WEBSITE DESIGN OF VEHICLE BREAKDOWN ASSISTANCE SYSTEM

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ABSTRACT

A web-based system called the Vehicle Breakdown Assistance Management System (VBAS) is created to help drivers who have roadside breakdowns. The main objective is to make it available to businesses that assist shops on the side of the road. The technology provides online access to several roadside help choices in an effort to resolve issues that were previously handled locally and manually. The software is especially helpful for those who are unable to fix their automobile on-site because service providers frequently help with transportation to a destination of their choice, giving them complete control over the towed vehicle. The concept intends to make things easier for businesses who offer roadside assistance.

I. INTRODUCTION

The "Vehicle Breakdown Assistance Management System" is a web-based tool that searches the internet for different companies that provide roadside assistance and shows the user their information. This app could be very helpful for you if your car breaks down and you can't fix it where it happened. Most of the time, the service provider will offer to help you get it to where you want it. Users of this app don't have to sign up to use it; all they have to do is fill out one form. The "Vehicle Breakdown Assistance Management System" we made uses Python and a SQLite database. The Admin, the Driver, and the User are the three parts that make it up.

II. LITERATURE SURVEY

The article highlights a number of studies designed to increase the effectiveness and security of garbage collecting trucks. The first is the Capacitated Arc Routing Problem (CARP)-based automated online re-routing of residential garbage collection vehicles in the case of a failure. The second examines how speed fluctuations affect an empirical single-vehicle probe's ability to function prior to a traffic accident. The third research focuses on the Townsend and Paschen Laws to determine the breakdown voltage and conduction moment of the primary coil for the free-piston linear generator (FPLG), and it examines the minimum ignition energy and breakdown voltage of the sparking system for the FPLG. The results demonstrate that improved ignition lowers the breakdown voltage and the primary coil will conduct for, but it has no bearing on the bare minimum of energy needed to start an engine.

The fourth makes a contribution to the creation of a strategy for controlling the flow of electricity between the energy grid and electric cars, particularly those fueled by fuel cells. In order to support innovative charging techniques like heat or hydrogen transfer between moving cars and other energy flows, the authors want to enlarge the information structure of the interface. The architecture of the logical data can be utilized to forecast any future restrictions on the energy flow. The authors also demonstrate a platform for exchanging consumer data that is based on a blockchain shopping cart. The platform addresses four key issues: preserving user control and privacy, fostering cooperation, and assuring the confidentiality of financial transactions. Additionally, the site creates user profiles and pays individuals for sharing their information with other for-profit businesses. The twofold deposit serves as collateral to assure the truth while the smart contract checks and executes previously agreed-upon rules for using the data.

III. ARCHITECTURE

SYSTEM ARCHITECTURE

The Vehicle Breakdown System is a tool created to help drivers in the event of a breakdown by offering them safe and speedy ways to return to the road. An overview of the Vehicle Breakdown System’s system architecture is provided. below.
IV. RESULTS

The Python-designed car Breakdown support System intends to offer consumers suffering car breakdowns quick and trustworthy support. Strong web development frameworks like Django or Flask are used in the website design to provide fluid user-system interactions and dynamic web pages. The incorporation of new functions is made possible by the flexibility and size of the Python library system. The system includes user-friendly forms for user input, geolocation functionality for precise location monitoring, and effective backend administration for user requests, data processing, and connectivity with external APIs or databases. The design places a high priority on security by including procedures for authentication and authorisation, protecting user data, and limiting unwanted access. The Vehicle Breakdown Assistance System, which combines Python's web development frameworks, data processing capabilities, and security features to produce a highly efficient system.

V. FUTURE ENHANCEMENT

Future Python-based improvements to the Vehicle Breakdown Assistance Management System (VBAMS) project may be beneficial in a number of ways. These consist of integrating GPS functionality, automating notifications, implementing intelligent dispatching algorithms, putting in place a system for rating service providers, creating analytics and reporting capabilities, integrating with repair facilities, keeping track of past roadside assistance, integrating vehicle diagnostics, and integrating with insurance companies. These upgrades will shorten response times, streamline dispatching procedures, and offer insightful information for streamlining operations and pinpointing problem areas. The VBAMS project may streamline the claims process for breakdown-related occurrences by putting these changes into place, providing prompt and accurate help.

VI. CONCLUSION

"The Vehicle Breakdown Assistance Management System (VBS) makes it simple for customers to reserve auto assistance using online platforms. Due to the system's complete automation, it is more effective. Users with the proper rights can access it thanks to its superior to the present group's user-friendly graphic interface. The system focuses data security, system security, and dependability while successfully eliminating transmission latency. The system may be made better to accommodate upcoming modifications.

VII. REFERENCES


