

Web View-Based E-Time Applications for Communities (Case Study : Polresta Bogor Kota)

Devi Setyawati
Faculty of Computer Science
Mercu Buana University
Jakarta, Indonesia

Dwi Ade Handayani Capah
Faculty of Computer Science
Mercu Buana University
Jakarta, Indonesia

Abstract - In the web view e-ticket application for the violating community, you can see the ticket form and then make a payment via transfer in accordance with the penalty imposed. Then the violator can take the evidence by showing the proof of payment. With the method of developing the System Development Life Cycle (SDLC) and applications can be accessed on computers or on smartphones by the public. The main purpose of this e-ticket application system is to make it useful for the community to complete the ticketing process and law enforcement or traffic police to be able to enforce the law and reduce paper use.

Keywords: E-Ticketing, Traffic, Offenders, Sanctions.

1. INTRODUCTION

In modern times, technological developments are increasingly advanced with various models. The technological advancements that we have felt in this era really provide convenience and comfort for humans so that people can communicate, find or obtain information wherever and whenever all needs will be fulfilled quickly and safely. And coupled with the existence of supporting factors, namely the internet and smartphones which when its function is not only as a communication tool but has turned into a basic need. Along with the development of technology there is an impact that affects the life. Not only affects the technology itself, technology also has an influence on other aspects such as religion, culture, social, politics, personal life, society and even the nation and state.

One of the effects of the influence of technology on legal regulation. Problems that are always faced in big cities including the city of Bogor are traffic problems. Evident from the indication of the number of accidents that always increases. And as is known a number of vehicles circulating from year to year are increasing. This also seems to have an influence on traffic security. Often violations are committed by two-wheeled, four-wheeled or other motorists that cause traffic accidents and congestion. Traffic accidents are caused by many factors not only by drivers of bad vehicles, but can be from pedestrians who are not careful, damage to vehicles, road design, and also less comply with traffic signs.

A certain traffic violation or ticket that is usually usually, is a violation of Article 54 regarding the completeness of vehicle license and vehicle registration documents as well as Article 59 concerning the excessive load of the transport truck then violation of Article 61 such as entering the crossing lane. Some cases of ticketing in the settlement of traffic violation cases are not in accordance with applicable regulations. Many cases of

traffic violations are settled in place by individual law enforcement officers or police officers, in other words, the violation cases are not processed according to the law. Other problems, namely the application of the e-ticket that is currently running, is only used by the prosecutors while the community only gets information on nominal penalties from cases that are carried out by receiving notifications via SMS, so that the public or violators do not understand what the e-application uses. ticket. And also violators do not know transparently the ticketing process that is being sued. In addition, violators are still having difficulties in making e-ticket payments due to delays in receiving briva code notifications from the respondent. based on these problems, in this final report the author wants to propose an android-based application system to overcome traffic cases so that they can be resolved until they are processed according to law. And also the legal process can be carried out effectively and orderly.

2. THEORETICAL BASIS

A. System Development Method

For the development of the system this research uses the SDLC (System Development Life Cycle) model. System Development Life Cycle (SDLC) is the process of making and changing the System sorta model and methodology used to develop a system. SDLC is also a pattern taken to develop a system of software systems, which consist of stages namely planning (planning), analysis (analysis), design (design), implementation (implementation), testing (testing), and management (maintenance) The SDLC model used in this study is the Waterfall model.

B. Related Research

Research related to software management has been conducted by several researchers from various perspectives including:
Research by [1] Setiyanto et al., Proposed the application of e-ticket penalty penalties for traffic violators in order to facilitate

speed and convenience, the openness of the ticketing process or in place of the ticketing process and the e-ticketing system would replace the ticketing system.

Research by [2] Ade Irma Suryani, designed an information system for reporting fines and ticket fees for the Pariaman state prosecutor's office. the system created to search case files and payment transactions is fast, the preparation and reporting process becomes timely and saves on office operational costs.

Research by [3] Pramuditya Ananta Nur et al., Developed a 3-pillar information system in the settlement of ticketing cases in the city of Kediri using a RESTfull Web Service with the aim of being able to facilitate existing businesses.

