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Web-Based Tourism Package Information System in CV Cendana Tour

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Abstract: CV Cendana Tour is a business engaged in tourism services. At present, the business system that is applied is still manual so that it is unable to compete in offering services. Then a web-based system is needed to make it easier to offer services that can be accessed using the internet and are not limited. The website needed is a system that will make it easier to offer tourism services and order online. This application is expected to provide convenience to customers and also CV Cendana Tour in managing tour package data, customer data, reports, and facilitate customers in ordering tourism services provided. It is hoped that this web-based system will greatly help CV Cendana Tour in offering tourism services.

Keywords: Travel Package System, Web, Tourism Services, Online Booking, Internet

I. INTRODUCTION

In Indonesia, traveling industry is very advanced and developed rapidly. But most people still feel confused to visit various places they dream of, because it is constrained by scheduling time, cost details, and transportation according to needs.

With plenty of competitors in tourism services, the best services are needed that can attract customer interest. A system that is able to offer vacation packages that suit your needs will be very helpful to be able to provide satisfying and easy travel services. Because it can be accessed online through a website with an internet network.

During this time, the offering travel packages are still manual by giving brochures and bookings made by telephone, also the procedures of recording order. These old procedures are takes time to obtain information about holiday packages.

Therefore, a tour package application with a website service on CV Cendana Tour is expected to be able to handle problems about bidding and order process. Making it easier to manage data and settings centrally.

II. METHODS

The tools which used in this study are computer machines and software including Sublime-Text, Xampp, MySQL, and Browser. Library studies are carried out by studying and examining various literature from libraries sourced, such as computer science books, scientific journals, sites on the internet that linked with this research. The data collection technique is done through interviews by asking questions or dialogs directly to the owner of CV Cendana Tour to find out information on current business processes and current constraints.

The flow of method used in present study is waterfall method. Using waterfall model can help about completion of a computer program. The waterfall model is often called a sequential linear model or classic life cycle.

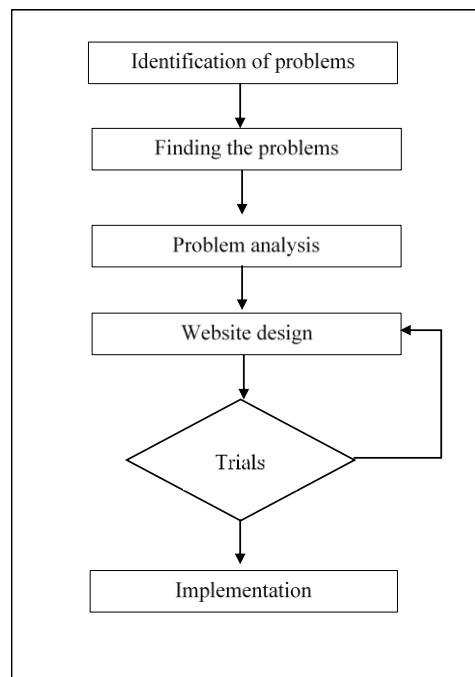


Fig. (1). Flow diagram of the experimental research showing work plan of the present study

The following is a description of the research phase flow diagram:

1. Identification of problems
At this stage the author makes observations to get the problems that occur and to find out how much public interest about the new system.
2. Finding the problems
After identifying, the author found several problems faced, such as lack of media delivery of information to the public and the number of business competitors that began to develop in the marketing system.
3. Problem analysis
This analysis phase serves to describe the problems needed in the design of information systems to be applied.
4. Website design
This website will be used as a promotional media and also deliver information on tour packages online. This design starts from the design, programming and testing stages.
5. Implementation
This implementation process includes testing and adjusting the website to make it easier for users to use. This implementation phase serves to ensure that the application is functioning properly and as expected.

III.RESULTS

Based on the interviewing CV Cendana Tour's owner, the results show that the ordering system on CV Cendana Tour is still conventional. Customers come to company offices or vice versa. In promoting its services, the media used is still less effective so that the information provided is not maximal. Many customers do not know the specific purpose and price of each package.

