

TICKET REPORTING INFORMATION SYSTEM USING A WEB BASED WATERFALL METHOD

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Abstract: The regional entity that deals with tourism in the forest is the Department of Tourism and Culture, which manages the nine tourist attractions in the garden. The reporting of income from the sale of tickets from each tourist attraction to the Department of Tourism and Forest Culture is still done manually and often leads to errors in the reporting. Based on the following issues, innovation is needed to facilitate the control and reporting of tourist attraction ticket sales. Therefore, this research has created a website Information System Ticket Reporting. Its purpose is to facilitate the control of the Tourist Attractions Ticket Report on the Tourism and Culture Service of Kebumen. This website uses the Waterfall method that consists of analysis, design, encoding and testing as well as entity relationship diagrams in database design. From the test results using Blackbox testing with 5 modules that are tested in between when performing Login either matching or not matching the username and password, then Drop Stock, Ticket Sales Report and Ticket Stock Report. Results All outputs from the system can run and match what is expected. With a website-based information system this can control directly anywhere without having to visit each of the tourist attractions as a daily report of tickets sales along with money revenue and at the same time can see the drop stock of tickets in each tourist attraction.

INTRODUCTION

In the digital age, the advancement of information and communication technology is heavily dependent on the development of telecommunications in Indonesia, almost all layers of society today have turned to digital devices connected to the Internet to meet every day needs (R.Dewantara, 2022). In the information age, most organizations have websites with their respective information policies and services, which enables websites (Ismail, 2018) to be an effective and efficient way of disseminating information and organizational data (L. Oktaviani, 2021).

The Department of Tourism and Culture (Disparbud) of Kebumen is a regional

organization responsible for managing government issues in the field of tourism and culture in the Kebumen region (Suparyanto, 2020). There are nine tourist locations administered by Disparbud district of Kebumen including Suwuk Beach, Goa Jatijajar, Sempor Waduk, Logending Beach, Karangbolong Beach, Krakal PAP, Petruk Goa, Farming Beach, and Wadaslintang Waduk (Aswir, 2018). Of the nine tourist attractions available in Kebumen district, the potential receipt of tourism revenue comes from entrance ticket remuneration, parking fee, villa fee and hygiene or garbage fee. Disparbud district of Kebumen has a task to do one of which is the control of conventional tickets of nine tourist attractions managed. After interviewing the authorities, the Chief of the General Section of the Secretariat and the Secretary of Disparbud district of Kebumen, there was a problem that was encountered among them, when the service carried out the ticket surveillance only one to three times in a month so that the reports obtained were not actual every day, the next problem was the income obtaining by the service from the sale of tickets sometimes did not correspond to the reality. In addition, after observing the two tourist attractions Petanahan Beach and Goa Jatijajar, it was found that the tourist attraction officers were still writing reports manually in the big book of daily, weekly and monthly ticket sales reports. So the revenue that was supposed to match the sale of tickets was not appropriate because of a mistake in calculating the total revenue. From the problem is very unfortunate if the ticket control of the managed tourist attraction is not balanced with the optimal work process support system, to solve such a problem is required Website-based Information System to facilitate the control of tickets (Y. D. Wijaya and M. W. Astut, 2019).

According to the research journal entitled "Design of Web-based Information Media Sarana Village Klambir Lima Using Waterfall Method" conducted by Hermansyah, Sri Wahyuni, Ahmad Akbar. The development of the village government is good but to know the information is still difficult. Therefore, the researchers developed a web-based information system for the village of Klambir Lima Gardens with the aim of improving the service to the community of the village, easy access to information, the village potential, the number of inhabitants, the size of the territory and so on (S. Wahyuni and A. Akbar, 2022). The research journal entitled "Development of Information Systems of Tomuan Holbung Village Using Waterfall Method" was conducted by Supiyandi, Muhammad Zen, Chairul Rizal, Muhammad Eka. In the village of tomuan holbung there

