

Web-Based E-Commerce Ticket and Tour Package

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Abstract: The development of technology is now increasing rapidly, one of the technological developments is the internet. Then what is obtained by using the internet is also utilized by the field of sales, namely the existence of Web-Based E-commerce Information System. The purpose of this study was to determine the effect of Web-based E-commerce on customer loyalty sale. In making this thesis, researcher built a web-based E-commerce information system by using Adobe Dreamweaver and MySQL as a database. The method used in writing this report was the waterfall method, by conducting a survey of the ongoing system, conducting interviews and observations and collecting data to obtain the information needed. Users are represented by use case diagram and use case glossary. Process design method by describing Context Diagram, DFD, ERD. The results of the design and manufacture of this application are expected to be useful and help to solve company problems and be implemented to help PO. Puspa Jaya in term of the sale process.

Keywords: E-Commerce Ticket, Web Based, PO Puspa Jaya

INTRODCUTION

1.1 Background

Crowded ticket purchase transactions at PO. Puspa Jaya in Kotaagung is a routinity that is often seen. This bus agent also functions as the head office for the Greater Jakarta area. This is what makes this agent always crowded with passengers like the bus terminal in general, because the bus rations and seats are more than the other PO Puspa Jaya bus agents. Ticket purchase transactions at this agent proceed as usual like other usual bus agents. Prospective passengers must come to the location to purchase ticket. It is not possible for a passenger to travel using PO Puspa Jaya bus without a ticket. Tickets are proof of payment and bus reservations that contain information about the purpose of travel, departure time, seat number, and so on.

To get a bus ticket, usually prospective passengers come directly to the bus agent. In general, prospective passengers make reservations or purchases one or two days before the date of travel. This would be a waste of time and energy, especially for prospective passengers who live far from this bus agent. In general, prospective passengers who have very busy activities, buy ticket on the day H. The risk for prospective passengers is to run out of tickets and become the target of broker who sells ticket prices above the normal price while for bus company, this can be risky to lose the customer.

The other obstacle faced by prospective passengers is during the holidays. Long queues are commonly seen during the mudik season. Prospective passengers are willing to arrive early and even stay the night at the PO. Puspa Jaya Kotaagung bus agent. This is because in order to get bus ticket to go home with family. Suffering from potential

passengers does not stop there. Even when they want to travel back they will experience the same thing that was experienced when leaving. This happens because there is no application that provides a round-trip ticket booking service at the same time before making the trip so they do not need to order ticket again in their hometown. In this condition, the passengers can not do much, they are also difficult to express their criticism and suggestion. The above situation often occurs because the bus is one of the right vehicle, especially for those who do not have private vehicles but want to travel long distances comfortably, quickly, and cheaply.

In dealing with conditions like this, special strategy is needed for the PO. Puspa Jaya Kotaagung in order to compete with the competitor. Currently, PO. Puspa Jaya has been computerized but only limited registration and administration, does not touch on the system of technology implementation in terms of ordering and selling tickets which should make it easier for prospective passenger. For this reason, a new system for PO. Puspa Jaya Kotaagung was made in order to be able to serve and provide convenience to prospective passengers maximally with the level of speed and accuracy in holding the online bus ticket booking service through the internet that can be accounted for. It is also intended to facilitate prospective bus passengers in obtaining tickets anytime and anywhere without having to queue long, so as to save time and energy and can avoiding from the action of broker.

1.2 Research Question

Based on the background problem in KiosBurung has have been described, hereby formulating the problem, namely:

1. How to Design a Web-Based E-Commerce Information System on PO. Puspa Jaya?
2. How to improve web-based ticket sale and booking information system ?
3. How is the ticket marketing and booking strategy so it can be accepted in the wider community?

1.3 Limitation of Research

Restriction used by the Web-Based E-Commerce Information System at PO. Puspa Jaya in completing this research is:

1. Data supporting information in PO. Puspa Jaya.
2. The development of Web-Based information system with the waterfall method.
3. Supporting data storage by using MySQL database.
4. The programming languages used are PHP, Mikromedia and MySQL.
5. This information system is used for cash transaction when receiving good.

1.4 Research Objectives

The purpose of the design and manufacture of web-based information systems is:

1. Creating Web-based Information System for PO. Puspa Jaya.
2. Be able to provide solution to improve data processing and transaction.
3. To produce a ticket sale system that uses web or internet media that can help the marketing division in marketing tickets so sales and booking transactions can be done quickly anywhere and anytime by all of people.
4. To promote or further introduce the company to all people so it can expand marketing reach with the aim of increasing official ticket sales.
5. Make it easy for the public to study tour or travelling out of town.

