

# Ticket Reservation System Design with Web-Based

Tata Sutabri <sup>a,1\*</sup>, Alex Wijaya <sup>b,2</sup>, Iin Seprina <sup>c,3</sup>, Rahayu Amalia <sup>c,3</sup>

<sup>a</sup> Department of Master of Informatics, Universitas Bina Darma, Palembang, <sup>b</sup> Department of Informatics, Universitas Bina Darma, Palembang, <sup>c</sup> Department of Information System, Universitas Bina Darma, Palembang

<sup>1</sup> tata.sutabri@binadarma.ac.id

\* corresponding author

---

## ARTICLE INFO

*Article history:*  
Received 31 Ags 2022  
Revised 6 Sept 2022  
Accepted 13 Okt 2022

*Keywords:*  
Information System,  
Online,  
Web,  
PHP,  
MySQL,  
Tickets

---

## ABSTRACT

At this time, the use of internet services as a means to obtain information is increasingly being used. Because of its broad reach and easy access to the internet, it is ideal when used as a means of promotion and means to publish information. Although the internet has a negative impact, the positive impact is given more and is very helpful for anyone who uses it. This ticket booking program aims to solve customers' problems, such as during ticket ordering and looking for information about tickets or other things. Such as helping all customers whose access to ticketing counters is constrained by distance and time, facilitating customers and ticket sellers in the buying and selling process, promoting the company, and providing services to customers regarding online and on-time ticket bookings. The internet is a very potent medium for developing a dynamic and wide-scale information system; with the internet, information about anything can be obtained easily and quickly and can be accessed via smartphones or laptops that are widely used in the current era. Based on the various conveniences and functionalities possessed by the internet, a "Design of a Bus Ticket Reservation System was developed. On-Line and On-Time Ticket Booking System. This web-based software is made with PHP, MySQL, and Macromedia Dreamweaver version 8. This information system is designed to provide convenience in terms of ticket booking services and obtain other information needed by customers in a short and efficient time, such as available departure schedules, the type of vehicle to the kind of route provided, and other information required by the customer..

Copyright © 2022 International Journal of Artificial Intelligence Research.  
All rights reserved.

## I. Introduction

Community activities to meet the needs of life in the city, significantly very much. Coincredibly activities must be supported by good infrastructure. The infrastructure used by the community is not only communication but also others, such as facilities and infrastructure, one of which is the internet. The internet is a medium of information that is very easy to access through various communication media, computers, cell phones, etc. Thus, opening up opportunities for companies to develop services and businesses and as a means to introduce the company to the general public or customers via the internet [1].

The competition for transportation service providers is currently getting tougher. Some transportation service providers have used the internet as a medium to introduce and improve services to passengers. The limited time in supporting activities is considered very helpful to create an application that can be accessed anywhere and anytime when you need land transportation, especially public transportation (buses).

The system runs on a web-based system is done using prospective passengers having to come to the counter and queue to order tickets. In this case, it can make it difficult for the ticketing department to record and serve prospective passengers and store ticket booking data, and errors often occur in ticket booking reports. For that, we need an excellent ket resan ex the system where prospective passengers can use the website application system to order tickets. This ticket reservation system was created to assist companies in making ticket booking reports and registering ticket reservations so that all the data obtained can be neatly arranged and stored correctly in the database.

## II. Methods

The method used in this final project is SDLC consisting of the following stages:

1. Identify problems, opportunities, and goals
    - a. the problems faced by System—XYZs in general.
    - b. Prepare a proposal to propose a new system.
    - c. Describe the objectives to be achieved by the research.
  2. Determine information requirements
    - a. Conduct interviews with sales staff to find out the work procedures that the system has running.
    - b. Describe the information required by the management of CV. XYZ.
  3. Analyze system requirements
    - a. Analyze input and output documents in CV. XYZ.
    - b. Designing the FOD system runs according to the processes contained in the CV. XYZ.
  4. Designing the recommended system
    - a. Designing a proposed system logic DFD to solve problems that arise in CV. XYZ.
    - b. Formulate a data dictionary that will be used in the design of database tables.
    - c. Designing use case diagrams to model the proposed system.
    - d. Designing a database (database) that will be used by the proposed system, which consists of the table structure and the relationship between the tables (relationship) using the MySQL application.
    - e. Designing the form of the user interface from the proposed system input using Adobe Dreamweaver and PHP.
  5. Developing and Documenting software
- The process carried out at this stage is to make coding from a system that has been previously designed.
6. Test and Maintain the System
- Before the information system can be used, it must be tested first.
7. Implementing and Evaluating the System

In the last stage of using the system, the analyst helps to implement the information system. This stage involves training users to control the system.