is already a service but some features, loading system and accuracy of the system are not functioning. Therefore, the researchers made the design of the village information system on Tomuan Holbung Village. With the presence of a village information systems based on the website can facilitate the device in the processing of village information data in order to be more effective and efficient in the provision of information about the village government to Tomuan holbung village (Supiyandi, et al, 2022). Further research journal by Danyl Mallisza, Harry Setya Hadi, Annisa Tri Aulia on his research entitled "Implementation of Waterfall Model in the Design of Website-based Service Travel Order System with SDLC Method" The design of the Service Trip Order System at the Central Statistical Authority of the South Coast District aims to computerize the production and processing of data of Service Travel Orders efficiently and effectively (D. Mallisza, H. S. Hadi, and A. T. Aulia, 2022). The research journal entitled "Design of Web-based Student Masterbook Management Applications Using Waterfall Model on Rawamangun 09 SDN" was conducted by Dwi Novia Satriana, Verdi Yasin, Anton Zulkarnain Sianipar. As the number of new students increases, the student's master documents accumulate and occupy space and also time in the search for documents. Therefore, the researchers designed an information system application aimed at simplifying and accelerating the process of storing and retrieving student data (D. N. Satriana, V. Yasin, and A. Z. Sianipar, 2021). Journal of further research by Matheus Supriyanto Rumetna, Tirsa Ninia Lina on his research entitled "Information Systems" "Arborek Village Tourism Information System with Waterfall Method". Arborek tourist village has generally been known as only a few of the tourist attractions in the village such as snorkeling, feeding fish, and seeing the peaches that became the icon of the village tourism. However, at the moment there is no complete information about the town tourism that highlights the natural beauty and local wisdom and culture of the city tourism arborek. Therefore, in order to promote the towns tourism so that more local and foreign tourism can be visited, the researchers designed the provision of information using website-based media (M. S. Rumetna and T. N. Lina, 2018).

Website Design Ticket Reporting Information System using Waterfall method. Waterfall method is a method that provides a sequential or sequential approach to the software lifecycle, starting with analysis, design, encoding, testing and support (A.Suryadi, 2019). The stages of the waterfall method are: Requirement Analysis, Design,

Development, Testing, Maintenance (D. S. Purnia, A. Rifai, and S. Rahmatullah, 2019). Tests were carried out in terms of functionality specifications and design whether functions and outputs matched the requirements (M. Syarif and E. B. Pratama, 2021). Based on the research described above, the study aims to transform manual ticket reporting into digital technology and facilitate the management of tickets and control between tickets sold and revenue.

RESEARCH METHODS

This is a phase of the study that can be seen in Figure 1 below.