1.5 Significance of the Research

The benefits that can be taken from making a web-based information system for this kiosburung are as follows:

1. Providing media information to consumers who want to buy ticket.
2. Can be used as inputting data and ticket price.
3. The marketing and promotion process becomes more effective and efficient.
4. The place or means to carry out promotion is wider and almost unlimited.
5. Information given to customers is up to date.
6. PO. Puspa Jaya can accept complaint or criticism and suggestion from customers through the internet.

2. THEORITICAL BASIS

2.1 E-Commerce Definition

E-Commerce or electronic commerce is basically an activity of buying or selling electronically that carried out on the internet network. E-Commerce more specifically can also mean advertising, selling, sending and receiving orders, providing, supporting and service by utilizing a web-shop 24 hours a day for all its customers (WahanaKomputer, 2006: 2).

According to David Baum, the notion of e-commerce is: E-Commerce is a dynamic set of technology, application and business processes that connect to certain companies, consumers and communities through electronic transaction and trade in goods, services and information conducted electronically (David Baum in Onno W. Purbo, 2000: 2).

2.1.1 History or Origin of E-Commerce

The history of the development of E-commerce in the world starts from the emergence of internet which then continues to grow so the emergence of E-commerce is occur. In the beginning, the internet was a computer cooperative that

no one owned. The internet was born in 1969 when a research group in the American Department of Defense linked four computers at UCLA, the Stanford Research Institute, University of Utah, and the University of California at Santa Barbara. This relationship is done to create a network to communicate with one another about government projects.

This network is known as ARPAnet-ARPA which stands for Advanced Research Project Agency which is part of the US Department of Security. Three years later, more than fifty universities and military agencies were connected together on networks, and other computer networks began to emerge around the state and the world. Along with the development of ARPAnet, which was also followed by network collaboration between the military and educator, and NASA's experiments on computer network, this network began to be connected to one another (interconnected), this was the beginning of the term "Internet".

2.1.2 Types of E-Commerce

E-Commerce consists of several types, as follows:

Collaborative Commerce (C-Commerce) Electronic cooperation between business partners. This cooperation usually occurs between business partners who are in the supply chain.

- ✚ Business-to-Consumers (B2C)
The seller is an organization and the buyer is an individual.
- ✚ Consumer-to-Business (C2B)
In this type, consumers notify the goods or services they need, and then organizations compete to provide the goods or services to consumers.
- ✚ Consumer-to-consumer
Sales of goods or services between individuals.
- ✚ Intrabusiness (Intraorganizational) Commerce.

In this type, the organization uses E-Commerce to increase its organizational operation. This is also known as Business to-Employee (B2E).

- ✚ Government-to-Citizens (G2C) and to others The government provides services to the public through E-Commerce technology. The government can also do business with other governments (Government-to-Government / G2G) as well as other organizations (Government-to-Business / G2B).

- ✚ Mobile Commerce (m-Commerce)
E-Commerce is carried out in a wireless environment such as using a cell phone for internet access.

2.2 Definition of Ticket

Ticket is a travel document issued by a company that contains the route, date, price, passenger data used to make a trip.

According to RahmatDarsono, a ticket is one of the travel documents issued by an lighting airline and is a contract written by one party which contains provisions that must be fulfilled by passengers while using flight services, and passenger flight data that has a certain period of time (Darsono, 2004: 15).

2.3 Definition Tour Package

Based on the definition of the tour tourism organization such as: WATA (World Association of Travel Agents) "Tour is a tour that takes more than three days, which is held by the Travel Bureau (BPW) in a city or region of which the event is review several places / cities, both within inside or outside the country. We must distinguish the notion of tour with travel or other words such as trip, excursion, sightseeing, and others. The word travel is usually used for purposes of various motivations and in essence not for tourism purpose.

In the world of tourism, the meaning of the word tour in general is: a trip made from one place to another, both at inside or outside of the country. Understanding the word tour is much more often used than the words trip, sightseeing, or excursion. However, the understanding of the word trip can be equated closer with the word excursion (city limits or certain areas no more than 24 hours), while the trip is relatively further and longer.

Tour package is a tour activity plan that has been arranged regularly with a certain price that includes transportation, hotel or accommodation, tourist objects and attractions as well as other supporting facilities listed in the tour package agreement.

