IJARCCE ISSN (O) 2278-1021, ISSN (P) 2319-5940

International Journal of Advanced Research in Computer and Communication Engineering

ISO 3297:2007 Certified ⁜ Impact Factor 7.918 ⁜ Vol. 11, Issue 11, November 2022

DOI: 10.17148/IJARCCE.2022.111118

ON ROAD VEHICLE BREAKDOWN ASSISTANCE

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Abstract: On Road Vehicle Breakdown Assistance is going to be a good solution for the people who seek help in the remote locations with mechanical issues of their vehicle. Users of the On Road Vehicle Breakdown Assistance will be the registered public and they will be getting connected with the particular mechanic through the trustworthy Assistance system. Because only the legally licensed and approved mechanics are enlisted in the On Road Vehicle Breakdown Assistance system. In an existing system there are users who have their own mechanic database which is very minimal. And also they have no idea if their vehicles are broke down or had any mechanical issue in remote locations or any long distant locations from their known mechanic shops. In an proposed Here the users of On Road Vehicle Breakdown Assistance system can search for list of mechanic at any location or the nearby locations which will help them in an unexpected situations raised by the mechanical issues of their vehicles.

Keywords: On road vehicle breakdown , Python , Django, HTML , CSS , Javascripts

I. INTRODUCTION

Today most of people use their own vehicle for travel. While travelling most of us are troubling with breakdown of our vehicle on the road. This is a worst experience that they have to face. When our vehicle suddenly breakdown on the road, the user have to search for mechanic and have to see a spare-part shops near to their location. At that time we can't able to search for a good mechanic and we have to arrange some other transportation. By using this website the user can find suitable mechanic. The most advantage is the user can find a mechanic based on their user location. This project will show the name and address or location of all mechanic. We have discussed about the website Helpme. This will show the user location and direct the nearest service provider to user and the chat platform where the user can ask some relevant questions to the mechanic. It expects that through some research, the statistics of car breakdowns can be obtained to see if this project is helpful to those in need.

Everyone can access this website. This website will help to reduce wasting user time for found a proper mechanic. Website shows the user locating and direct the nearest service provider to user. There is a chat platform to chat with others. When the user searching mechanic application will show mechanic by his specialty, contact details, image, and rating. After job completed user can rate and give feedback to the relevant mechanic. User requests included user location, required service type, vehicle details, and description. Admin can view all registered user and mechanic details.

Introduction chapter is discussing about background of the project and it describe the aim, objectives and artifacts of the project. That is introduce of the project to others. Literature review describe the related project as a second chapter. There are discuss how is difference from other similar system and compare with each other. Then Methodology chapter discuss the Methodology that use, requirement gathering and design of the project. Implementation and testing chapter is discussing the tools and technology that use to the application and how tests for the final product. Evaluation chapter discuss about the user feedback for the android application. Finally, as a conclusion there are describe the benefits, limitation and future works of the project.

II . LITERATURE SURVEY

PAPER 1-Car Talk 2000

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.

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CarTALK 2000 is a European Project focusing on new driver assistance systems which are based upon inter vehicle communication. The main objectives are the development of co operative driver assistance systems on the one hand and the development of a self organising ad-hoc radio network as a communication basis with the aim of preparing a future standard. (Reichardt, 2002)

PAPER 2-
A car breakdown service station locator system Findings- The On-Road Vehicle Breakdown Assistance is like a car breakdown service station locator. But there is a chat platform to discuss the type of breakdown and exchange ideas about vehicle breakdown. At this point, the Car Breakdown Service Station Locator. System will be developed on Android platform due to the time constraint and a lot of research need to be done to develop the system. Development of this system on other platforms such as IOS and windows will be considered in the future if good feedbacks are being received from the users. The scope of this system will focus on searching the nearest CRSP for the drivers, providing help to people who do not possess any mechanic's number in hand. The business deal is between the CRSP and the driver which is out of the system's control.
(Monica, 2018)
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PAPER 3-
Emergency Breakdown Assistance Kit
Findings- Emergency breakdown Assistance Kit is an automobile emergency signaling kit, that shown "HELP" in front transparent panel. Below the HELP sign indicate the specific nature of the disable. In On-road vehicle Breakdown Assistance didn't display any special sign in front panel. There are need mechanic for identify the nature of the disable. As a consequence, our emergency vehicle breakdown service provides superior location results. Our programme quickly detects nearby locations, which is extremely valuable for users in emergency situations. It also features an offline mode that provides recommendations when the internet is not available. This technique simplifies the user experience and outperforms the old system in critical situations. (Sophie, 2001)