To overcome existing problems, a new system is required in booking tour packages, namely online. In addition to facilitating transactions, the new system also aims to expand promotion so that company profits are expected to increase. The existence of this new system will make it easier for tour package administrators to manage package data, manage websites, and print orders. In addition, it is also expected to provide convenience for customers to get information about tour packages.

1. PROPOSED SYSTEM DESIGN

From the results of problems analysis that have been explained, the author tries to propose an information system design using Use Case Diagram, Activity Diagram, Class Diagram, and Sequence Diagram of a package information system tour.

A. Proposed System Use Case Diagram

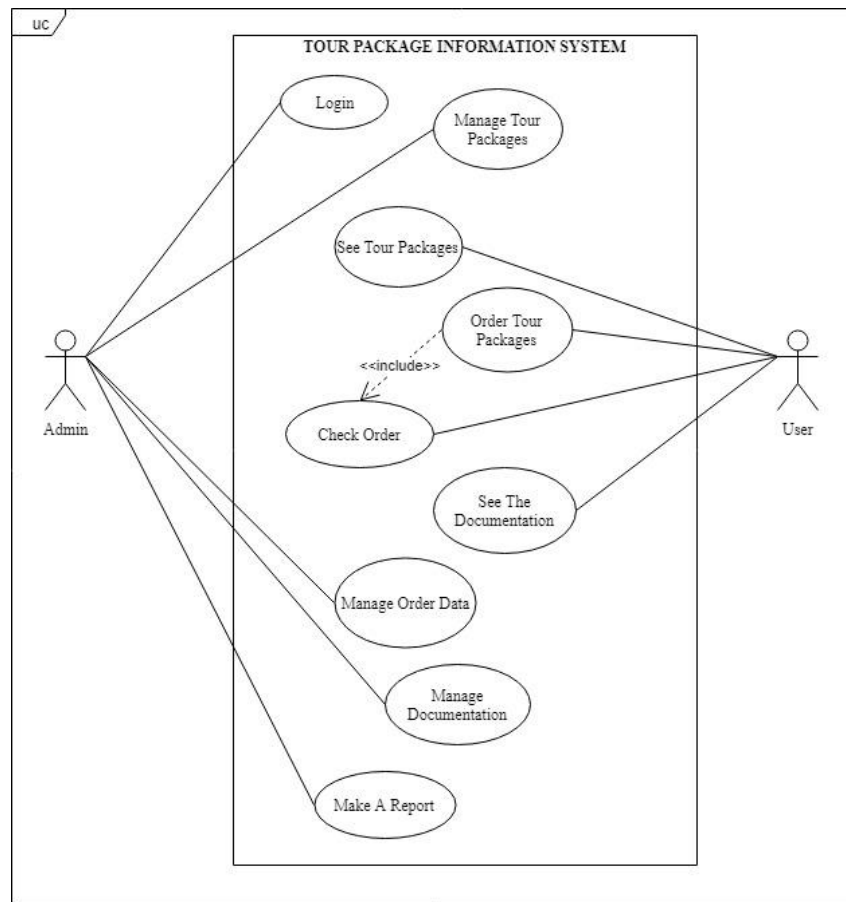


Fig. (2). Use Case Diagram of Travel Packages

Table 1. Login Use Case Diagram Scenario

Use Case Name	Login
Actor	Administrator
Description	Serves to ensure that the data entered is properly registered and creates a session to control user access
Precondition	Users access the login page
Scenario	1. Enter username; 2. Enter password;
Post Condition	Make a session to proceed to the main page.

Table 2. Managing Tour Packages Use Case Diagram Scenario

Use Case Name	Managing Tour Packages
Actor	Administrator
Description	Serves to manage tour packages such as adding, changing or deleting tour package data.

Precondition	The user has successfully logged in.
Scenario	1. Select the tourist data menu; 2. Selecting the management function to be carried out; 3. Fill out the tour package form if the user chooses the added function; 4. Update the tour package through the form displayed when the user selects the edit function; 5. Erase selected tour package data when the user selects the delete function;
Post Condition	Status notification appears successful or not. And the system will log the user activities and display the latest data on the admin and user pages.

