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WEB-BASED TOUR PACKAGE INFORMATION SYSTEM ON BRADER BUS HOLIDAY BANDUNG TOUR

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ABSTRACT

Tourism is a government priority because it has the potential to be one of the third largest contributors to national foreign exchange, thus the government's management of the tourism sector will continue to be improved. As a result, companies that provide travel services, often known as travel agents, have sprung up. At this time, the brader bus holiday bandung tour & travel is still conducting the registration, booking, payment, and cancellation of trip packages by manual. As a result, recording errors are common. Furthermore, prospective consumers must visit the office in order to select a tour package, implying that the work system is ineffective and inefficient. As a result, an information system is required to assist businesses in processing their data. The waterfall approach is used to build the information system, UML is used to design it, and PHP is used as the programming language and SQL server as the database management system. The study's findings have resulted in a web-based tour package booking information system that can make it easier for customers to order tours and for administrators to manage client data.

1. Introduction

Tourism is a government priority since it has the potential to be one of the third major producers of foreign exchange to the country [1] . So that the government continues to promote tourism sector management in order to increase selling capacity so that domestic visitors and tourists come to visit. This may be seen in the tourism industry's rapid growth, as seen by the increasing number of hotels erected, the preservation of tourist attractions, the diversification of eateries, and the variety of holiday packages offered by travel companies. A travel agency is a company that provides various types of travel-related products to its customers, such as hotels, restaurants, and transportation [2]. Additionally, travel agencies offer services such as trip planning, acquiring visas and other travel papers, arranging trips, selling tickets, securing hotel room reservations, and conducting trips [3]. Suppliers provide the products, which are then bundled into various tour packages [4] [5].

Bandung is such a well tourism destination in Indonesia. Bandung has a wide range of tourist attractions, including nature tourism, recreational tourism, culinary tourism, and marine tourism. As a result, it's not unexpected that travel agents provide tourist-friendly packages. Tourists may spend their time in Bandung without worrying about transportation, hotels, entry tickets to tourist places, or meals with these tour packages. Several years ago, travel agencies could choose the types of vacation packages they offered to their consumers, whether they were individuals, groups, or international agents. Customers usually follow the travel agency's packages [6]. On the other hand, now customers have access to a wealth of information on tourist destinations, products, and tourist attractions to visit, therefore guests/agents are more likely to choose

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or determine the service package they want themselves [7][8]. However, the travel agency continues to offer tour packages that can be chosen directly. As a result, agencies must offer a diverse range of products.

Travel agencies used traditional methods to distribute travel package brochures and attract customers to take the packages offered in the past [9][10]. However, due to rapid technological advancements, some travel agencies have begun to use technology to make it easier for them to promote the tour packages they offer. Technology brings travel agencies closer to their customers, lowers expenses, and allows them to be more flexible [11]. With an unrestricted market range, it will be easier to appeal to as many customers as possible [12]. Through public interaction, the usage of social media in online and cellular-based internet technologies creates a variety of information that is not confined to geographical, social, political, or demographic factors. Commercial circles are now using social media, and it has become a global phenomena in recent years [13].On the other hand, Some travel businesses have not taken advantage of technology. A brader bus holiday bandung tour and travel agency is one of them, and it is a travel agency that specializes in tour package destination services. When it comes to conducting business, they still use manual processes for reserving trip packages, registration, ordering, payment, and cancellation. As a result, recording errors are common. Not only that, but prospective tourists must visit the office in order to select a trip package, implying that the work system is ineffective and inefficient. As a result, an information system is required to make it easier to access information related to brader bus holiday tour and travel, such as tour package data, incoming message data, transaction data, monthly report data, and user data, via internet technology, in order to increase marketing and company services effectiveness and efficiency, particularly in the brader bus holiday bandung tour and travel itself.

2. Methods

The waterfall model is utilized in this software development, The waterfall technique is a traditional software development model that is systematic and sequential, Waterfall is one of the software development models in the SDLC (Software Development Life Cycle) model [14]. The Software Development Life Cycle (SDLC), also known as the System Development Life Cycle, is the process of creating or updating a software system utilizing the models and methodology that people have used to create prior software systems, based on best practices [15].The stages of employing the waterfall approach are as follows:

a. Planning (Estimating, Scheduling, Tracking) at this point, the author will construct a tour package booking application program with multiple processes, including the tour package booking process, user data input, payment transaction process, and transaction report description process.
b. Modelling (Analysis & Design) the authors use the Data Model to construct the database and the UML to develop the application at this stage.
c. Construction (Code & test) At this point, you'll go from design to program mode, and once the coding is finished, you'll run the system and code testing you've established to look for any potential issues.