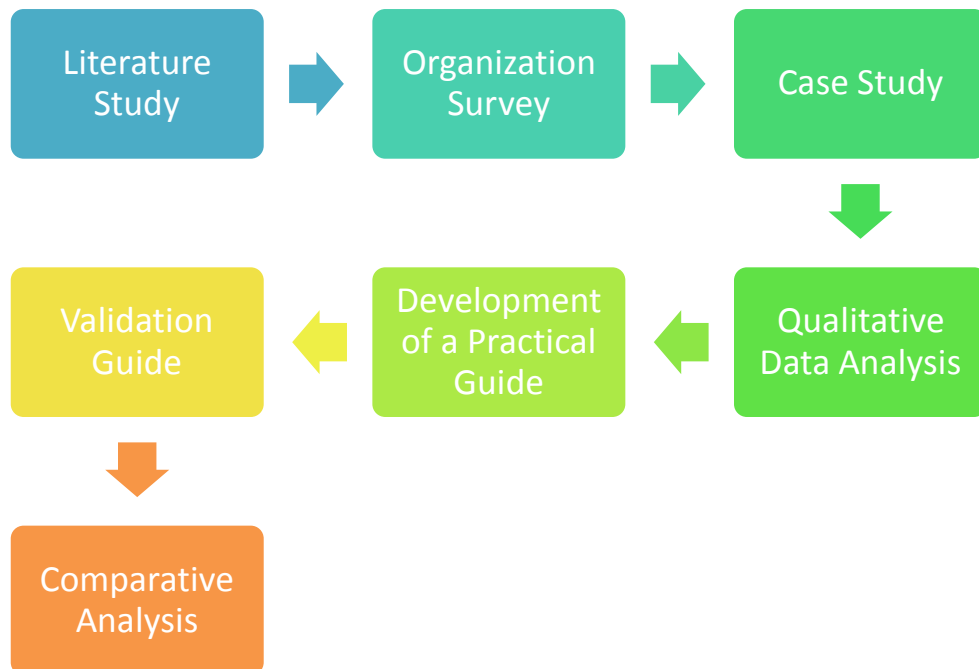


Figure 1. Research Phase

Using Knowledge to Build an Effective Knowledge Management System: A Practical Guide to Organizational Success" may include the following steps:

1. Literature studies:

The first step is to undertake a comprehensive literature study of basic concepts in knowledge management, related theories, and best practices that have been applied by other organizations. This will help in understanding the current framework and trends of knowledge management.

2. Organizational Survey:

Conducting surveys in several organizations that implement knowledge management

systems. Surveys may include questions about the implementation of the system, benefits that have been obtained, challenges faced, and best practices that they have identified.

3. Case study:

Select a few organizations that have successfully implemented an effective knowledge management system as a case study. This will involve interviews with organizational leaders, knowledge managers, and system users. Case studies will help in identifying key factors that contribute to their success.

4. Qualitative Data Analysis:

Data obtained from interviews and surveys can be qualitatively analyzed. It involves grouping findings based on themes, identifying common patterns, and drawing conclusions about key factors that influence the successful implementation of knowledge management systems.

5. Practical Guide Development:

Based on findings from literature studies, surveys, and case studies, you can develop practical guides that will help other organizations in building and implementing effective knowledge management systems. These guides should contain practical steps, tips, and advice that can be applied by the organization.

6. Guidance Validation:

The practical guidelines developed need to be validated by involving a number of different organizations. They can try to implement them in their own context and provide feedback on their usefulness.

7. Comparative analysis:

Conduct a comparative analysis of the various organizations that have implemented this guide to measure its impact on the successful implementation of knowledge management systems.