Table 3. See Tour Packages *Use Case Diagram Scenario*

Use Case Name	See Tour Packages
Actor	User
Description	Serves to display a list of tour packages to be offered.
Precondition	Users access the CV Cendana Tour website.
Scenario	1. Choose a list of tour packages provided; 2. Actors click left to see details of selected tour packages.
Post Condition	A detailed page of the selected tour package will appear.

Table 4. Book a Tour Package *Use Case Diagram Scenario*

Use Case Name	Book a Tour Package
Actor	User
Description	Serves to display a list of tour packages to be offered.
Precondition	Users access the CV Cendana Tour website.
Scenario	1. Choose a list of tour packages provided; 2. Actors click left to see details of selected tour packages.
Post Condition	A detailed page of the selected tour package will appear.

Table 5. Checking Order *Use Case Diagram Scenario*

Use Case Name	Checking Order
Actor	User
Description	The process looks at the order status.
Precondition	The user has placed an order and the position on the check code of the booking page.
Scenario	1. Fill in the column according to the booking code that has been received; 2. The actor presses the check button to see the order status;
Post Condition	Ordering data successfully displayed.

Table 6. See Documentation *Use Case Diagram Scenario*

Use Case Name	See Documentation
Actor	User
Description	The process of seeing tourist documentation that has been done by CV Cendana Tour.
Precondition	Users access the CV Cendana Tour website
Scenario	1. The user selects the gallery menu; 2. See the documentation displayed by the system; 3. The actor presses left click.
Post Condition	Display the original documentation size.

Table 7. Managing Order Data *Use Case Diagram Scenario*

Use Case Name	Managing Order Data
Actor	Admin
Description	Serves for ordering data management such as changing or deleting ordering data.
Precondition	The user has successfully logged in.
Scenario	<ol style="list-style-type: none"> 1. Selecting the booking data menu; 2. Selecting the management function to be carried out; 3. Update the ordering data through the form displayed when the user selects the edit function; 4. Delete the ordering packet data if the user selects the delete function.
Post Condition	Status notification appears successful or not. And the system will log the user activities and display the latest data on the admin and user pages.

Table 8. Manage Documentation *Use Case Diagram Scenario*

Use Case Name	Manage Documentation
Actor	Admin
Description	Serves for management of documentation such as adding, changing or deleting documentation.
Precondition	The user has successfully logged in.
Scenario	<ol style="list-style-type: none"> 1. Selecting the gallery menu; 2. Selecting the management function to be carried out; 3. Fill out the documentation form when the user chooses the added function; 4. Update documentation through the form displayed when the user selects the edit function; 5. Delete the documentation data selected when the user selects the delete function.
Post Condition	Status notification appears successful or not. And the system will log the user activities and display the latest data on the admin and user pages.

Table 9. Make a Report *Use Case Diagram Scenario*

Use Case Name	Make a report
Actor	Admin
Description	Works to print tourist reports.
Precondition	The user has successfully logged in.
Scenario	<ol style="list-style-type: none"> 1. Select the menu report from the tour package for the data withdrawal process; 2. After the withdrawal process is successful, the tourism details that have been systemized will appear; 3. Choosing storage in pdf or word format.
Post Condition	The system downloads data in the format selected.

