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On Road Vehicle Break Down 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, Java scripts.

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. RELATED WORK

Car Talk 2000 is focus on new driver assistance system based on inter-vehicle communication. Radio network use as a Communication. That helps 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. 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)

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)

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)

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).

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).

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 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

- ✓ The proposed application helps to find the nearby mechanics easily and quickly.
- ✓ This application show the user location and direct the nearest service provider to the user.
- ✓ It allows us to search the nearby mechanics from different locations and call to the mechanic.
- ✓ The user can make payment based on their service through this application.

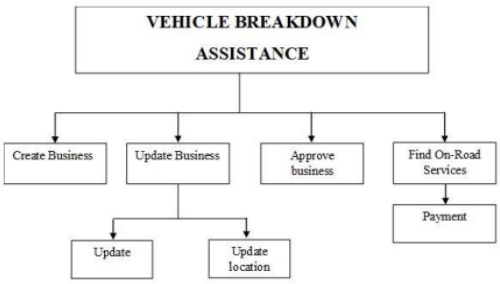

Figure 1 : Architecture Diagram

IV. RESULTS AND ANALYSIS

Create Business:

In this module, the business owner can add their business details like Mechanic name, Services,

Availability and Address. Once the business is created the admin will provide the approval for the business.

Update Business:

In this module, the business owner can upload the location and can edit and view the details.

Approve Business:

In this module, the admin can provide the approval for the registered business and can view the user details and ratings.

Find on road services:

In this module, the user can search the nearby mechanics according to their location. The user can call or message to the particular mechanics who is nearby to their locations. PAYMENT: In this module, the user make the payment based on the services.

Admin

The admin will provide approval for the registered business and can view user details.

Database Collection

The database will maintain all records about the mechanic shop details and user details in this application. So that it is easy to access and retrieve data from the database. The user can search the nearby mechanics shop which is stored in the database.

User details and business owner details are stored in database and it can be viewed by admin. The admin will provide approval for the registered business. The admin will keep on checking the feedback of the user to know the service provided by the mechanic shop.

Figure 2: Business Details

Figure3: Find

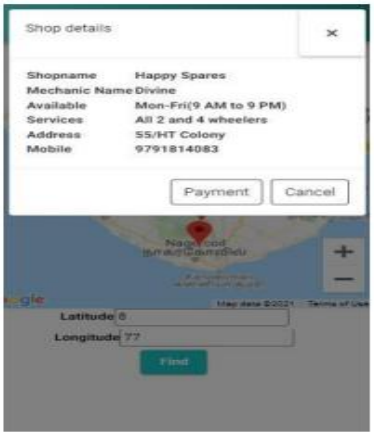

Figure 4: Shop Details

Figure 5: Business Approval

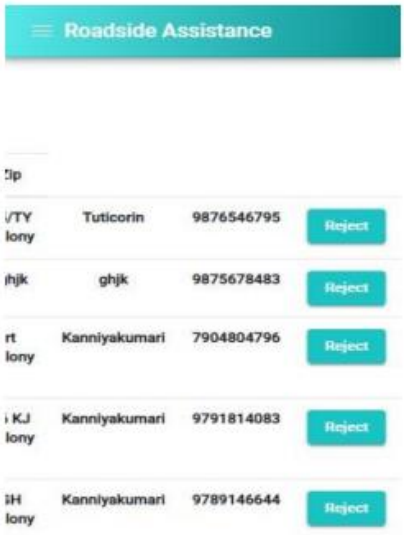

Figure 6: Details

Figure 7: Other Business Details

Figure 8: User Details

Figure 9: Paypal

The existing and proposed systems are analysed. The problems can be easily rectified with this concept. Nearly 70% of the performance has been increased.

V. CONCLUSION AND FUTURE WORK

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. 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 makes comfortable the user. They won't make tired their journey.

In Future, the vehicle and spare parts shop will be categorized according to the vehicle model. That is help to user found their spare-parts according to the

type of the vehicle by saving their time. In addition to that the list of hospitals and Fuels stations can be added.

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