Smart Emergency Assistance for Road Vehicles

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ABSTRACT

Anyone in a faraway place who needs assistance with their car's mechanics will find the On-Road Vehicle Breakdown Assistance (ORVBA) to be an excellent resource. Members of the general public may sign up to use the On-Road Vehicle Breakdown Assistance (ORVBA) system, which will put them in touch with a specific technician. An On-Road Vehicle Breakdown Assistance (ORVBA) system is in place, however it is only accessible to authorised technicians. Since every user is providing feedback on the service they have used via the ORVBA system, they are also being monitored to ensure that no additional fees are charged to the users.

When people's cars stop working while they're on the road, the goal of the on-road vehicle breakdown support initiative is to provide them a way to get help quickly using a digital platform. To manage service requests, provide help, and monitor the progress of each breakdown case, the project incorporates a backend system and a mobile app.

Keywords: html5, css3, bootstrap, php, mysql, angular java script .

I.INTRODUCTION

Many people have trouble receiving assistance when their automobile breaks down on the road. Many of them are unable to receive assistance because they lack the contact information for On Road Vehicle Breakdown Assistance, which may be located far from where they are.

The proposed system connects On Road Vehicle Breakdown Assistance (ORVBA) and the Public through this system, which is one of the anticipated outcomes. Using a mobile phone, the owner of the vehicle can submit information about the breakdown location in the system if it occurs on a highway or federal road at any location.

The nearest ORVBA to the reported occurrence site will be immediately searched for by the system. The ORVBA can be contacted by the users to service the vehicle.When a car breaks down, the driver becomes frustrated, which leads to poor decisions and

being taken advantage of by tow truck con artists. Getting assistance from mechanics or workshops is another issue.

If one does not know the workshop's number, they must rely on passing cars for assistance and run the danger of being conned. It is crucial to develop a solution that can address each of these interrelated issues.If On Road Vehicle Breakdown Assistance (ORVBA) is interested in providing an application-based platform for your mechanical troubles with your vehicle in remote areas or places where you are unsure of the mechanics. The list of registered and certified mechanics in and around the targeted places will undoubtedly provide assistance in solving the issue without additional costs. to the residents of the city you have chosen.

II: LITERATURE REVIEW

Getting out of the car to check for breakdowns can be quite dangerous, especially on a highway where people are travelling very fast. This means that automobile breakdowns could signify more than just the car's mechanical flaws and could result in injuries and fatalities. According to Federal Highway Administration data (United States), roadside collisions cause over 4,000 fatalities and almost 60,000 injuries each year.

It is recommended to seek the assistance of a professional in this situation, such as On Road Vehicle Breakdown Assistance because they are more informed and for your own safety while driving. Currently, the biggest worry is getting in touch with the On Road Vehicle Breakdown Assistance because the public has little knowledge of the provides. Findings- Car Talk 2000 is focus on new driver assistance system based on inter-vehicle communication. Radio network use as a Communication.

That help to communicate with other vehicle. “HelpMe” didn’t use radio network as a communication. Because the system using android operating system and user can locate mechanic by using GPS Miss. Harsha Spare, Miss. Kanchan Yadav, Miss. Divya Solav, Mr. Aniket Budhbaware, Mr. Sahil Droned [2] proposed a method for locating the Breakdown Service Station. The system connects Car Repair Service Providers and the Public in on road vehicle assistance system.

In terms of future work, there is a lot of potential for this programme to be evolved into a premium version in order to expand the radius of ORVBA search results, which is one method to make money from a business standpoint. When the majority of ORVBA adopt the trend of incorporating smartphone usage in their businesses,

applications on the ORVBA side may also be built to connect the ORVBA and the users through the application itself. The creation of this Car Breakdown Service Station Locator System will help both the general public and the ORVBA, as it will lower the number of tow truck scams that constantly prey on the needs of the general public.