## III. Result and Discussion

In the next stage, after the researchers collected data, the researchers analyzed the data obtained from the data collection method. System analysis carried out by researchers on the current system is document analysis and output document analysis.

The results of the system analysis carried out serve as guidelines in designing the system to be built. System analysis aims to find weaknesses or deficiencies to be modified to create a better-proposed system.

The ongoing system analysis breaks down the complete information system into parts to identify and evaluate problems, opportunities, obstacles, and expected needs so that improvements can be proposed—the procedure for the bus ticket booking system currently running at CV. XYZ can be seen in Figure 1.

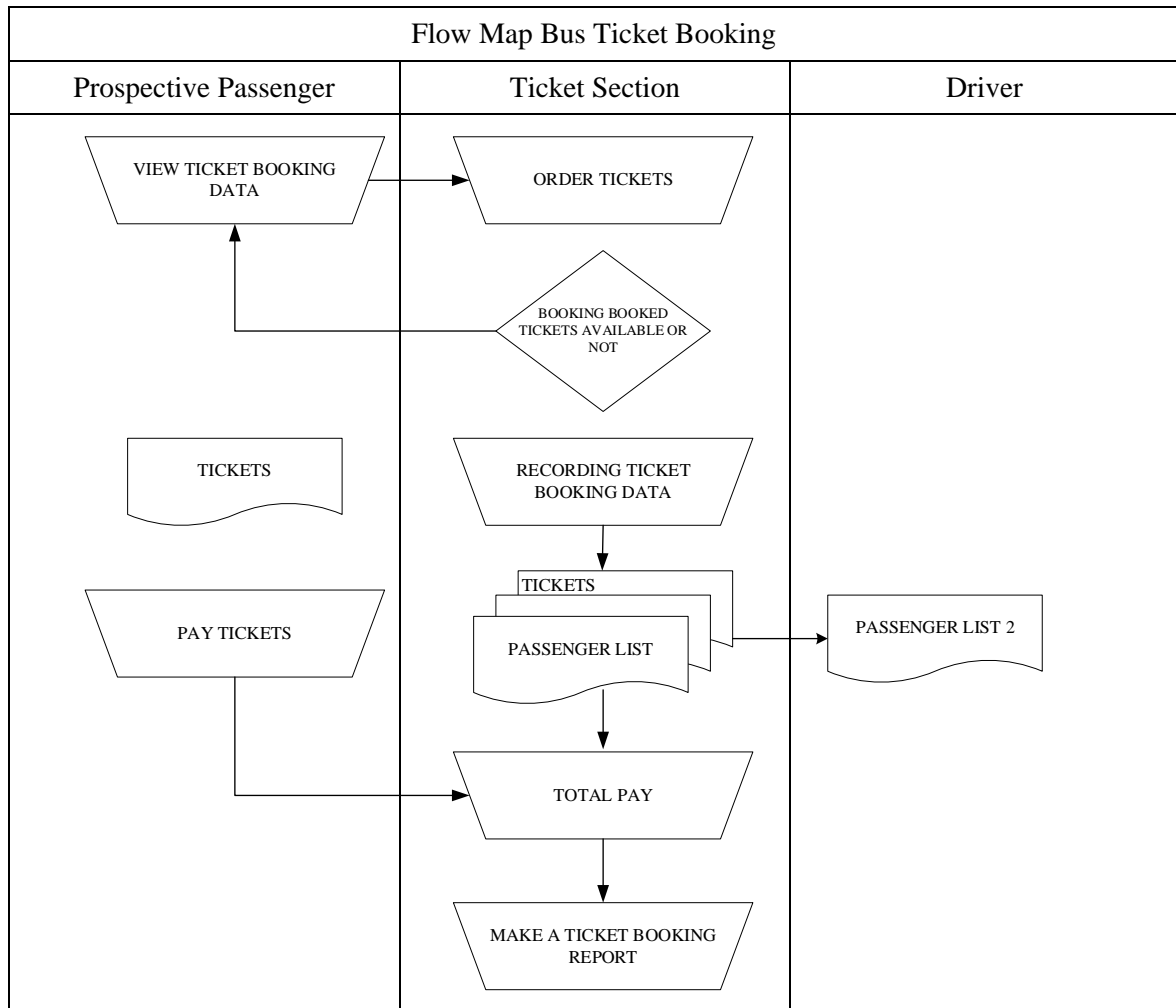


Fig. 1. System Flow Map In Progress

System design is the stage after the analysis of the system development cycle, which is defined from the functional requirements from preparation to implementation design that describes how a system is formed, which can be in the form of drawing, designing and sketching, or arranging of several separate elements into a unified whole. Intact and functioning also involve the configuration of hardware and software components.

Making a web requires a database as data storage information. The following is a database table for the bus ticket booking information system on a system.

The system testing stage is a process that is carried out after the system design stage is completed. By testing this system, researchers can find out the advantages and disadvantages of the system being built; if, in testing, there are errors, improvements will be made to the program system that is being worked on so that the results are maximized.

**IV. Conclusion**

The conclusions that can be drawn from the application of the system that has been built based on the existing problems are as follows:

1. This Bus Ticket Reservation Information System can display ticket booking information, available tickets, departure schedules, and remaining seats, and prospective passengers can order tickets without coming directly to the counter, choose the desired seat, and can print their tickets, and pay at the counter by shows the validation number that was found at the time of publishing the access.

2. This ticket reservation information system can display ticket booking reports that can facilitate performance in the ticketing section and report generation..

### References

- [1] Maxmanroe, "Pengertian INTERNET adalah: Definisi, Fungsi, Manfaat, Dampak Internet." 2017. [Daring]. Tersedia pada: <https://www.maxmanroe.com/vid/teknologi/internet/pengertian-internet.html>
- [2] T. T. Loveri, "Sistem Informasi Aplikasi Pengelolaan Transaksi Keuangan Dan Pendataan Konsumen Pada Cv. Puplas," *J. Sains dan Inform.*, vol. 4, no. 2, hal. 139, 2018, doi: 10.22216/jsi.v4i2.3584.