B. Proposed System Activity Diagram

a. Activity Diagram Login

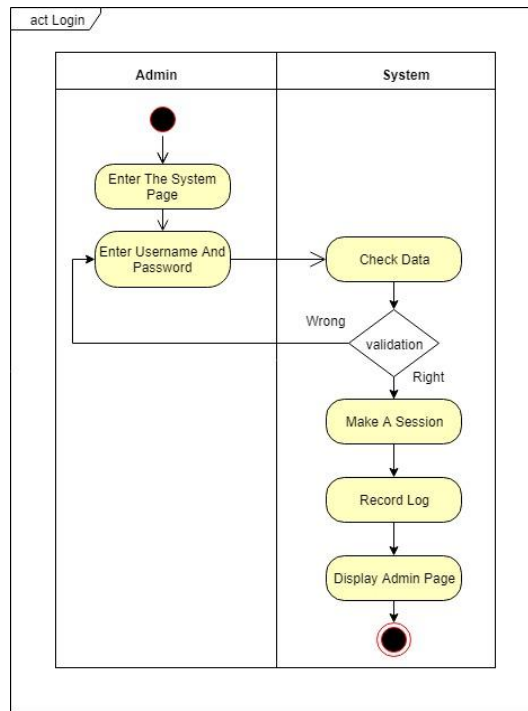


Fig. (3). Activity Diagram Login of Travel Packages

The following are explanation of the *Activity Diagram Login*:

- i. On the admin login page, user is asked to enter a username and password.
- ii. The system will check the data which will be continued to create sessions and log records for admin activity data that successfully enters the system main page.

b. Activity Diagram for Making Tour Packages.

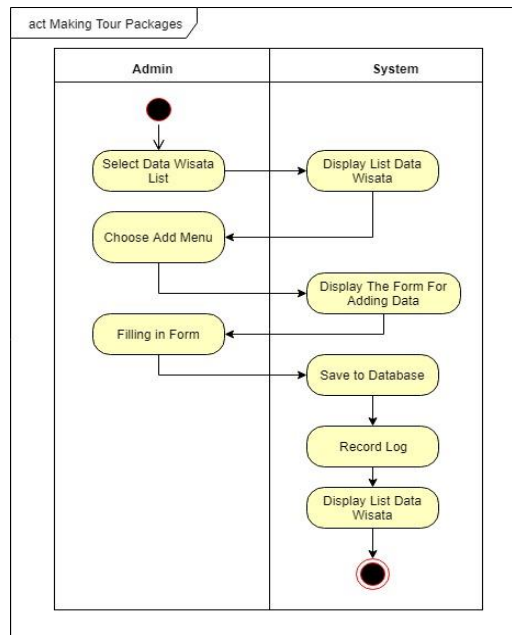


Fig. (4). Activity Diagram for Making Tour Packages

The following are explanation of the Activity Diagram for Making Tour Packages:

- i. On the tourist data menu page the admin chooses the added function to display the form for adding tour package data.
- ii. Admin is asked to fill out a form for additional tour package data, followed by pressing the save button.
- iii. In the process of storing, the system will log the admin activities that make additional data and if the process is successful, then the contents of the latest tourist data menu will be displayed.

c. *Activity Diagram for Booking a Tour Package*

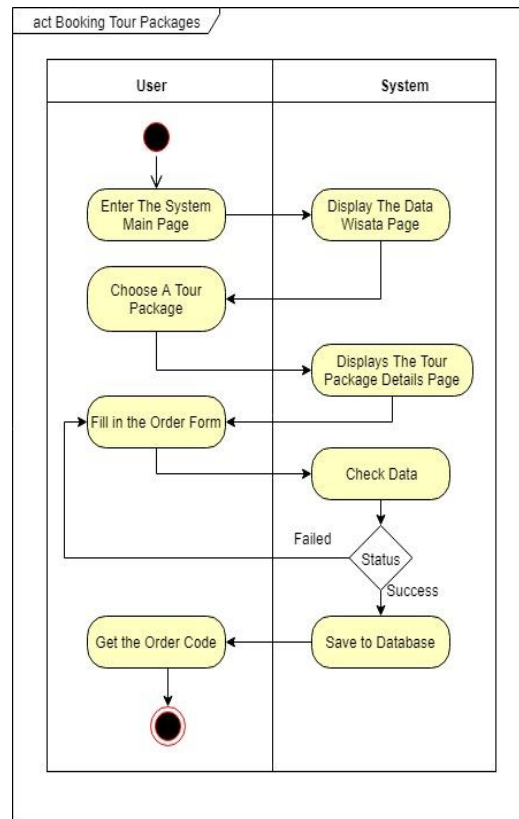


Fig. (5). *Activity Diagram for Booking Tour Packages*

The following are explanation of the *Activity Diagram* for Booking Tour Packages:

- i. The user enters the system main page.
- ii. Users can choose the tour package provided.
- iii. The system will display the detail page of the selected tour package.
- iv. In this page the user will get detailed info on the selected tour package.
- v. The user selects the tab book menu to get the order form.
- vi. Then the user must fill in the order form.
- vii. The process continued with checking data.
- viii. If the filling form is not appropriate, the user is asked to fill out the form again.
- ix. The user will get an order code if the filled out form is appropriate and stored in the database.

2. IMPLEMENTATION

The implementation phase is carried out after the problem analysis stage and the system design proposal is completed.

A. Application Interface

Following are some pictures of the display application for administrator and user that is running at website:



Fig. (7). Login Page

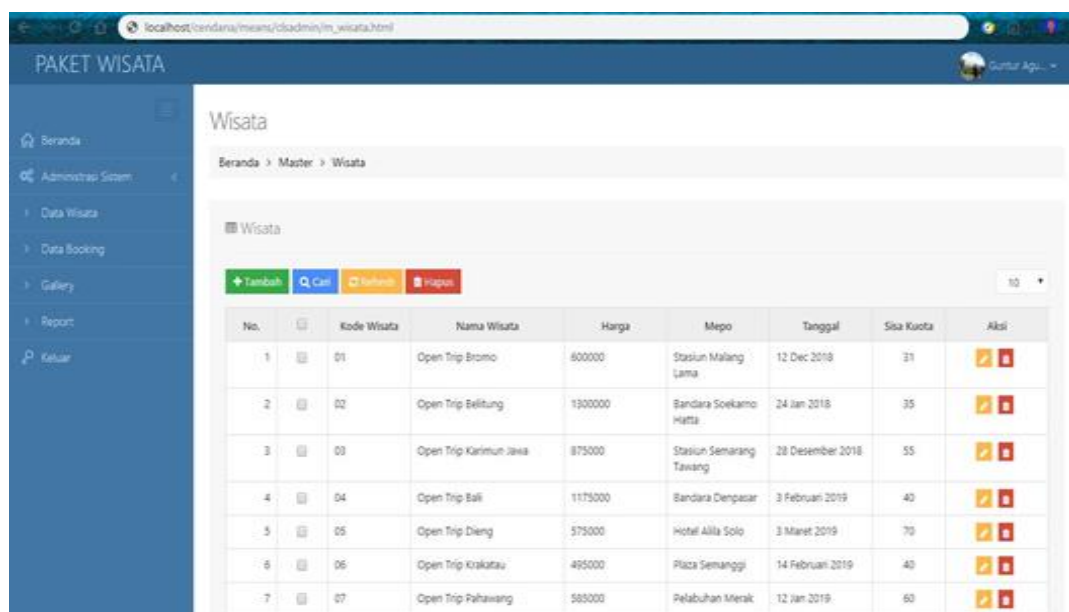


Fig. (8). Tourism Data Menu Page



Fig. (9). User Main Page

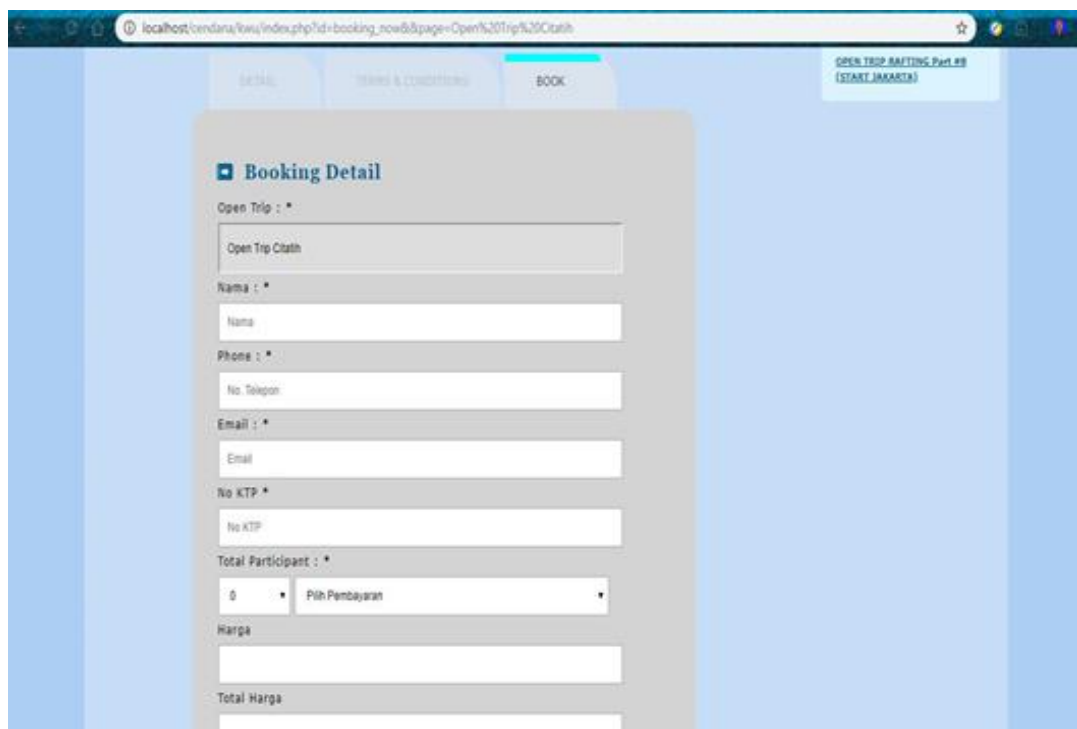


Fig. (10). Tour Package Order Form page

B. System Test Results

Table 10. Testing Result

No.	Testing Scenario	Test Case	Expected results	Test result	Status
1	Empty all login data fields, then click the "MASUK" button	Username: - Password: -	The system will deny login access and display the message "Please fill in your email and password"	According to expectations	Valid
2	Enter the wrong login data, then click the "MASUK" button	Username: 123 Password: 321	The system will deny login access and display the message "Your username or password is wrong"	According to expectations	Valid
3	Enter the login data correctly, then click the "MASUK" button	Username: admin Password: admin2018	The system will receive login access and then display the main page	According to expectations	Valid
4	Admin chooses Tourism Data menu	Clicking on the Tourism Data menu	The system will display tourist data that has been created and a menu for managing tourist data	According to expectations	Valid