III: OBJECTIVES

The proposed application helps to find mechanics easily and quickly. It is difficult to find mechanics nearby area wherever you are travelling. This system helps to overcome this issue by providing mechanic details in one click. Here the locator allows you to search mechanics from different locations. Admin is allowed to access and manage mechanic details. This online mechanic locator reduces work and can easily find the mechanics from various location. Reduces your time and cost. The main objective is to provide a better service and to make the process easily and finally appointing a mechanic quickly. Proposed system is accessed by three entities namely, Admin, Mechanic and User. A mechanic can perform task such as viewing request received from users and can also send feedback to the admin. User can send a request and can appoint a mechanic on respective date-time.

On Road Vehicle Breakdown Assistance application helps to find mechanics easily and quickly. It is difficult to find mechanics nearby area wherever you are travelling. This system helps to overcome this issue by providing mechanic details in one click.

- Providing a smart technology On Road Vehicle Breakdown Assistance system.
- Reducing human time and effort
- This application will help to reduce wasting user time for found a proper mechanic.
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IV: METHODOLOGY

Here, users of the On Road Vehicle Breakdown Assistance (ORVBA) system can search for a list of mechanics in their area who can assist them in emergency situations brought on by mechanical problems with their vehicles. Only licensed mechanics may be mentioned here while a search is being conducted. Additionally, a

mechanic is on call and may fix any mechanical problems the user's vehicle may be experiencing. Following a thorough investigation, it was determined that the system is equipped with the following modules: User, Administrator, and Mechanic.

Administrator

After checking the mechanic's licensing information, the administration must approve the registration of the mechanic in order for the service to be effective.

Mechanic

•Register - In order to receive approval, each mechanic must first register their information with the administrator.

•Login - Registered mechanics who have received admin approval may login to their accounts.

•Post your information - Here, mechanics must list their contact information, including name, address, and services offered.

•View feedback - Mechanics must maintain or enhance their service using the feedback given by users/customers.

•New Request - The request containing the problem and location will be received by the mechanic from the user side. Mechanic can use Google Maps to find the user's location. And Mechanic will revise the request's status.

Users must register with their basic information in order to access this application service.

•Login — After registering, users must log in to access the service when they need it.

•View Details - Logging into the application will provide you access to a list of the mechanics that the application has approved.

•Search records and calls - This feature enables users to do a list based search according to their location and time.

•Share location and problem - Using Google geo map, the user can manually submit the location and problem. It is sending the mechanic a fresh request.

•My Request - User may view the status of their requests whether it is pending or accepted.

•Post feedback - Following the process, each user must utilize this application to provide their opinions on the service they have chosen

V: PROPOSED SYSTEM

A. Existing System

In existing system, result of the search is available only when the user is in the range, so it is very difficult for the user to get the service especially in rural areas. Assistance through helpline is highly prone to unavailability that makes the travelers experience worse.

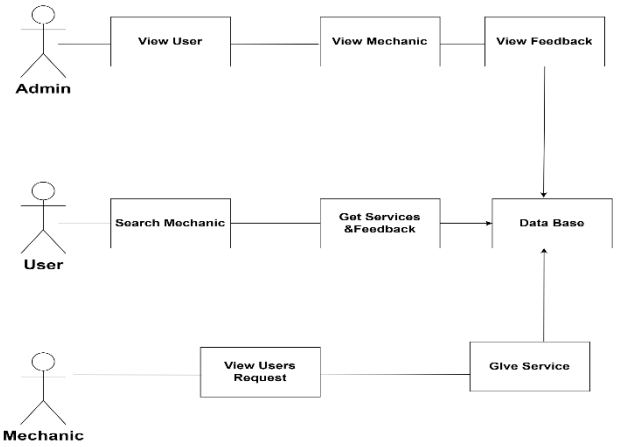
B. System objectives

- To develop a web based service provider Registration system
- To implement review analysis module using Text mining technique
- To develop android app for service provider searching.

