

# [Computer-based traffic violation recording system](https://assignbuster.com/computer-based-traffic-violation-recording-system/)

The correct use of information is highly dependent on the available information system. Law enforcement agencies with the endeavourer to improve efficiency and effectiveness in the service provision, they computerized their systems. Different data such as location, personal information of those who outrage a certain law are being integrated using the capabilities offered by technology. As years pass by, the development of technology have created opportunities for the effectiveness and efficiency of a computer-based system and the improvement of existing ones.

In a developing country, the agencies or any of their organizations have o adopt to the new challenges of the environment they are in. As society is increasing in number and advancing in technology, law enforcement agencies have to move with the trend or they will be unable to meet the demands of society. In America, created a Traffic Violation Recording System which includes the monitoring a vehicles. The systems determine whether the vehicle is violating a traffic rule and records of the image of the vehicle and a camera when the vehicle is detected for violation.

In the Philippines, the Traffic Enforcement Unit is one of the four traffic operations Division under the Department of Public Order and Safety that monitors and prepares statistics, data and reports on the traffic violators and responsible for conducting traffic direction with the coordination of Metro Manila Development Authority (MADAM). They implement and enforce traffic rules and regulations in cities to reduce unwanted incidents that may involve minors and to keep the streets generally peaceful. In attaining their objectives, a computer-based system is present in their operation that provides them a satisfying result.

No doubt that in Panamanian especially in Dugan City, the need for developing technology was too slow to create opportunities or an effective and efficient computer-based system. Like in any other country where population is high, incidents are increasing day to day. The Public Order and Safety (POSS.) is one of the active law enforcement agencies that is responsible in monitoring the safety condition of the motorists and maintains orderliness in the public highway in the city of Dugan. To deliver a quality service in the community, a computer-based system that is suitable in handling a Traffic Recording System is what they need.

It will help them to provide a faster, more reliable, and more efficient way of filling information that provides security and manage violator’s record instead of using manual system. The proponents would like to implement this study for a better managing of violator’s record of the POSS.. Objectives of the Study This study aims to design and develop a computer-based Traffic Violation Recording System for POSS.-Dugan City. The following are the objectives of this study: 1. Completeness System has to contain all the important facts that are needed to store the required file of the violators. 2. Accuracy

System must be free from errors. 3. Timely System has to be delivered and process the information of the violators at the right time. 4. Security Data Security only authorized person is allowed to access the information. Significance of the Study This study will benefit the following entities: Community. This may help generate interests among the public and private organization or sector using technology to conduct a faster and efficient computerized recording system as a dependable alternative to the manual process of adding, updating of the records and a methods that best ensure data security.

POSS.-Dugan. This may be a great help to the POSS. in enhancing and integrating its system through fast filling and accessing of records and managing important information in an efficient manner. Proponents. This study will help the students to create a computer based system. Future Researchers. This study will benefit and help the future researchers as their guide in making related study. Scope and Delimitation This study intended for the management of violator’s record of POSS.-Dugan City.

Computer-based that will provide user friendly software no need for an Store the personal information of the violators such as: Name, Age, internet access. Address, Contact Number, Gender, License Number, Plate Number and the violation including the amount of penalty. This will not include the mode of payment of the violators and deletion of the file. Definition of Terms Computer based system- a system which uses a microprocessor or computer for controlling or executing task it is designed. – a system which best use to make work easier done by a computer.

Data Security – this refers to the confidence of safety that which secures or makes safe for keeping information. – assurance that all information of violators will not corrupted. Proponent – one who makes a proposal Traffic Violation – state of being violated – which will be stored in recording system of POSS.-Dugan. Technology -technical implementation for the control of equipment. CHAPTER 2 Review of Related Literature and Studies Related Literature Most road accidents result from human error and carelessness on part of the drivers.

Many researches find out that with the help of a computer-based system, accidents are reduced. The creation of such systems can greatly improve the traffic safety and highway improvement of any law enforcement agencies. According to the Research Meetings with Traffic Accident Section from PEN Traffic Accident Report room Manual of instruction and examples wrote the traffic accident information system plays a very significant role in controlling traffic system especially in Metropolitan Cites despite of several limitations.

Most common systems were designed to collect data using standardized psychological scale and for efficient collection, reporting and monitoring of road traffic accidents. According to Negate, O(Septet. 23, 2011) states in his research for Smart Recording Traffic Violations via M- FRI. that this kind of system is a great help for law enforcement agencies in record management. In this system, the record of violators are securely monitored and kept. In this system includes the speed tracking sensors and is used for dispatching traffic violation to traffic department servers.

Drivers would feel the police presence on roads and as result they obey traffic laws more than ever. The International Journal of Information Management (2002) is an international peer-reviewed Journal which aims to bring its readers the very best analysis and discussion in the developing field of enforcement management. Phillip Hills is the editor in this Journal that focuses on sigh quality papers that address contemporary issues for all those involved information management and which make a contribution to advancing information management theory and practice.