- [3] I. Jauhari, "Sistem Informasi Manajemen Pendidikan Islam," *Tarbawi Ngabar J. Educ.*, vol. 2, no. 2, hal. 190–208, 2021, doi: 10.55380/tarbawi.v2i2.130.
- [4] W. R. Kusaeri, P. Juliana, dan R. R. Pratama, "Perancangan Sistem Informasi Penjualan Menggunakan Metode Rapid Application Development (Rad) Di Pabrik Genteng Uun Super Jatiwangi," *Pros. Semnastek*, vol. 027, no. 2407–1846, hal. 1–8, 2018, [Daring]. Tersedia pada: <https://jurnal.umj.ac.id/index.php/semnastek/article/view/3457>
- [5] M. Audrilia dan A. Budiman, "Perancangan Sistem Informasi Manajemen Bengkel Berbasis Web (Studi Kasus : Bengkel Anugrah)," *J. Madani Ilmu Pengetahuan, Teknol. dan Hum.*, vol. 3, no. 1, hal. 1–12, 2020, doi: 10.33753/madani.v3i1.78.
- [6] A. Hidayat dan F. Piliang, "Rancang Bangun Sistem Informasi Penyewaan Lahan Parkir Berbasis Web Gis," *J. Sist. Inf. dan Sains Teknol.*, vol. 1, no. 1, hal. 1–9, 2019, doi: 10.31326/sistek.v1i1.320.
- [7] E. P. Sari, A. Wahyuni, dan N. Narti, "Sistem Informasi Sekolah Berbasis Web (Studi Kasus : TK Kusuma Putra Kota Mojokerto)," *Indones. J. Softw. Eng.*, vol. 5, no. 1, hal. 87–94, 2019.
- [8] DHONI, "Tinjauan Pustaka Tinjauan Pustaka," *Conv. Cent. Di Kota Tegal*, hal. 6–37, 2017.
- [9] F. Alihar, "No Title ענף הקיטור מצב: תמונת מצב," *עלון הגושע*, vol. 66, hal. 37–39, 2018, [Daring]. Tersedia pada: [https://www.fairportlibrary.org/images/files/RenovationProject/Concept\\_cost\\_estimate\\_accept\\_ed\\_031914.pdf](https://www.fairportlibrary.org/images/files/RenovationProject/Concept_cost_estimate_accept_ed_031914.pdf)
- [10] E. W. Lestari, N. Y. Mirchandini, C. Sitasi, dan : Lestari, "Sistem Informasi Pendaftaran Anggota Baru Pada Palang Merah Indonesia (PMI) Jakarta. Paradigma-Jurnal Komputer dan Informatika," vol. 21, no. 2, hal. 173–178, 2019, doi: 10.31294/p.v20i2.
- [11] R. M. Kosanke, "濟無No Title No Title No Title," hal. 6–31, 2019.
- [12] Y. A. Kurniawan, J. T. Informatika, F. I. Komputer, dan U. D. Nuswantoro, "Smk Bagimu Negeriku Semarang Berbasis Web Application," 2017.
- [13] "Bahasa Query: Pengertian dan Cara Kerjanya - Glints Blog." <https://glints.com/id/lowongan/bahasa-query/#.Y3e3isdBw2w> (diakses 18 November 2022).
- [14] A. Kuncoro, Ari dan M. Kom, *BUKU AJAR : Pengantar Bahasa Query*. Semarang: Yayasan Prima Agus Teknik, 2021.
- [15] A. Christian, S. Hesinto, dan Agustina, "Rancang Bangun Website Sekolah Dengan Menggunakan Framework Bootstrap," *J. Sisfokom (Sistem Inf. dan Komputer)*, vol. 7, no. 1, hal. 22–27, 2018.
- [16] A. Suwarno *et al.*, "Jurnal Teknologi Pelita Bangsa," *J. Teknol. Pelita Bangsa*, vol. 12, no. 4, hal. 33–40, 2021.
- [17] D. Atikah, "Aplikasi Pendataan Penduduk Berbasis Web (Studi Kasus: Kantor Kecamatan Dayeuhkolot)," *Ani Indah Sari Br.Tarigan*, vol. 6, no. 1, hal. 29–39, 2017.
- [18] A. Lutfi, "Sistem Informasi Akademik Madrasah Aliyah Salafiyah Syafi'iyah Menggunakan Php dan MySQL," *J. AiTech*, vol. 3, no. 2, hal. 104–112, 2017.
- [19] A. Corputy, I. Saputro, dan J. B. Sanger, "Aplikasi Impact Generation Berbasis Web," *J. Realt.*, vol. 13, hal. 63–70, 2018.