The Travel Bureau in its function as a mediator and manager of all components of tourism needed by dive tourist in their travel activities, must pay attention that the products they produce can fulfill their function as a tourist aid in meeting their need for rest and relaxation for physical and spiritual fitness and to eliminate boredom towards work or routine activities that are expected to develop personality, disclosure of attitude, mental, physical and spiritual. The Travel Bureau should also be able to place it not only as an intermediary but as a pleasant travel partner for tourists for their expertise in managing trips that are able to provide good experience, especially in saving the time and money and able to provide a sense of security, comfort and satisfaction of tourists in tourism activities.

2.3.1 Type of Tour Package

- ✓ Pleasure Tourism, which is a tour package prepared for the purpose of wanting to know a tourist destination in an event to fill its vacation in order to eliminate fatigue from daily routine.
- ✓ Recreation Tourism Type of tour package arranged with the main

purpose of utilizing the day off to restore physical and spiritual freshness.

- ✓ Cultural Tourism tour packages specially organized to find out the customs, styles and ways of life of a nation, history, arts, culture and religious events.
- ✓ Adventure Tourism is a Outdoor travel packages to train physical agility and to refresh spiritually by taking risk that are quite dangerous to the safety by being guided by someone more experienced
- ✓ Sport Tourism is a Tour package conducted in the context of training or conducting physical agility tests or participating in sport event in other regions or countries.
- ✓ Business Tourism is a Tour package conducted in the context of conducting a business feasibility study in the area or in the country visited.
- ✓ Convention Tourism is a Tour package in order to participate in activities or visit conference, seminar, exhibition and similliar activities with tourist activities in the spare time.
- ✓ Special Interest Tourism is a Special tour package that requires special skills and abilities for participants with the classification of the limited number of participants such as pilgrime, skydiving, hang gliding and etc.

2.4 Definition of CV. Puspa Jaya

Puspa Jaya is a transportation company that was founded in 1980. It was founded by Mr. I KetutNarya who is a transmigrant from Bali who was placed in Lampung.

2.4.1 History of PO. Puspa Jaya

PO.Puspa Jaya was established on October 31,1980, founded by Mr. I KetutNarya who is a transmigrant from Bali who was placed in Lampung. PO.Puspa Jaya is a family company that started its business in the field of transportation. At the beginning of its

business, the company only had one bus with the Banjit-TanjungKarang route using the name PO. Puspa Sari with the approval of PT. Puspa Sari Denpasar. Over time, this transportation business was well received by the community. The company can develop very well, so the route or the bus destination can be developed to several destinations. Not only in the province but also outside of the province.

In 1989, the company began pioneering transportation with the Lampung-Denpasar route. The Lampung-Denpasar route is opened to meet the demand of consumers who are transmigrants from Bali who want to use the services of the company to take them on vacation to their hometown. Then in 1992, the company's leadership was handed over to Mr. I KetutPasek, an alumnus of the Faculty of Engineering, Gajah Mada University who is the son of Mr. KetutNarya. At that time, the company still used the name Po. Puspa Sari Denpasar.as the initiative of the family. On October 31, 1992, the company built an independent business under the name Po. Puspa Jaya. Thanks to its diligence and tenacity, the company has survived and even developed, especially in Lampung province. Then in 1994, it began to use an AC bus with the early Lampung route - Denpasar. along with market demand in 2000, PO Puspa Jaya also used executive class bus with the Lampung - Yogya route, Solo Wonogiri and Patas AC class bus for the Lampung - Semarang - Solo route Ponorogo - Blitar route. Now PO.Puspa Jaya not only serves Regular but also Serves Tourism bus with the formation of the Tourism Division to meet consumer demand.

2.4.2 Vision and mission

In accordance with the PO.Puspa Jaya Tag line, namely "satisfaction is our priority", it has the following vision and mission.

Vision

- Being a transportation company that excels in service because customer satisfaction is our priority

Mission

- Providing the best service with a sense of family.
- Providing safe, comfortable, clean and affordable transportation.
- Providing excellent service for customer satisfaction is supported by quality human resources

2.4.3 Types of PO. Puspa Jaya Car

To provide comfort to the passengers, all our buses use the Mercedes Benz Brand which is famous for its comfort and we also choose a good quality bus body that is always updated with the latest model.

a. Jet Bus



Figure 2.1 Jet Bus

b. Categories of good quality



Figure 2.2 Good Quality Category

c. Medium Category



Figure 2.3 Medium Bus Category

d. Galaxy Exl



Figure 2.3 Medium Bus Category

3. METHODOLOGY

System Development Lyfe Cycle (SDLC) is the whole process of building a system through several steps. The software development method is known as the SDLC (Software Development Life Cycle). This methodology is of particular concern to the software engineering process. Because the SDLC methodology used will determine the success or failure of the software project.

el Waterfall ON Software Development Life Cycle (SDLC) is explained below.