RESULTS AND DISCUSSION

Result

1. Use Case Diagram Design

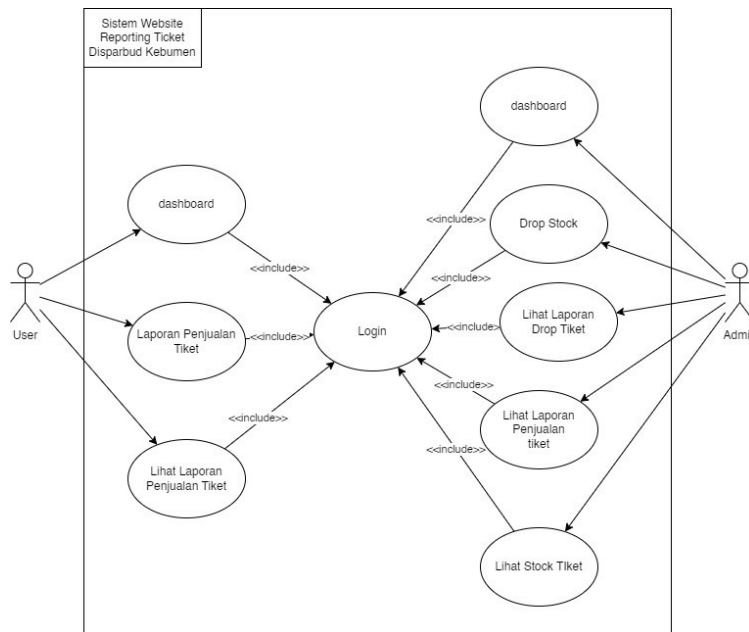


Figure 1. Use case Diagram

2. Implementation

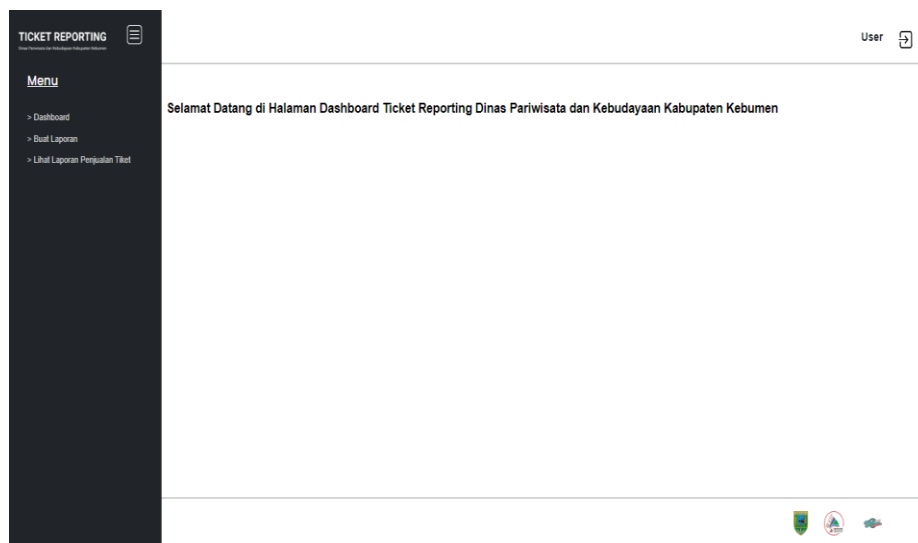


Figure 2. Dashboard

Discussion

Implementation of the Website Reporting Ticket aims to facilitate the control of the Tourist Attractions Ticket Report at the Tourism and Culture Service of Kebumen. In its implementation the system must be ensured to run well in accordance with what was previously expected. Therefore, a test was carried out on the Website Reporting Ticket system. Here are the test results shown in Table 1.

Table 1. Black Box Testing

Tested Module	Describes Expected	Output Test	Result Obtained	Conclusion
<i>Login Page</i>	Enter Username and Password correctly according to the section, then click the login button	Login Access Successful, Login to the page according to the respective roles	The system displays the dashboard page according to the respective roles	Suitable
<i>Login Page</i>	Entering the wrong username and password	Login failed, notifications of usernames and passwords are not matched	The system displays notifications of the wrong user name and password, and the display remains on the login page	Suitable
<i>Drop Stock</i>	Entering input on the Drop Stock form	Data will be stored in the database and displayed on the page View Drop Report	Data Tickets Successfully Saved and shown in the page See Drop Tickets Report <i>Drop Tiket</i>	Suitable
Ticket sales report	Entering inputs on the form Ticket Sales	he data will be saved in the databases and shown on the pages Viewing Drop ticket reports	The data is successfully saved and is displayed in a page Viewing Tickets Sales Report	Suitable
Ticket stock report	Inserting input in the Stock Drop and Ticket Sales form	Data is stored on a database and will display a table of results from Drop stock and Sales data.	Data successfully displayed on the Ticket Stock Report page	Suitable

CONCLUSION

One of the methods that can be used in building a system is the Waterfall Method, in the process of its implementation this method must be gradual which to carry out the next stage must complete the previous stage first either from the stage of Requirement Analysis, Design, Development, Testing, and last to the maintenance stage. The research has produced a ticket reporting website that can be used by the tourism and cultural services of the district to manage the ticket control of the tourist attraction. There are

several functions of the multi-user login system, namely admin can create a drop-ticket report, delete a drop list of tickets, view a drop report, see a ticket sales report, remove a list of ticket sales reports, view the tourist attraction ticket stock report. This system can prevent data delays obtained because the data reporting of the tourist attraction can be done computerized so that information can be received in real-time every day. From the test results using the black box testing all systems of both Login, Drop Stock, Ticket Sales Report, and Stock Tickets can run well and in line with the expected output. Thus the system generated can be used by the Tourism and Culture Department of Kebumen district for the control of Tickets 9 tourist attractions managed.

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