3. Results and Discussion

This study yielded an information system that can be used to handle data on tour packages and record transactions, beginning with the registration process and progressing through the selection of tour packages available to the package purchasing process.

Planning (Estimating, Scheduling, Tracking)

This stage explains the first strategy for developing a travel agency system by assessing system needs using the PIECES approach, which was carried out during field observations:

Table 1
PIECES analysis of system needs

PIECES	Analysis of the Old System's Results	The New System's Expected Results
Performance	Customers are waiting a long time for information on how to book tour packages.	Make it easier for customers to get clear information about booking tour packages.
Information	There is no such thing as an automatic package order data report.	The system allows users to view and print customer information as well as a data summary of package order reports.

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Economy	Reporting is costly since it necessitates a large number of books and stationery.	In terms of report generation, there is no need to purchase stationery.
Control	Unauthorized individuals have access to data used to order tour packages.	The data is saved in a database, and system access is granted to each employee via a username and password.
Efficiency	If data is needed at any time, it takes time to find it.	Streamline the process of looking for information on tour package bookings.
service	When a consumer places an order, they may have to wait while the employee attends to another customer (the service is not satisfactory).	Data processing, such as placing an order and precisely filling out customer data.

3.1 Modelling (Analysis and Design)

The researcher then proceeds to the modeling stage, where the data model is used to create the database and UML is used to construct the system.

a. Use case diagram

This use case diagram was created to determine the relationships between the system's actors. The purpose of use case modeling is to specify the system's functional and operational needs by defining user-developer usage scenarios. This step are follow on figure 1 describes the information system's scope, as well as the interaction between administration, leadership, customers, and the system itself.

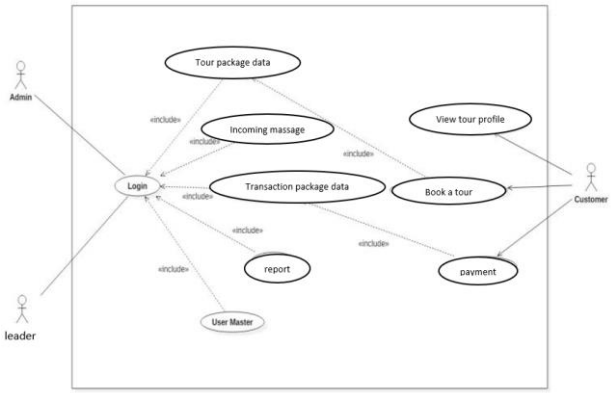

Fig 1. describes the information system's scope, as well as the interaction between administration, leadership, customers, and the system itself.

b. Activity Diagram

The activity diagrams depict the workflow of a series of actions in a process using the use case diagram as a guide.

1) Activity diagram of package order

This activity diagram depicts the functions that will be used to order tour packages and conduct online transactions created by visiting actors. This step are follow on figure 2 showed that activity diagram of the package order

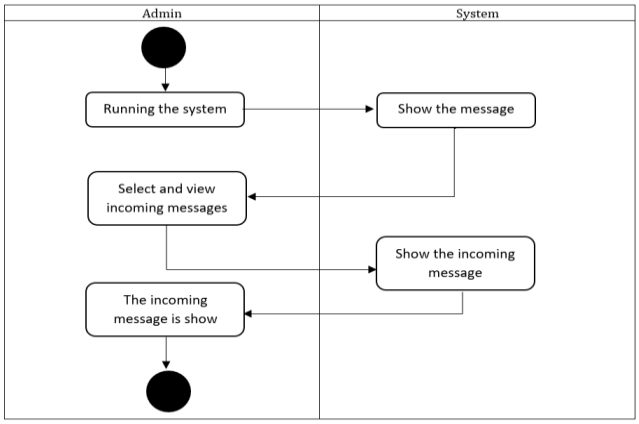

Fig 2. Activity diagram of the package order

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2) Activity diagram of Consumer data input (user)
The functions that will be utilized to input user data are depicted in this activity diagram. This step are follow on figure 3 showed that Activity diagram of costumer data input.