3.1 Waterwall

Waterfall, is the oldest SDLC because of its natural characteristic. The waterfall SDLC sequence is serial from the process of planning, analysis, design, and implementation of the system. This model is a model that first appeared around 1970 so it is often considered obsolete, but it is the most widely used model in Software Engineering (SE). This model approaches systematically and sequentially starting

from the level of system requirements then goes to the stages of analysis, design, coding, testing / verification, and maintenance. It is called the waterfall because step by step through must wait for the completion of the previous stage and walk in sequence.

Advantages :

- Is the most reliable and long-term development model in use.
- Suitable for large-scale software system.
- Suitable for generic software system.
- Work on the project system will be well scheduled and easily controlled.

Disadvantages :

- System requirements must be clearly described.
- The details of the process must be absolutely clear and may not change.
- Difficult to adapt if there is a change in specifications at a development stage

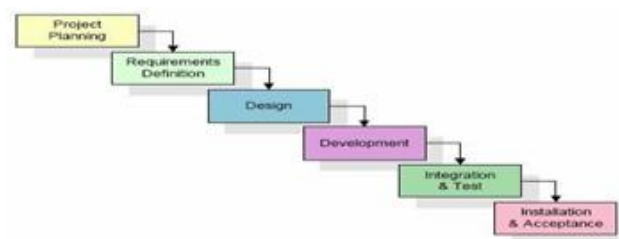


Figure 3.1 Waterfall Model

1. System Investigation

In the system investigation process, the application designer conducts a field survey to find out what problems occur and choose which problems are suitable to be resolved. In a system investigation, the most important thing is to study the problem to be solved. Starting from technical problems that include hardware, software and other components needed in designing application to solve these problems.

2. System Analysis

System analysis is the process of identifying problems that will be solved using information system. At this stage, the problem is determined, the causes of the problem are identified, detailing possible solutions and gathering information in order to find a solution. There are 3 ways that organizations might take to solve a problem, namely: keep using the old system and not change it, modify the system that is running, or build a new system

3. System Design

At the system design stage, a solution is sought so a system can complete what has been obtained from the system analysis. At this stage, design will be carried out which includes: output, input, and screen display of the system, hardware, software, database, telecommunication and procedure, and how all components can be connected into one part

4. Programming

At the programming stage, translation will be carried out from the design that has been designed equipped with information that is already available into computer code. This process is very possible to take a long time. Generally, this process is done in teams and in writing programs, it uses structured programming techniques that consist of many modu.

5. Testing

The next stage is the testing stage or often also called testing. At this stage, a check is made whether the program will produce data in accordance with the

requested in various conditions. Testing requires a long time and must be done continuously in stages. Another purpose of this testing is to check whether there are errors or bugs from program that has been successfully created. There are 2 types of errors that may occur, namely syntax error and logic error.

6. Implementation

Stage of implementation is the stage of using a new system to replace the old system that is currently running.

3.2 Hardware or Software Specification

3.2.1 Hardware Specification

The hardware used to build this Web Based Decision Support System for Achieving Employee Based on Performance with the following specifications:

- ❖ Processor Intel Dual Core 2.6 Ghz
- ❖ Mainboard ASUS/Gigabyte/ECS
- ❖ RAM DDR2 V-gen 2 Gb
- ❖ HD 80 Gb Seagate/Samsung SATA
- ❖ Casing ATX 450w + 2 FAN CPU
- ❖ LCD LG/Samsung Wide Screen 17"
- ❖ DVD-RW Samsung
- ❖ Keyboard
- ❖ Mouse

3.2.2 Software Specification

- ❖ Windows XP SP2
- ❖ Controller Bandwidth Controller / Manager
- ❖ Mozilla
- ❖ Firewall
- ❖ Anti Spyware, Malware, Adware
- ❖ MySQL Version 3.51.12
- ❖ PHP Version 4.0
- ❖ Xampp Version 2.5

4. DESIGN AND IMPLEMENTATION

4.1 Context Diagram

There are three entities in the context of the E-Commerce information system in the KiosBurung, namely supplier, customer and owner. Supplier provides data of goods into the system, which contains the name of the item, the selling price of bird and the types of birds entered,

which will then be processed on E-Commerce information system. Then the E-Commerce information system will produce output in form of proof of the transaction that is the memorandum of the result of the sale transaction that will be given to the customer, the supplier bird sale report that will be given to the supplier, and the overall report that will be given to the owner.