Subsequent research by [4] Syeni Rakhmadani, concerning the implementation of e-ticketing in realizing Go Governance in Indonesia, is a step of change for the police to improve the public service system.

Research by [5] Yudi Muhammad Irsan et al., Application of E-Tilang Using Recordings of CCTV (Closed Circuit Television) by having superior service faster than conventional ticketing. The advantage is that this system is very practical and fast, in accordance with the principle of justice that is simple, fast and low-cost.

The research above is a related study used to complete this study.

3. RESEARCH METHODOLOGY

The research is divided into several stages such as the following chart:

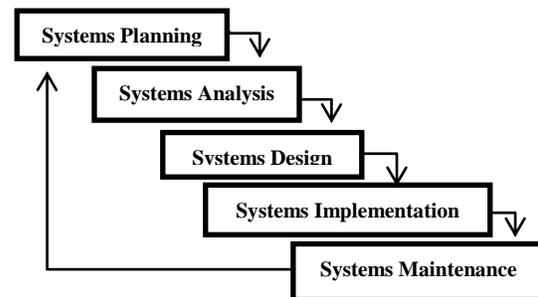


Fig. 1 SDLC (System Development Life Cycle)

The following is an explanation of each research stage:

1. Systems Planning

More emphasis on aspects of the feasibility study of developing the system, the existing activities include:

- Identify whether existing problems can be resolved through system development.
- Determine and evaluate strategies that will be used in system development.
- Determination of technology priorities and application selection.
Establishment and consolidation of the development team.

2. Systems Analysis

- At this stage, the system operation is described in detail. activities carried out are:
- Analyze the interaction of objects and functions in the system.
- Analyze data and create database schemas.
- Designing a user interface.

3. System Design

This stage, the features and operations of the system are described in detail. Activities carried out are:

- Analyze the interaction of objects and functions in the system

- Designing a user interface.

- Analyze data and create database schemas.

4. System Implementation (Systems Implementation)

Implementation of the system is implementing the design of the previous stages and conducting trials. Activities carried out as follows :

- Making a database in accordance with the design scheme.
- Making applications based on system design.
- Testing and repairing applications.

5. System Maintenance

Done by the designated admin to keep the system able to operate properly through the system's ability to adapt according to needs.

4. RESULTS AND DISCUSSION

The Use Case Diagram describes the activities that can be carried out by system users in the application, including Managing police accounts, Managing police locations, managing violation articles, managing payment agreements, managing violation data, vehicle input, registration, violation input, viewing ticket letters , upload proof of payment.

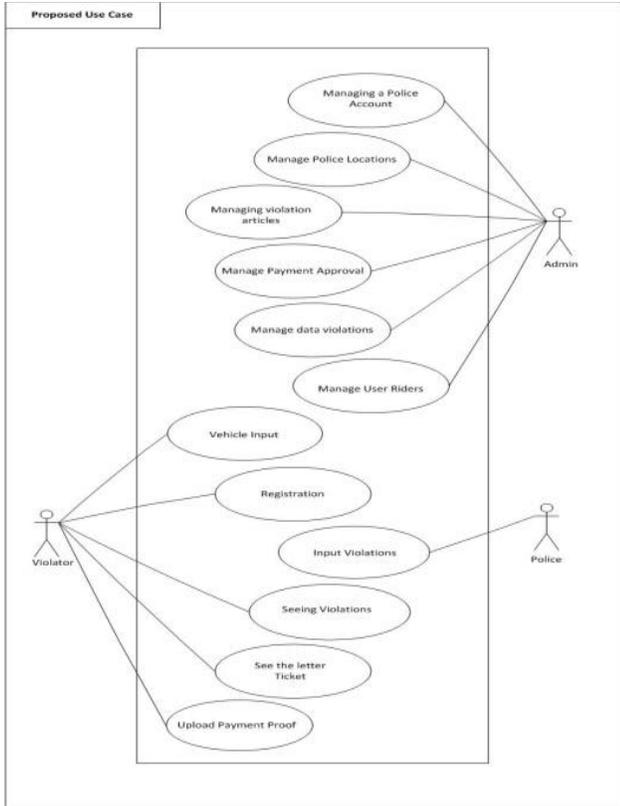


Fig. 2 Proposed Use Case Diagram of the Bogor City Police E-Ticket System.