The challenge for information management is now less about managing activities that collect, store and disseminate information. Rather, there is greater focus on managing activities that make changes in pattern of behavior of customers, people, organizations and information that leads to changes in the way people use information to engage in knowledge focused activities. Information management covers a wide field and encourage from diverse areas of reactive and settings including business, health, education and government.

The Operation and Traffic Management Research, states that Law enforcement agencies must maintain accurate, easily accessible records of the information that is relevant to the law enforcement and public safety in their community. Like the traffic management system it is design to help law enforcement personnel in a kind of record-keeping tasks. Local Studies Various attempts have been made to improve Traffic Law Enforcement Operation. Different computer-based system arises to meet the needs of society. As years pass by this system was develop and provide efficient and effective result in the Law Enforcement Agencies.

The Metro Manila Traffic Navigator, the Philippines first digitized information system created by Skyway Some was officially launched last August 2012. A Joint project of the MADAM and News, the Metro Manila Traffic Navigator is an online system that provides users a live and up-to-date traffic status of different routes in the Metro Manila. This system is a user-friendly so it’s easy to use and understand. It will allow motorists to view latest updates on the traffic taxation in Metro Manila, helping them to choose the most convenient road to take.

The said system provides road user with information and updates on flooding during heavy rains and bad weather. Intelligent Transportation System (ITS) is to address Metro Manila Traffic Congestion (2009) created by Regina Jewel M. Macabre improves the capacity of existing transportation systems. ITS presents viable solution to traffic congestion problems rather than focus only on the intensive road infrastructure developments and improvements. This system also use in traffic management, assessments and suitable data collection.

The main goal of ITS is to improve the overall efficiency of transportation system. Some developed countries have attained advances in realizing benefits of ITS in terms of safety, efficiency and improved transportation system. Philippines were blessed for having ITS that provides a very good and satisfying performance. The Traffic Management Group (2008) created a Traffic Accident Information System which monitored the traffic accident in Metro Manila. The system maintains the traffic signal control for the Metro Manila Area. It collects and summarized traffic accident from all police districts.

Accident record keeping has been given much priority in this system by concerned government agencies. But this system didn’t work effectively in their operation. Some of the accident information available in police files is all often incomplete. It didn’t provide a precise information management. Foreign Studies The Asher System (2013) Saudi Arabia launched a system to make roads safe called The “ Asher” is a state-of-the-art traffic management system that can monitor vehicle and track them using a license plate recognition technology.

Some traffic light are equipped with stationary and mobile cameras that record traffic violation. When a location is committed, the system request information from the Traffic Center Database and issues an automatic ticket. Now it’s working on all main through fares in the major cities, it is monitoring traffic violations as they happen. The Interbrain Corporation Part Of Hexagon Group (2013) created an Integrated System for Police Record Management. In which, police department can update, share, and access critical data via-one centralized database.

This system enables to create an integrated and centralized police records management for reserving data integrity and enhancing department efficiency. The best solution for the law enforcement management from case management records to information on accidents and offenses. This system provides them a satisfying result. Coli, Robert (Torah, VA) (2005) created an automated traffic violation monitoring system a method for tracking, identifying and recording traffic violations. The system improves traffic detection and provides comprehensive violation data as an evidentially record for traffic violation enforcement purposes.

The sides looking cameras improve the ability and efficiency of tracking a vehicle and improved moving between various field of view, while maintaining a positive identification of the icicle and an improved ability to assess a traffic violation such as passing the wrong side. The U. S. National Highway Traffic Safety Administration is still using this system. CHAPTER 3 Methodology of research and Sources Data Tool in the Development Process The proponents will use Microsoft Access 2007 to make and develop the system. The Microsoft Access 2007 is a computer application used to create and manage computer based databases on desktop computers.

Method use in the Development of the System Software Engineering is important factor to make the system more feasible for implementation, and at the time same to reduce the numbers of errors that may be committed the Rapid Application Development (RADAR) model is focused on integration of the different existing modules. The proponent had chosen the RADAR because it has appropriate and it’s fit with the proponent system. The RADAR model is composed of four (4) process (1) Requirement Analysis (2) System Design (3) Development & Integration (4) Software Validation.

Procedure to Developing the System The first process is Requirement Analysis. This stage was important since the project identification and selection of the Peso’s need must be identified, analyses, retrofitted and manage. The proponent takes the importation gathered and display inputs, process and outputs the System function. The second process is System Design. In this stage, it composes of designing database and users interface based on information gathered on the other system, Designing the structure and logical design of the propose system for more feasible implementation in the process.

The third process is Development Integration. The individual program units or program that were develop and integrate that gives ideas to ensure that the software requirement will met as complete system. The last process is System Validation. Involves correcting error which were not discovered in earlier stages of the life cycles, improving the implementation of the system units and enhancing the system service as new requirement are discovered and additional inputs and changes when the system demands for it.