- [20] Sepriano & Ardiyansa, "MEMBUAT BLOG PRIBADI MENJADI WEBSITE BERITA ONLINE MENGGUNAKAN HTML DAN CSS Sepriano," *Juisik*, vol. 2, no. 2, 2022, [Daring]. Tersedia pada: <http://journal.sinov.id/index.php/juisik/indexHalamanUTAMAJurnal>:<https://journal.sinov.id/index.php>
- [21] "Apa itu Sistem Manajemen Konten (CMS)?" <https://kinsta.com/knowledgebase/content-management-system/> (diakses 17 November 2022).
- [22] "CMS (Content Management System): Pengertian, Fungsi, dan Wordpress." <https://tekno.foresteract.com/cms/> (diakses 19 November 2022).
- [23] A. Yusnara, A. Milenia, dan A. Septini, "Perancangan dan Implementasi E-Commerce UMKM Pada Opencart," *Semin. Nas. ...*, 2021, [Daring]. Tersedia pada: <http://prosiding.snastikom.com/index.php/SNASTIKOM2020/article/view/109>
- [24] I. Maita dan A. Adawiyah, "Sistem Informasi Reservasi Online Pada Guest House Uin Suska Riau Berbasis Web," *J. Ilm. Rekayasa dan Manaj. Sist. Inf.*, vol. 3, no. 1, hal. 85–96, 2017.
- [25] R. Ameldi dan T. K. Ahsyar, "Sistem Informasi Reservasi Lapangan Futsal Berbasis Android Pada Lapangan Futsal," *J. Ilm. Rekayasa dan Manaj. Sist. Inf.*, vol. 4, no. 1, hal. 81–90, 2018