The activity of managing a police account is a process of managing police data. Activity managing location is the process of managing location data where the police are on duty. The activity of managing violation articles is the process of managing violation articles and can add new articles or edit articles if there are changes. The activity of managing payment approval is a process of approving payments that have been paid by the violator. The activity of managing data violations is a process of monitoring some of the stored data violations. Activity managing user riders is the process of managing driver data. Vehicle input activity is the process of registering a vehicle ticketed by the police. The violation input activity is the process of inputting violation data by the police. The activity of seeing a violation is a violator process can see the ticket data that has been done. The activity of seeing the ticket ticket is a violator's process of being able to see the details of the ticket ticket and the payment status of the ticket. Upload proof of payment activity is an upload process of receipt of payments made via transfer or teller.

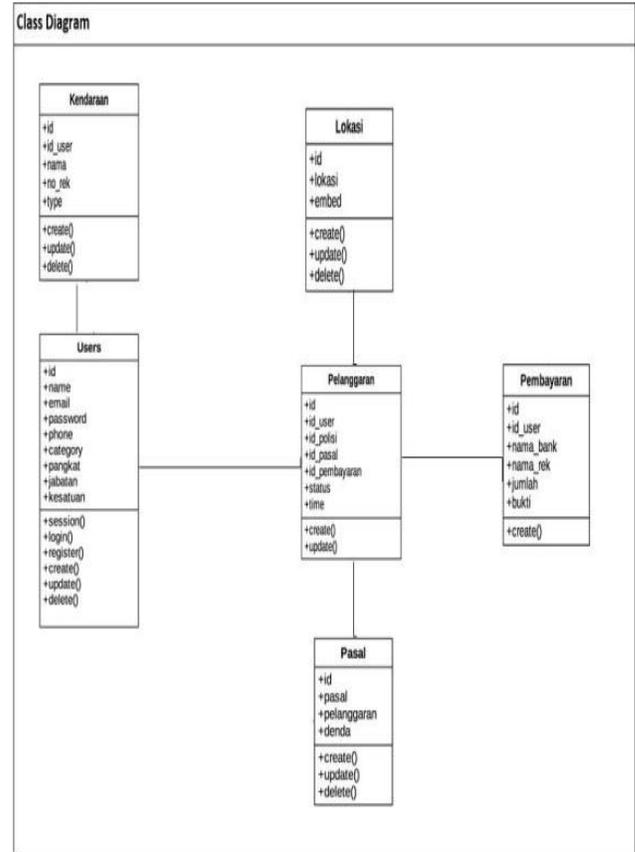


Fig. 3 Proposed Class Diagram

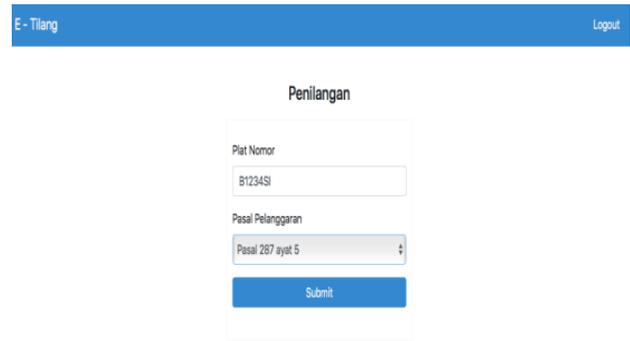
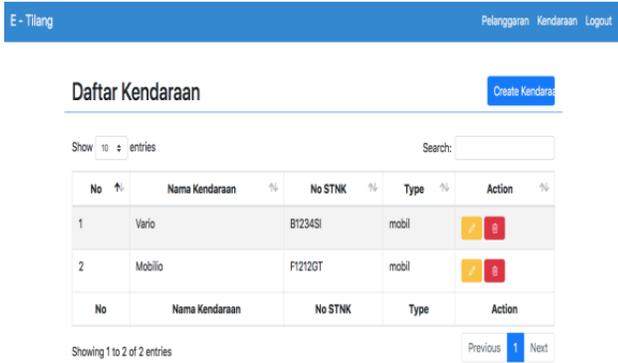


