

INDWAYS USING GPS FOR VEHICULAR APPLICATIONS

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Abstract—Our project is to make life simpler and easier than ever by being a helping hand while travelling. All of us like to travel around. But while travelling our car might breakdown in a remote unknown place which you don't know much about. So, in such conditions you will definitely need help. Our aim here is to help you in such situations. For that we are creating a website which uses your GPS to get the current location and gives the list of workshop and details of mechanics. So that you can contact them and get immediate help. We are providing space for the technicians and users to login. Technicians can upload their information about their workshops and tutorials. Users can access the details, tutorials and online store where they can buy or sell or exchange vehicle spare parts, rate the workshops etc. Suppose if we cannot access the GPS then we can provide the details of workshops from the database which will be uploaded by the workshop technician. The website can give your car specific model workshop or mechanic to get a quality product. This website will cover all the vehicles including cycle and bike. This will also be an online platform to get tutorials for your vehicle, buying spare parts and a lot more. This is a simple concept but we are looking to build big out of it.

Keywords— Global Positioning System(GPS),MYSQL,HTML,CSS.

I. INTRODUCTION

All of us like to travel around. But while travelling our vehicle might breakdown in a remote or unknown place which you don't know much about. So, in such conditions you would need help. Our aim here is to help you in such situation. For that we have found a solution. Here we have come forward with a platform that would help you to find the nearby garages and workshop technicians including their required information. There are no accurate websites or applications that provide us with the information of nearby garages and workshop technicians. The existing system provides only a few details. Even though these websites provide us with certain information there are some difficulties such as lack of user friendliness, control and services are not that easy, takes more data and processing is heavy etc.

The internet browser is said to be the most important piece of software for the modern day. Everyone will have access to an internet browser but it is not that easy to find a user-friendly app or website where one can find all the details of workshops like location, contact details, price comparison of each workshops and even a platform where one can get the spare parts at their best-selling rate. All car repair and maintenance work is carried out after the customer's consent. We even provide with a toll-free number that helps you to contact with us even when internet facility is not available this makes it even more easy for users to get the information.

II. DRAWBACKS OF EXISTING SYSTEM

- Even though these websites provides us with certain information there are some difficulties.
- Lack of user friendliness.
- Control and services are not that easy.
- Takes more data and processing is heavy.

III. METHOD

The proposed system has been evolved with the intention to overcome the limitations of the existing system.. This project aims to provide an efficient and less time-consuming way of finding the workshops and required details. This platform makes use of GPS to identify the location of the vehicle. Once the location is been traced the nearby garages and workshop technicians are listed out and their contact details are provided. Along with this we are providing the list of spare part shops.

A use case is a strategy used in system examination to determine, explicitize, and systematize the system requirements. In this perspective, the term "system" refers to something being developed or operated, such as a mail-order product sales and Websites offering various user services. Use case diagrams are employed in UML (Unified Modelling Language), a standard notation for the modelling of real-world objects and systems. System objectives will embody coming up with overall necessities, validating a hardware design, testing and debugging a software product, under development creating an online help reference or performing a consumer service-oriented task.

For example, use cases in a product sales environment would include item ordering, catalogue updating, payment processing, and customer relations. To understand the rudiments and details of a system, we need to use different types of diagrams. Use case diagram is one among them and its specific purpose is to assemble system needs and actors.

Use case diagrams particularize the actions and functionalities of a system and their flow of direction. But use case diagram never explains how they are prepared. Use case diagram can be thought of as a black box where only the input, output, and the role of the black box are known. figure 1 depicts the use case diagram for our project.