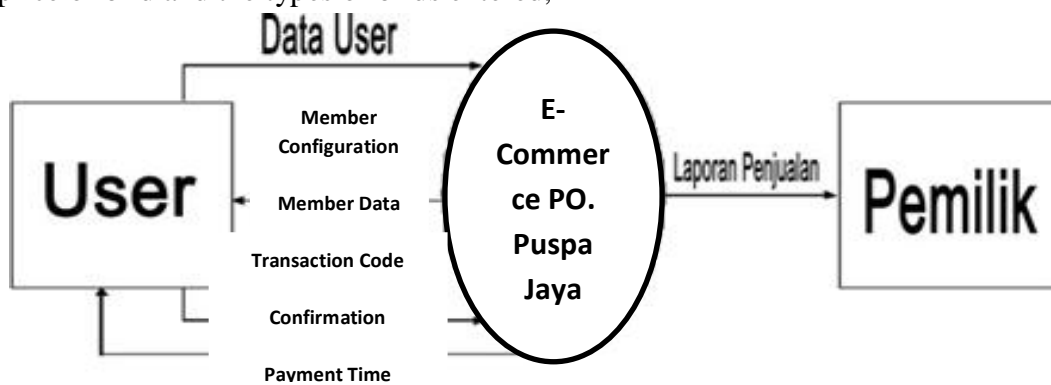


Figure 4.1 Context Diagram

4.2 DFD 0

In Data Flow Diagram level 0 there are 4 processes, including.

- Process 1.0 is the process of checking bird, price and quantity. The list of birds, prices and quantities given by the supplier is checked first, to be adjusted to the number of items available, then stored in a file that is the bird file.
- Process 2.0 is the process of recording bird, price and quantity. In this process, activities are carried out recording the name of the bird, the selling price of bird, and the number of birds available. Once recorded, the data is stored in a bird file.
- Process 3.0 is the process of bird sale transactions. In this process, bird sale data in form of the names of birds sold, the number of birds and the total sales of birds will be processed so as to produce evidence of transaction that will be given to customer. Then the data from all sales transactions will be given to 4.0 process to make a report.
- Process 4.0 is the process of making report. All sales transaction data and bird data, price and quantity are then processed to make a report. Report produced is in form of supplier bird sale report that will be given to suppliers and overall report that will be given to the owner.