Fig. 4 Ticket Action Page



The screenshot shows a web application interface for 'E-Tilang'. At the top, there is a blue header with 'E-Tilang' on the left and 'Pelanggaran Kendaraan Logout' on the right. Below the header, there is a section titled 'Daftar Kendaraan' with a 'Create Kendaraan' button. Underneath, there is a search bar and a table with columns: No, Nama Kendaraan, No STNK, Type, and Action. The table contains two entries: 1. Vario, B1234SI, mobil; 2. Mobilio, F1212GT, mobil. Each entry has a yellow and red action button. At the bottom, there is a pagination control showing 'Showing 1 to 2 of 2 entries' and 'Previous 1 Next'.

No	Nama Kendaraan	No STNK	Type	Action
1	Vario	B1234SI	mobil	[Yellow/Red Button]
2	Mobilio	F1212GT	mobil	[Yellow/Red Button]

Fig. 5 Page Registering a Vehicle

5. Conclusions and Recommendations

The conclusions of this study are:

1. Successfully built an e-ticket application for the community that serves to resolve ticket cases for people who violate traffic regulations easily and can monitor the ticketing process experienced
2. Successfully implemented an e-ticket application that provides a payment menu so that traffic violators can immediately complete payments without making payments. wait for the identification of the briva number from the police.

The suggestions that need to be added for further application development are as follows:

Based on the results of the conclusions above, suggestions that can be given for further development are expected to be more supported by features that make it easier to use, and more attractive appearance and functions.

REFERENCE

- [1] Steven, Janet, *Pengertian Xampp*, 2013:75.
- [2] Prodjodikoro.W, *Pengertian pelanggaran*, Yogyakarta 2003:33.

- [3] Saputra. *Pengertian MySQL*, Jakarta, 2012.
- [4] Nugroho. *Javascript*, Yogyakarta 2012.
- [5] Steven, Janet, *Xampp*, 2012:75.
- [6] Sidik, *Framework Codeigniter*. Bandung: Informatika, 2012.
- [7] McLaughlin, Brett, *Pengertian PHP*, 2013:2.
- [8] <https://crudbooster.com/Crudbooster/>, 180520/29 September 2018, 21.15 .
- [9] Setiyanto, Gunarto. Sri Endah. (2017). "*Penerapan Sanksi denda E-Tilang bagi pelanggar Lalu Lintas*, Jakarta, 2017.
- [10] Suryani, Ade. Irma, *Sistem informasi pelaporan denda dan biaya perkara tilang pada Kejaksaan Negeri Pariaman*, Sumatera Barat, 2017.
- [11] Pramuditya A.N, Adam H. B, dan Agi P. K. *Pengembangan Sistem Informasi 3 Pilar Dalam Penyelesaian Perkara Tilang Dikota Kediri Menggunakan RESTfull Web Servis*. Jawa Timur, 2018.
- [12] Rakhmadani, Syeni, *Penerapan E-Tilang dalam mewujudkan Good Governance di Indonesia*, Jakarta, 2017.
- [13] Yudi Muhammad Irsan, Gunawan J, Budi Rizki Husin , *Perspektif Penerapan E-Tilang Dengan Menggunakan Rekaman CCTV (Closed Circuit Televiti*. Bandar Lampung, 2018 Di <http://jurnal.fh.unila.ac.id>.
- [14] F. Masya, Elvina, and Fitri. M. S, "Sistem pengaduan masyarakat pada Divisi Humas Polri Berbasis Web", Salatiga, Indonesia, 2014.
- [15] Rizhul. J. R, YS. Triana, "*APPLICATION DESIGN OF THE NATIONAL BOOK READER USING ZAHMAN FRAMEWORK METHOD*", Jakarta, 2018.
- [16] Arishita N. A, I. Handriani, "*Aplikasi Sistem Order Jasa Graphic Designer Berbasis Web pada PT. Decorner*", Publikasi.mercubuana.ac.id, Jakarta.