PAPER 5 -
On-Vehicle Breakdown-warning report system
Findings- On-Vehicle Breakdown-Warning Report System installs an electronic control panel and when the occurring breakdown detected and shown the signal on control panel. That may be help to detect the breakdown type before the major breakdown the vehicle. On-Road Vehicle Breakdown Assistance (HelpMe) couldn't detect any special breakdowns and didn't show any specific signal about breakdown. An on-vehicle breakdown-warning report system is disclosed. an occurrence of break-down is detected and judged based on a signal in an electronic control system installed on a control apparatus for an engine ignition system, a charging system, an engine fuel system, a engine cooling system, a power transmission system, and an oil lubricating system of an automobile or a diagnosis display system; and a diagnostic data is sent to an information terminal device of a diagnosis and maintenance agency or a service company having a diagnosis and maintenance agency as a contents information by using an on-vehicle mobile communication apparatus, and an action for an emergency measures and a maintenance schedule is asked. (Masahiko, 2000)

PAPER 6 -
Geo Location Tracking System and Method
Findings - Geo Location Tracking System and Method is geo tracking routing from point to point in geographical location. In "HelpMe" there is a location tracking based on user location. User can search the spare parts shops based on their location. With recent technological advancement of modern science people are now expecting the information about the location of any object for tracking purposes. Presently, we want more location-based services for being advanced and to save time and money also. GPS is a system which is already implemented and everyone can access it without any restriction. Having the facility of GPS to develop this system we need a GPS device to calculate the location from the information taken from GPS (Morales, 2016)

PAPER 7 –
VEHICLE BREAKDOWN ASSISTANCE
This application is used to find nearby area mechanics while we suddenly stranded on the remote locations with mechanical issues of our vehicle. It is a good solution for the people who seek help in the remote locations. In this, the approved mechanics are enlisted in this application. Also they are under monitored by this system for not charging any extra service fee from the users. This can be monitored by the admin through the user feedback based on their service. The registered users can access this application. This application will help to reduce wasting user time to found a proper mechanic. This application will allow user to make payment for a vehicle repair in a reasonable price. When the vehicle breakdown occurs

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the driver have to see a mechanic or the repair shop. The driver has to ask for help from the people. By using this application, the user can find mechanic based on user location. The user can get the mechanical help directly and easily. This is help to save user's time while the traveling. When the breakdown occur, user can fix their vehicle immediately. That make comfortable the user. They won't make tired their journey

III. PROPOSED SYSTEM

When the vehicle breakdown occurs the driver have to see a mechanic or the repair shop. The driver has to ask for help from the people. If driver using this vehicle break down assistance user can find mechanic basis on user location easily. Driver can get the mechanical help directly and easily. If there are any need of spare parts while repairing the vehicle user have to looking for spare parts shop. When the breakdown occurs user can find repair shop or spareparts shops also. This is help to save user's time while the traveling. When the breakdown occur, user can fix their vehicle immediately. They won't waste their time on the road. That help to save their valuable time. That make comfortable the user. They won't make tired their journey. There is a chat platform that user and mechanic can chat. There user can ask question that related to vehicle breakdown. The mechanic can reply for that. This is help to improve user's technological knowledge about vehicle. There is user can make star rate to mechanic after the repair done. This is help to 26 mechanic that they are rated by their client. That is help to burnish the mechanic skills. It is help to outrank them self. Using "HelpMe" android application, user can do their repair for reasonable price. That help to save user money from cheated merch

IV. SYSTEM ARCHITECTURE

The various functions and conditions used in the system are explained in the flowchart