5	Admin clears the tourist data form and clicks the "SIMPAN" button	All forms are left blank	The system will display a warning message on the form that has not been filled	According to expectations	Valid
6	Admin does not complete the travel data form and click the "SIMPAN" button	Price of dp: - The rest has been filled well	The system will display a warning message on the form that has not been filled	According to expectations	Valid
7	Admin fills in all tourist data forms accordingly and clicks the "SIMPAN" button	All forms have been filled	The system will display the message "Success" followed by the appearance of the latest tourist data menu	According to expectations	Valid
8	Users choose and click on one of the existing tour packages	Click the tour package	The system will display the detail page of the selected tour package	According to expectations	Valid
9	The user clears the order data form and clicks the "SUBMIT" button	All forms are left blank	The system will display a warning message on the form that has not been filled	According to expectations	Valid
10	The user does not complete the order data form and click the "SIMPAN" button	Email: - The rest has been filled well	The system will display a warning message on the form that has not been filled	According to expectations	Valid
11	Users fill in all forms of order data accordingly and click the "SUBMIT" button	All forms have been filled	The system will display the order data again on the new page which is completed with the booking code and payment account number	According to expectations	Valid

IV. CONCLUSIONS

The website of the tour package information system on CV Cendana Tour provides convenience for people who wants to know tour package information. Also, the information system tour packages can increase marketing or promotion of service offers from the companies.

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