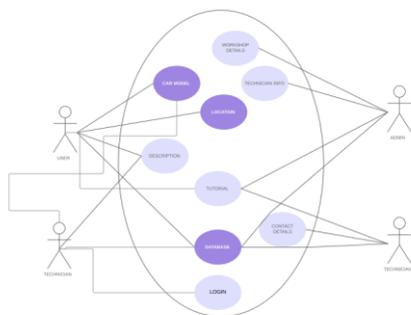


Figure 1

In figure 2 class diagram of our website is visualized. This figure depicts the activities the users and the technicians can perform through our website. Once the information about the location and the vehicle is provided the users will be provided the details of nearby workshops and technicians. Our website provides a user friendly community for writing blogs, sharing their reviews about the workshops etc.

We can buy, sell and exchange the spare parts and make the payment through the website. Figure 2 clearly depicts these activities. Our project is intended to help the people who love to travel without any hindrance.

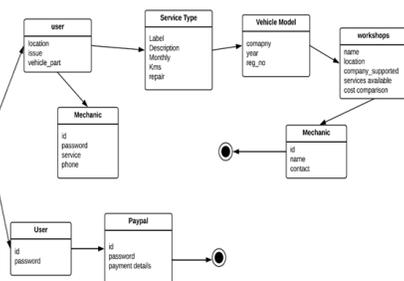


Figure 2

The language used for coding the project is HTML with CSS styling. The program is implemented on a system by transferring the appropriate folder in which the program exists to the user's computer. The program is written using gedit and notepad++ on a Linux and Windows PC

respectively. Before implementing the code, the code was tested and analyzed by all members of the group and made sharper and more efficient. There is a lot of database involved in this we used MYSQL. We have used services from PayPal for the online payment and transactions. Our hosting partner was WIX.

Login Page is where the user can enter the details and sign up to create account. By logging in you can access the features very easily without any delay.

You can view the workshop nearby you from the workshop's page. Here you will have to choose from a list of workshop and workshop technicians whose services will be available at a single click.

The online store is the market place where the users can buy products related to car. The can order products and pay using PayPal. The technicians can sell their products through our website by uploading their product details in our website.

The cart is the place where you can view the products you have added to the cart. Here you can choose the number of each products you have ordered and view the total amount to be paid. You can do your payments through your PayPal account.

Advantages:

- More user friendly than the existing system.
- provides more activities like buying/selling spare parts and writing blogs.
- Provides more accurate and precise informative details about workshops including technician info.
- Moreover the user can also access the tutorial for self repairing the vehicle in case of absence of technicians.

IV. RESULTS

Indways provide an environment where user can find the nearby workshops location along with spare parts shop. We have introduced a website where one can find the required details and information. The primary goal of our project is to provide a quality experience. In future we would design an app so that it will more convenient for the users to accessing the services .We would also improve and expand our online spare parts shop. We would be working for 24x7 call service so that the user would be able to access our help at any time. We are working on a prototype of device which works as SOS device. Once the button in this device is pressed our consultant will arrive at the location, this can be used for emergency purposes also.

The Indways will be a useful website for travellers and vehicle lovers for finding the workshops and other spare parts even for vintage vehicles. It is user-friendly website which provides with the necessary information and details with a good end-user

experience. It has many advantages over the current existing methods. All these advantages amount to a simple, yet helpful website which can help a lot of people. Technology makes the world a better place to live and makes our lives easier. Our proposed method makes it easier for travellers without any hindrance.

V.CONCLUSION

The Indways will be a useful website for travellers and vehicle lovers for finding the workshops and other spare parts even for vintage vehicles. It is user-friendly website which provides with the necessary information and details with a good end-user experience. It has many advantages over the current existing methods. All these advantages amount to a simple, yet helpful website which can help a lot of people. Technology makes the world a better place to live and makes our lives easier. Our proposed method makes it easier for travellers to travel anywhere anytime without any hindrance. Indways makes us realize the relevance of database management and GPS location tracking system in the field of transportation and offline location sharing in case of any kind of danger in between the journey. In the era of evolving technology and new modern techniques for finding the solution to each and every problem our project provides a simple yet efficient way to get the details of workshops and vehicle technicians in case of emergency in the midst of any unknown place by utilizing the technologies of GPS location tracking and database management system.

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