C. Advantage of Proposed System

The traveler is provided with more services and support to ensure that they have a good travelling experience. The traveler can have easy access to the services based on the current location using Google Maps Navigation System. The services are provided in a wide range so that travelers enjoy the maximum benefit out of it. System recommends traveler to choose the best service.

D. System Architecture.

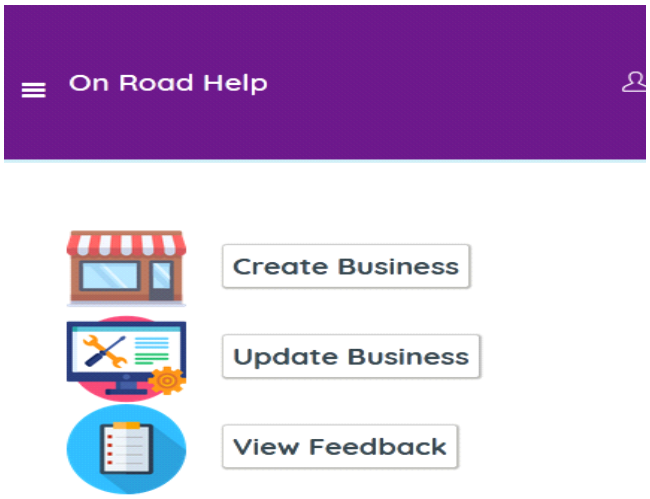


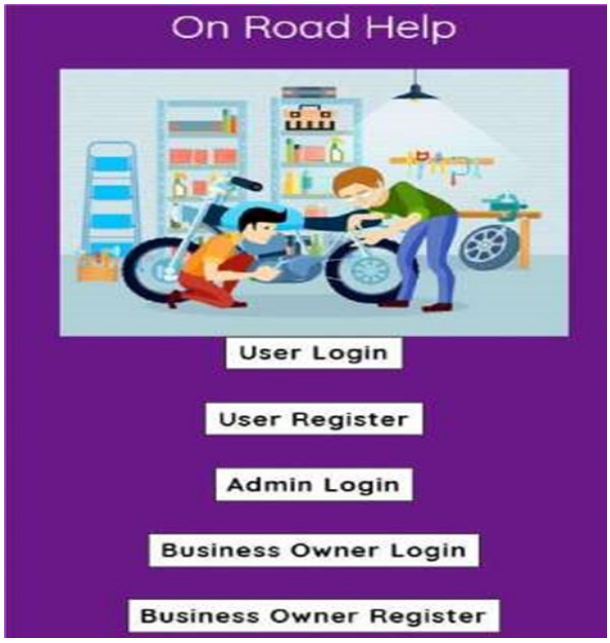
VI: RESULTS

shows the Home page of the ORVBA application where user login, user register, admin login, business owner login, business owner register..

This is the Graphical user Interface of the user, where the user can find the services related to his problem.

shows the any person create business or update business to use this interface and it shows the feedback of service





VII: CONCLUSION AND FUTURE WORK

Thus, a superior location result is provided by our emergency breakdown service. When used in an emergency, our app quickly locates the closest spot, which is very helpful to the user. According to the user's preference, the application offers navigation to the closest emergency service. Additionally, it gives these services'

contact details. This strategy greatly simplifies the user experience and outperforms the current system in situations this important.

Our application will use all reasonable efforts to identify and point users towards the closest service supplier based on their location. It assists the user with car collision, fuel delivery, flare tyre replacement and mechanical breakdown towing. The application can obtain service information that is saved in the server as part of roadside assistance (Visit Mechanic).

Future work:

- In Future work, This application to develop a cross platforms like IOS, etc.
- In adding the more features of On road fuel demand application management system to develop access with user's flexibility.
- To authenticate the users based on the system users list which is maintained by the operating system

To restrict the usage of all files by the users based on their privileges on the system.

VII: REFERENCES

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