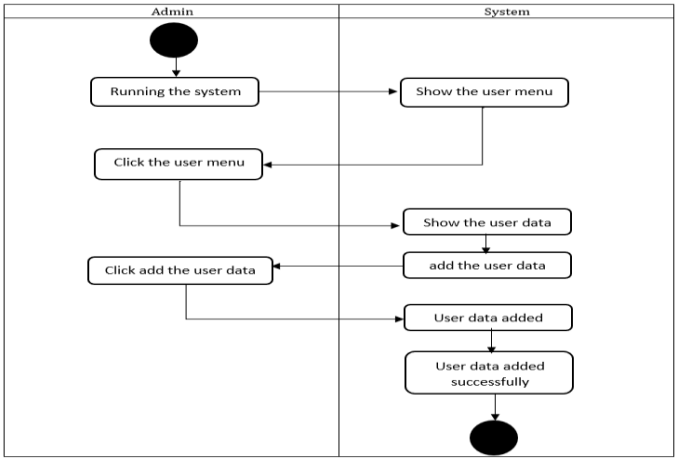

Fig 3. Activity diagram of costumer data input

3) Activity Diagram of payment transaction
This activity map depicts how actor visitors register with the admin and pay for tour packages ordered online. This step are follow on figure 4 showed that activity diagram of payment transaction

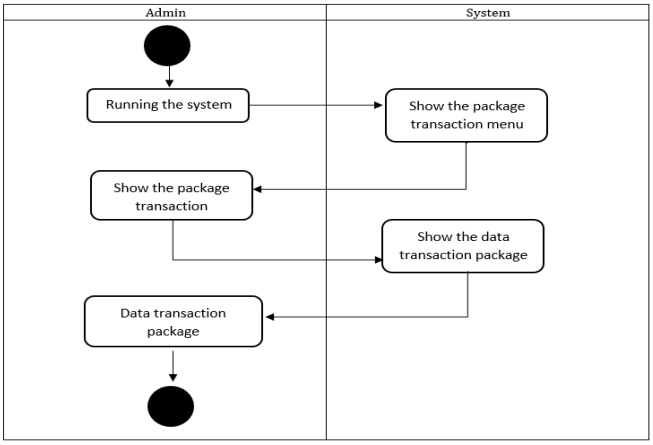

Fig 4**.** Activity diagram of payment transaction

4) Activity diagram of transaction report
The functions that will be utilized to report on the admin's transactions are depicted in this activity diagram. This step are follow on figure 5 showed that activity diagram of transaction report

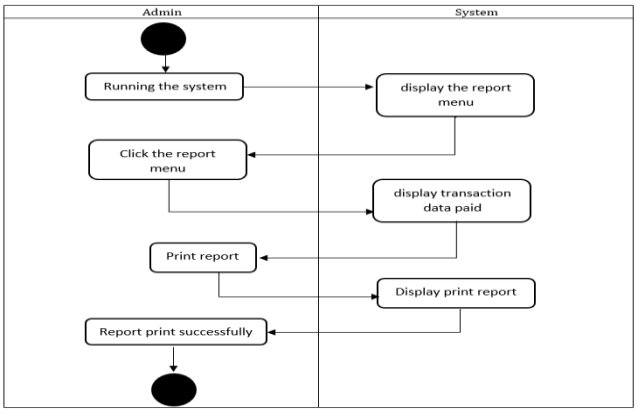

Fig 5. Activity diagram of transaction repor

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c. Class Diagram

Class diagram depicts the system's structure in terms of the classes that will be built to aid the system. Class diagrams are used to not only visualize, explain, and document parts of a system, but also to build code execution in the application software that will be constructed. As a result, the class diagram can be thought of as a static representation of the system to be created. This step are follow on figure 6 showed that class diagram.

