



VEHICLE BUDDY

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Abstract: The VEHICLE BUDDY project is an innovative approach to vehicle safety and comfort that aims to improve the driving experience by providing real-time monitoring and assistance to drivers. The project proposes the development of an intelligent system that can be installed in any vehicle and can provide a range of services such as real-time traffic information updates, vehicle diagnostics and driver assistance.

The proposed system will be equipped with sensors that can monitor the vehicle's performance and alert the driver in case of any problems such as low tire pressure or engine failure. It will also have a GPS module that can provide real-time traffic updates and suggest the best route to the driver. In addition, it will have a voice assistant system that can provide hands-free assistance to the driver, allowing him to concentrate on the road. The aim of the project is to improve road safety by reducing the number of accidents caused by human error. It also aims to improve the driving experience by providing drivers with a range of convenient services to make their journey more comfortable and enjoyable. The Vehicle Buddy project has the potential to change the way we drive and make our roads safer for everyone.

Keywords: Assistant, Experience, Intelligent, Potential

I. INTRODUCTION

Vehicle safety is a primary concern for both drivers and passengers. Every year, thousands of accidents occur on roads around the world, resulting in injuries and fatalities. Although advances in technology have improved safety features in cars, such as airbags and anti-lock brakes, there is still room for improvement. One solution is the development of "vehicle buddy" systems that can assist drivers in various ways. An in-vehicle buddy can take the form of a mobile app, a device that plugs into a car's diagnostic port, or the built-in features of a car's entertainment system.

The background of the study for the Vehicle Buddy project is rooted in the increasing demand for advanced automotive technologies that can help drivers maintain their vehicles more efficiently. With the advent of connected vehicles and the Internet of Things (IoT), there is a growing need for innovative solutions that can streamline the vehicle maintenance process and provide real-time insight into vehicle perform.

Outlines of the proposed work for the Vehicle Buddy project include the development of an application that can monitor vehicle performance and provide drivers with basic information about the health and performance of their vehicle. The primary goal of the proposed work is to design a device that can communicate with the vehicle's on-board diagnostic system (OBD-II) to collect data from various sensors and systems. This data will be analyzed using advanced algorithms and machine learning techniques to give drivers real-time insight into the health and performance of their vehicle.

The proposed work also includes the development of a user-friendly interface that will display basic vehicle performance information such as engine power, fuel consumption, tire pressure, and more. The interface will be designed to be easy to read and understand, providing drivers with useful information about their vehicle's performance.

II. CONCLUSION

Vehicle Buddy technology is a promising technology that can improve the driving experience and safety by providing real-time recommendations and insights to the driver. The details of technology implementation can affect its functionality, performance and usability. The use of enabling technologies such as IoT, AI, AR, cloud computing and blockchain can enhance the capabilities of vehicle technology and provide more advanced and personalized recommendations to the driver.



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