

Drive Assist

Pratik Patil, Harshal Bhangale, Janavi Kadam, Vaishnavi Konduru, Co-Ordinator Mrs. V.T. Thakare

Department of Computer Engineering,
JSPM Rajarshi Shahu College of Engineering,
Tathawade, Pune 411033, India

Abstract- Contemporary solutions are needed for modern issues. There's no need to postpone your trip due to vehicle troubles or getting troubles at remote locations because DRIVE ASSIST will guide you how to fix it. User will be able to smoothly use the website with no problems as it is a user- friendly website. If there is sudden destruction of the vehicle, DRIVE ASSIST provides users with the closest garage, serviceman, hotels for resting and even the opportunity to rent automobiles to continue their journey in the event of an unexpected vehicle breakdown. The website also lists the closest gas stations and charging facilities for electric vehicles. DRIVE ASSIST was developed to provide users with support. To use the services they require, users only need to register on the website. Contact information will be available on the website so that customers can speak with service providers directly to ask questions and to discuss pricing. The supervisor will keep track of all customers and service provider information.

Keywords- Stations for Fuel, Electric Charging, rental service, Hotel services, closest garage.

I. INTRODUCTION

We all enjoy travelling from one location to another, but what if the car suddenly sustains damage? What if a sudden failure causes the trip to be cancelled? Time will be wasted and more issues will result from a breakdown. Even if we manage to locate a technician or garage, their prices will be more than usual.

As a result, money is also wasted. That is why we have a website called "DRIVE ASSIST" to reduce your concerns. If your car needs maintenance work, we can connect you with a dependable mechanic. Based on your location, DRIVE ASSIST will locate the closest mechanic or garage for you.

The specialist will handle everything, so don't even bother about the towing service. You can get information by getting in touch with the closest garage. If a user is unfamiliar with the area, this website makes it simple to identify nearby gas stations and electric charging stations.

If passengers or drivers would rather not stay at the garage while the car is being fixed, we provide options for renting a car and making hotel reservations. Any of these can be chosen by individuals based on their level of comfort. With these services, individuals won't need to worry for toddlers or new babies.

The primary goal of DRIVE ASSIST is to ensure a memorable and safe journey. If drivers and passengers use the Drive Assist website, there is no need to be restless.

“Undamaged Vehicle Is Directly Proportional To Happy Journey”

II. AIMS AND OBJECTIVES

- To give users a simple way to contact service providers.
- Provide assistance.
- Putting safety first, friendly use
- Using a range of services.
- The new fuel station and electric charging station is conveniently located.

III. METHODOLOGY

1. Requirement Gathering:

First, demands of the society should be taken into consideration. Therefore, we aggregate the information from the polls that different websites conducted. According to this most of the users are adopted to android smartphones. Second, there must be information about the locations or area that needs this kind of website. Third, routes through wooded areas, mountains, etc., that are prone to vehicle breakdowns should be noted.

2. List of Modules:

Drive Assist System provides four main modules –

- Car Repair
- Fuel Station
- Car Rental
- Hotels Services
- Electric Vehicle Charging Station

IV. PROS

- User friendly access for user as they can avail quick services based on location.

- Provide user-friendly travel without the threat of an unexpected breakdown
- Best to use during emergency.

V. CONS

- Not flexible because user will have to use another app to identify the unspecified area.
- It is hard to find CNG gas station.
- Not every location will have electric charging stations therefore difficult to find at remote locations.

VI. DESIGN

Before the project can be built, its design must be completed. A fundamental understanding of how the project will go depends on design.

The following are a few of the modules on the website:

1. Fuel Station Module:

The fuel station module will assist the user in finding nearby fuel stations in the event of low fuel or gas. This website module will show the user the closest gas stations around in real time, and it will also give them the option to "show on map" so they can easily find the station.

2. Hotel Service Module:

The website will display local hotels with their individual prices, reviews, and maps when a user is tired and needs to rest. As a result, the user need not visit many websites to make a hotel room reservation.

3. Electric Vehicle Charging Station Module:

The world is moving towards electric cars. Thus, it is necessary to locate the electric charging stations closer to where the user is. As a result, the module will offer this service. For questions regarding charging cost, user can get in touch with the owner directly.

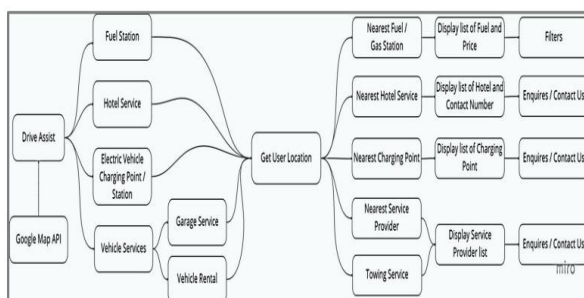


Fig 1. chart of Drive Assist .

4. Vehicle Services Module:

4.1 Garage Services:

No one is able to predict when or where a car breakdown will occur. So, finding a solution to this issue is necessary. This service option will therefore assist the customer in contacting the closest garage service provider to convey the issue associated to car breakdown.

4.2 Vehicle Rental:

The consumer has the option of using rental services if they don't want to wait around the garage while the car is being fixed. As a result, if a user has urgent job, they can continue working without worrying because the service provider will collect the rental vehicle's security deposit.

The user will be able to rent any kind of vehicle through this service, including four-wheelers and two-wheelers with or without a driver.

VII. FUTURE WORK

In the age of advanced technology, it is important to develop solutions that are based on societal issues. The bigger the issue, the more modules it may be broken down into. In this way, the issue is more widely noticed and easier to solve.

VIII. CONCLUSION

Thereby "DRIVE ASSIST" provides all necessary services that are the basic need for any traveler travelling across different locations. This website is like a protector for the travelers and the automobiles as it guides them in difficult situations.

Offers a simple way to locate gas stations and charging stations for electric vehicles, which are becoming more and more prevalent. "DRIVE ASSIST" gives users advance notice of information or details so they can be aware of the services in their area and be prepared.

REFERENCES

- [1] https://www.researchgate.net/publication/341900918_On-Road_vehicle_Breakdown_Assistance
- [2] <https://www.jetir.org/papers/JETIR2106050.pdf>
- [3] https://www.irjmets.com/uploadedfiles/paper/volume2/issue_4_april_2020/465/1628082980.pdf
- [4] <https://www.ijrpr.com/uploads/V2ISSUE4/IJRPR340.pdf>
- [5] <https://www.ijrpr.com/uploads/V2ISSUE4/IJRPR340.pdf>
- [6] <https://ijcrt.org/papers/IJCRT2005145.pdf>