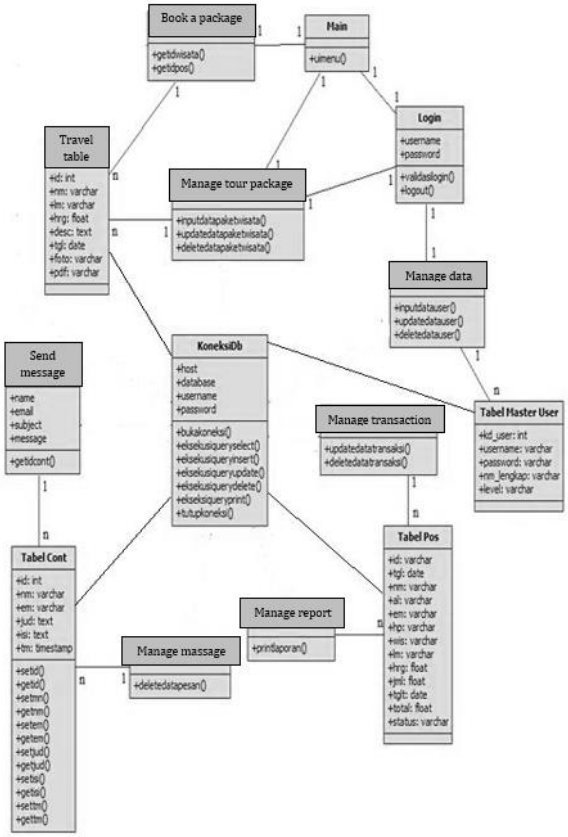

Fig 6. Class diagram

3.2 Implementation of the user interface

The tourist package booking information system interface is implemented as follows. The website dashboard is made up of appealing material and high-quality photos, as well as a variety of packages that will appeal to potential customers. This step are follow on figure 7 showed that implementation of website dashboard

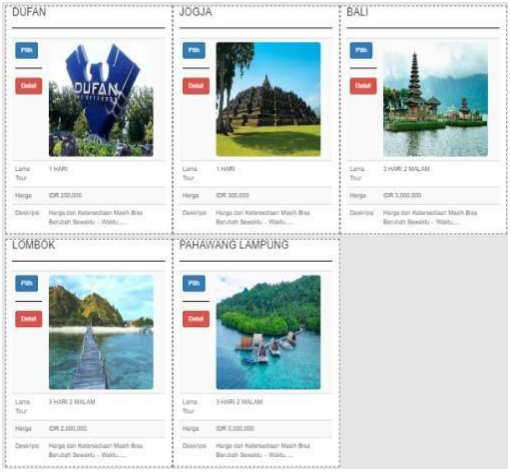

Fig 7. implementation of website dashboard

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Reservations for a tour package, the package includes a booking service to make it easy to book a room, as well as marketing professionals to follow up on possible travelers. This step are follow on figure 8 showed that implementation of Reservations for a tour package

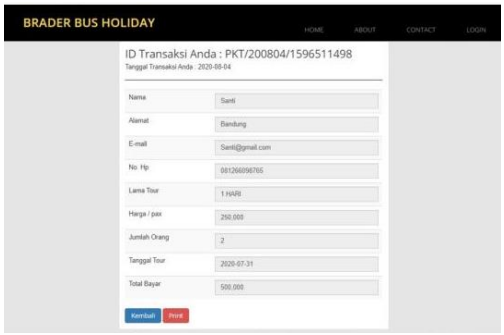

Fig 8. implementation of Reservations for a tour package

Confirmation of payment, the website provides consumers with convenience in terms of payment. So that the service staff may ensure that a departure schedule is adhered to by confirming the crew and mode of transport. This step are follow on figure 9 showed that implementation of confirmation payment

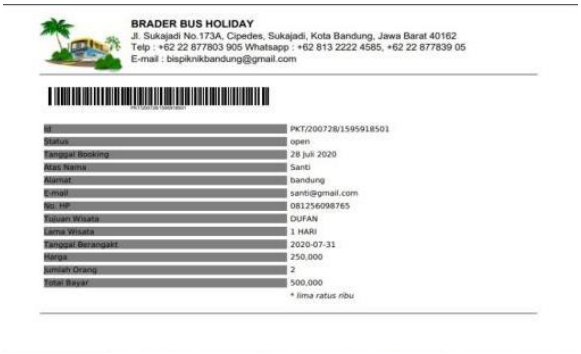

Fig 9. implementation of confirmation payment

4. Conclusion

Starting with the analysis stage and ending with the implementation of a website-based Broder Bus Holiday Bandung Tour & Travel information system application. As a result, the company may promote tour packages that are delivered to customers up to date and in real time at a cheaper cost than traditional promotional media. This website-based information system also includes a menu of information on booking tour packages, a payment confirmation function, and recommended tour packages based on data input by the administrator. This information system also has tour package booking capabilities, allowing you to book tours without having to go to a tour and travel company.

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