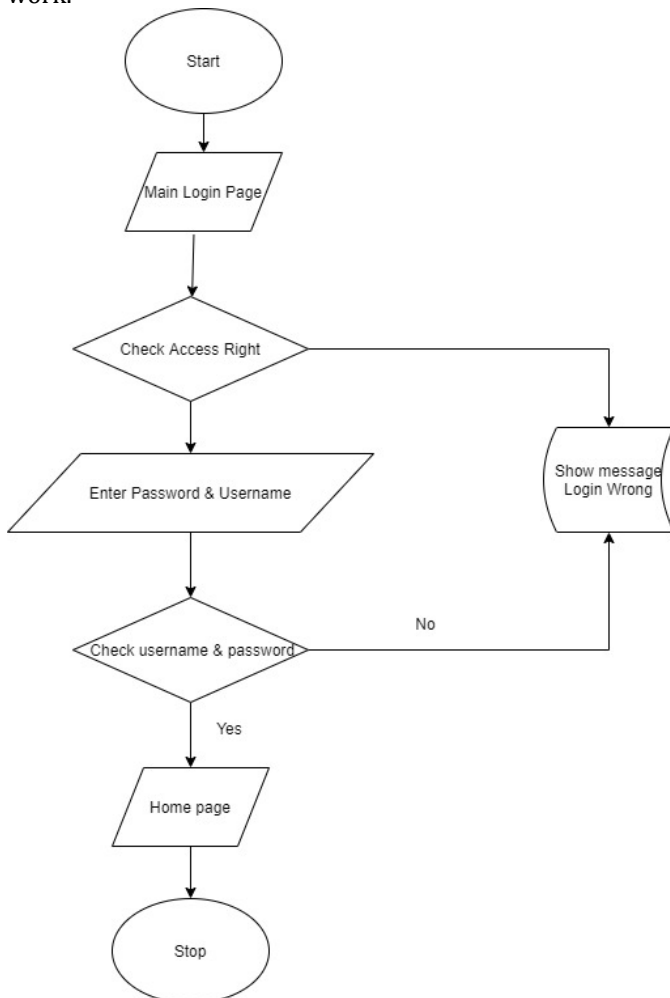


Figure 2 Flowchart of login

Then we started working on the front-end that is our design of the website. We tried various looks, templates, themes, images and codes for making our website feel good and attractive.

Then we started working on the back-end which is the actual code related to storing of the data by connecting database, using the appropriate algorithm for matching routes, connecting it with CSS and making our website build successful.

We managed the errors and the difficulties during the building of our website. Other additions and eliminations from our project consulting it with our mentor and other faculty members



Figure 3 How it works



Figure 4 Sign Up and LOGIN

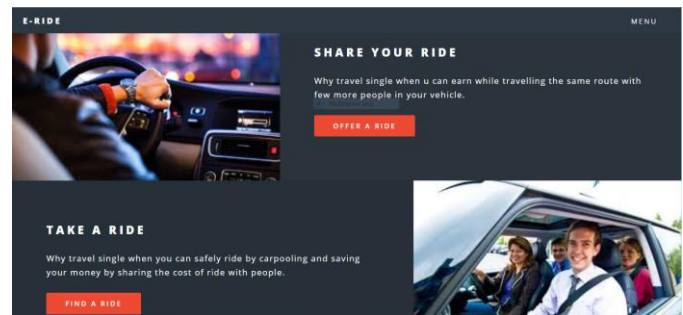


Figure 5 RIDER AND RIDE OWNER FORMS

CONCLUSIONS

E-RIDE has established that car-sharing brings tremendous advantages in phrases of decreased car possession and travel, and advanced mobility. It can help developers, employers, universities, local governments and transit agencies achieve their goals. It also helps in reduction of air pollution, carbon dioxide emissions, and other harmful gases. E-Ride is the best way to build up our social connections, so as we can conclude overall it is proving advantageous for us. This website will help you save money, as of the fees for the gas/petrol of vehicle is divided between the passengers, it also helps you save on the cost of vehicle repairs and maintenance if you rotate vehicle use between the members of your carpool team.

REFERENCES

- [1] (Alan Kerr & Diane Rasmussen Pennington, 2018) https://www.researchgate.net/publication/322444198_Public_library_mobile_apps_in_Scotland_Views_from_the_local_authorities_and_the_public?sg=_KYvwuIhVGMx6P7BF1CzjT_lmVKVgdTbPs4FeAudrYYO_dP8MxpDk0Lq0rLn-pD0ymE3h-jujtwGEuQ
- [2] (Amber Jade A. Baetiong, et al., 2018-19) <https://ieeexplore.ieee.org/document/8666313/>

- [3] (Boller, 2017)
https://www.researchgate.net/publication/320474082_Apply_Ever_After_How_to_create_your_own_library_mobile_app_through_easy_to_use_low_cost_technology?_sg=nLh43Ibm9uWJ6o1Zp0v8q_-tbit-06zv5CvXSe0JV2NrGKeEdNlzUSALIKySLCtmK7vWfU-FAh_jU
- [4] (K.Ayyanar, 2019)
https://www.researchgate.net/publication/339676167_MOBILE_APP_AND_THE_LIBRARY_SERVICES?_sg=AIicqQaQpWDePH1dtImynKVHkmEJR7LwgmrOIZbUTwNSxX8whFksu9xvDi6W4jp3DZ17F3ZjJEV66io
- [5] (Ying-Hung Pu, Po-Sheng Chiu, Tzung-Shi Chen , & Yueh-Min Huang , 2015)
- [6] <https://emeraldinsight.com/doi/abs/10.1108/LHT-10-2014-0100>
- [7] (Puttaraj Choukimath & Mallikarjun Angadi, 2018)
https://www.researchgate.net/publication/328165495_Library_Mobile_Apps_A_Revolutionary_Trend_in_Managing_Information_Resources_and_Services?_sg=otNSse0Chld88gJU8y8L2_egK7mbz5MmIh8A9ISRyhPQf12_Jaj8wtOnr9Jl2N3k88OFdUfCX6kXAAQ

BIOGRAPHIES



Miss. Bhumi Patel is a B.E Computer Science and engineer working as Software Developer at Shree Harsh Peripherals PVT. LTD.



Mr. Vivek Patel is Pursuing Post-graduation in Artificial Intelligence and Smart sensors and actuators at Deggendorf Institute of Technology, Deggendorf, Germany