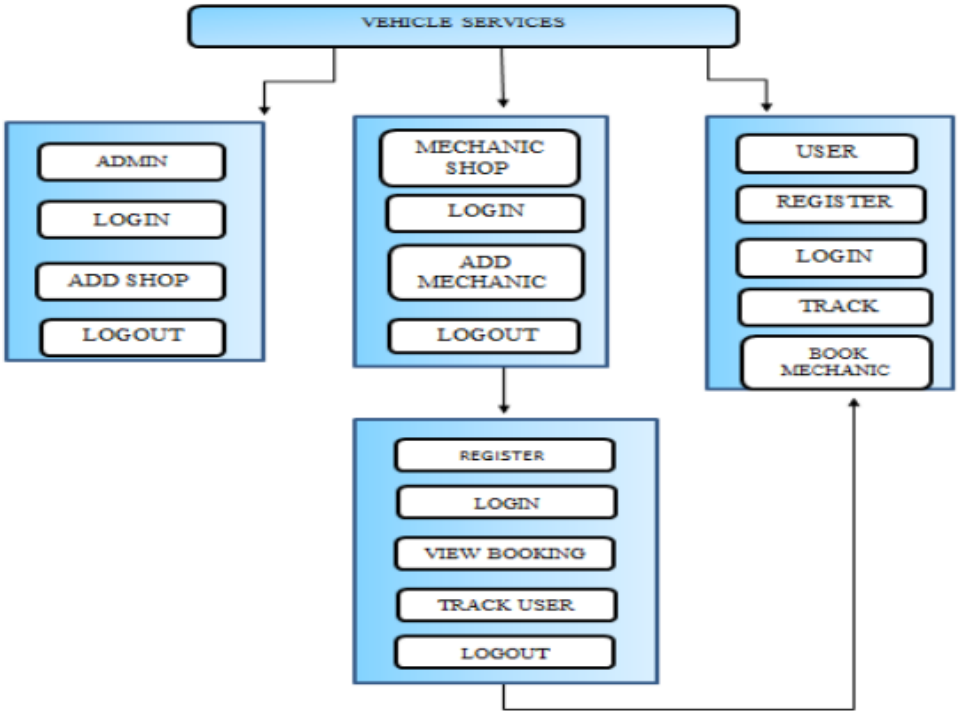

Fig 1 Block diagram

1.Register: Mechanics can register with all their information.
2.Login: Registered mechanics will be provided access to Login only if the Admin will allow or block.
3.View Request: Mechanics can view the request which is sent by the user.
4.Feedback: Mechanics can provide their own feedback.

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V. SYSTEM REQUIREMENTS

User:
1.Register: User can register with all their details.
2.Login: Registered user can Login with their credentials.
3.Search Mechanics: User can search for local mechanics on the basis of their locations.
4.Send Request: On selection of the mechanics, the user can send the request to the respective mechanic.
Hardware and Software Requirement

Hardware Requirement-
0) Processor – Dual Core
1) Hard Disk – 50 GB
2) Memory – 1GB RAM

Software Requirements:
The following describes the software needed in-order to develop the on road vehicle breakdown assistance
1)Windows 7 or higher
2)WAMP Server
3)Visual studio
4)browser
5) Django Extension in VS code

languages –
1) python
2) HTML
3) CSS
4) Javascript

VI. ACKNOWLEDGMENT

We take this opportunity to express our hearty thanks to all those who helped us for this project. We express our deep sense of gratitude to our Project Guide Ms. Shital S. Patil for his guidance and continuous motivation. We gratefully acknowledge the help provided by him for improving of this project with great interest. We express our heartiest thanks for those who encouraged us and give their innovative ideas and suggestions for this project. Lastly, we would like to thanks to all teachers and all my friends who helped us for this Project.

VII. CONCLUSION

Thus, our on road Vehicle breakdown assistance give better location result. it's easily identifying the nearby location which is incredibly useful to the user who uses it in emergency needs. the applying provides navigation to the closest emergency service as selected by the user. It also provides contact information of those services.

This approach makes the user experience very easy and performs better than the present system in crucial times like this. Our application shall make all possible efforts to locate and direct the closest service provider to user's location. It helps us the user for mechanical breakdown towing, fuel delivery, flare tire change and vehicle collision etc. Service details will be accessed from the applying, which is stored within the server as a part of the broader roadside assistance service.

When the vehicle breakdown occurs the driver have to see a mechanic or the repair shop. The driver has to ask for help from the people. If driver using this vehicle break down assistance user can find mechanic basis on user location easily. Driver can get the mechanical help directly and easily. If there are any need of spare parts while repairing the vehicle user have to looking for spare parts shop. When the breakdown occurs user can find repair shop or spare-parts shops also. This is help to save user's time while the traveling.

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