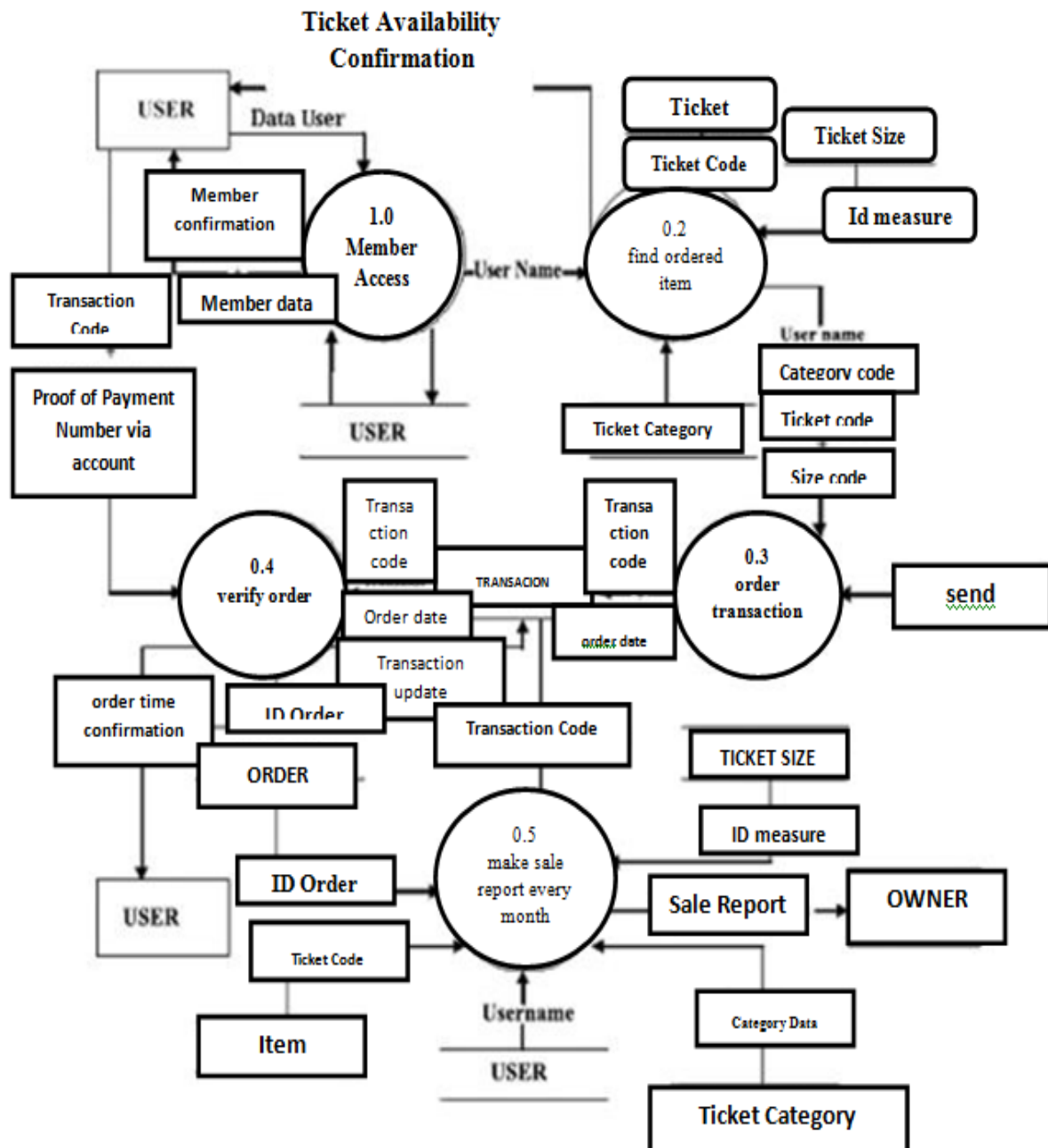


Figure 4.2 DFD Level 0

4.3 Implementation

Implementation is the process of making the application to be implemented. Where the manufacturing step starts from typing the program to testing the program for errors that may occur before entering the system implementation.

a. Website General Display



Figure 4.3 Implementation of the Main Page

b. Gallery Page Display

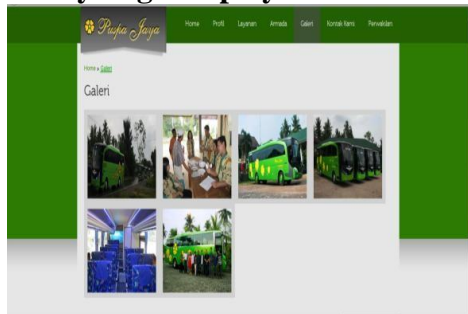


Figure 4.4 Implementation of the Gallery Page

c. Profile Page Display

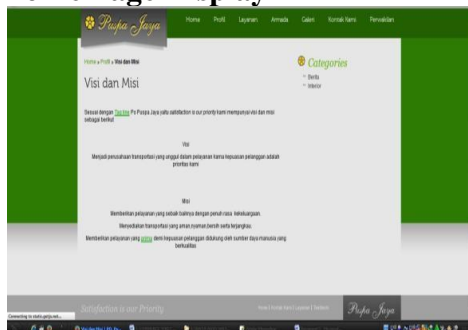


Figure 4.5 Implementation of the Profil Page

5. CLOSING

5.1 Conclusion

From the result of the analysis and design carried out by the author, it turned out that several conclusions were generated regarding the Ticket and package Sale Information System on PO. Puspa Jaya Kotaagung namely:

1. By using a website-based sale system, the scope and reach of the marketing became wider.
2. Providing convenience to customers to find out information about the latest tour packages and could book packages directly on the website.
3. Made it easy for customers to find information in purchasing tickets and tour packages and customers could provide complaints in form of criticism and suggestion through the website.

4. With this website, seller could save money on making brochures that aimed to promote tour packages.

5.2 SUGGESTION

It is recommended for PO. Puspa Jaya Kotaagung to do several things as follows:

1. Notification / promotion can be done through the PO. Puspa Jaya Kotaagung website widely.
2. The need for HR to act as an administrator, whose job is to handle and manage the website through the special page provided.
3. The design of e-commerce application that the authors has made is expected to be implemented to support its development process and provide convenience in completing the company's performance process at PO. Puspa Jaya Kotaagung.

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