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Online Traffic Offense System

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Abstract: The Online Traffic Offense System is a web-based platform developed to automate the process of recording, managing, and monitoring traffic violations. The system enables traffic authorities to maintain an online record of offenders, issue fines digitally, and provide transparency in traffic management. Using PHP for the front end and MySQL as the database, this system simplifies data retrieval and minimizes manual errors. This paper discusses the architecture, modules, and implementation of the system designed to enhance efficiency in traffic enforcement.

Keywords: Traffic Management, PHP, MySQL, Offense Automation, Web Application

I. INTRODUCTION

Traffic management has become an essential component of urban development due to the rapid increase in vehicles. Traditional systems often rely on manual recording, leading to inefficiency and data loss. To address these challenges, the Online Traffic Offense System provides an automated solution for maintaining and monitoring traffic violations. The proposed system allows officers to record offenses online, generate challans, and update payment details in real time.

II. METHODOLOGY

The system is implemented using a three-tier architecture consisting of a user interface, application logic, and a database. PHP is used for server-side scripting, and MySQL serves as the backend database. The system includes modules for user login, offense registration, fine generation, and record maintenance. The admin panel enables authorized officers to view and manage all traffic violation details.

III. RESULTS AND DISCUSSION

The Online Traffic Offense System was successfully deployed and tested in a simulated environment. The system demonstrated improved efficiency in recording offenses and retrieving records compared to the manual process. The database design ensures data consistency and integrity. The user interface is designed to be intuitive and responsive, allowing easy navigation for users.

IV. CONCLUSION

The Online Traffic Offense System effectively automates the process of traffic violation management. It reduces the workload of traffic authorities, ensures data accuracy, and provides citizens with an easy way to view and pay their fines online. Future enhancements may include mobile app integration, automated number plate recognition, and real-time offense tracking through IoT-based devices.

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