

WEB-BASED BATIK CLOTHING INFORMATION SYSTEM ON CV. DESTA BOGOR

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ABSTRACT

CV.Desta is one store that is located in the Bogor area. On the CV.Desta authors conducted an analysis of sales system that is running thr current. Sales are only made in the store are still not getting the maximum result. Income and lact of promotion does not necessarily make CV.Desta still not known to the public. Moreover want development and expansion of sales and increased sales not only in the store. To overcome such problems, the authors intend to try to handle the sales process by designing an information system is a web-based sales of goods or more often in the know as e-commerce using the programming language php and mysql.

Keywords : CV.Desta, E-Commerce, Web, MySQL

1. Introduction

Background of the problem

Currently the internet is one of the cheapest communication infrastructures and the range of reception is wide and unlimited. The internet is also often used as a media for promotion, communication, buying and selling of products, services and complete information media online. With the advantages of the internet that can provide services without time limits and easy access at affordable costs as well as other conveniences, more and more business people are doing business using e-commerce(Ahmad & Hasti, 2018, Alfarizi, et al., 2018).

CV. Desta is one of the companies engaged in the sale of batik clothing. The sales information system in CV. Desta still uses the conventional method, namely the process of recording and calculating customer transactions which are done manually, so the time to do this is long. To see information about the products needed, customers must come directly to the store. Sales that are only carried out in stores are still not getting maximum results, uncertain income and lack of promotion make CV. Desta still not known to the public. In addition, they want to develop and expand sales and increase sales that are not only in-store. Therefore, this company still has problems in expanding its marketing area and the reporting process on CV. Desta is still experiencing problems such as delays in making sales reports and inaccurate sales data(Nasution & Baidawi, 2016; Prasetyo & Susanti, 2016).

The sales system mechanism at the Smith distribution is now still using the conventional system, where consumers have to come directly to the distribution. With the E-commerce application at the Smith Semarang distribution, it is hoped that it will make it easier for the public to buy products without having to come to the place, as well as expand marketing and increase customer loyalty(Kosasi, 2014; Apriyanto, 2011).

To solve the existing problems, the author wants to build an online sales application (e-commerce) to promote products and expand the sales area of CV. Desta. With the construction of the online sales application, business people can use it as a medium to promote their company and its products, so that they can be known more widely. And it is hoped that it will make it easier for consumers who will buy the products offered by business actors without having to come to the place directly.

Identification of problems

Identify the problems that occur in CV. Desta as follows:

1. The sales information system in CV. Desta still uses the conventional method, namely the process of recording and calculating customer transactions which are done manually, so that it takes a long time to do it.
2. To see information about the product needed, the customer must come directly to the store. Sales that are only made in stores are still not getting maximum results,
3. Lack of promotion makes CV. Desta still not known to the public.
4. The process of making reports on CV. Desta is still experiencing problems such as delays in making sales reports and sales data that are less accurate.

Formulation of the problem

Based on the problems described above, the author can formulate a problem, namely How to design an interactive website so that it supports an increase in the interest of visitors to be interested in the products offered? How to implement a website application as a support for sales information systems so as to make it easier for CV? How to test and evaluate the CV. Desta website application when the sales information system is already running?

Purpose and objectives

The purpose of writing this thesis is as follows:

1. Analyze the problems that occur in CV. Desta.
2. Make suggestions for the online sales process.
3. Create a web-based sales program at CV. Desta.
4. To help and make it easier for customers to process clothing purchases.

While the purpose of writing this thesis is as one of the requirements for graduation in the Undergraduate Program (S1) Department of Information Systems at the College of Informatics and Computer Management (STMIK) Nusa Mandiri, Jakarta.

Information system is a system within an organization that brings together the daily transaction processing needs that support the managerial functions of the organization's operations with the strategic activities of an organization to be able to provide reports required by certain outside parties (Asfinoza, et al., 2018; Bernadi, 2013).

According to Azwanti, (2017), "The popular view of e-commerce is the use of the internet and computers by browsing the web to buy and sell products". According to Sukanto and Salahuddin (2011:118) "UML is a visual language for modeling and communicating about a system using diagrams and supporting texts".

According to Dharmawan (2015) concluded that: Use case or use case diagram is a modeling to perform (behavior) the information system to be created. Use describes an interaction between one or more actors with the information system to be created. Roughly speaking, use cases are used to find out what functions are in an information system and who has the right to use those functions.

According to Kosasi (2015) "Xampp is a program that contains Apache, MySQL and phpMyadmin packages". Xampp is an Open Source-based PHP package developed by an Open Source community.

2. Research Methods

To analyze and design the system, the authors conducted research with the following methods:

Data collection technique

This method is a method that is carried out by conducting research with the following methods:

1. Direct Observation (Observation)

The author collects data by direct observation of the sales activities of batik clothes that are being carried out by CV.Desta to find out the problems of the running system.

2. Interview

The author conducted a question and answer process to Mr. Juhriyadin as the owner of CV. Desta about the information needed by the author as material for writing this thesis.

3. Literature Study

The author obtains data or information sourced from data collection, studying reading books, notes, journals, internet, e-books and other relevant lecture materials. In this case, the writer collects data related to thesis material through reading manuals that have to do with thesis writing.

B. System Development Model

In the development of this system the authors perform several stages, among others:

1. Software Requirements Analysis

Software is a device that allows computers to carry out the commands that we give. The software needed by the author is the PHP programming language, Macromedia Dreamweaver Text Editor 8. Documents needed to develop a website that is needed by the author such as goods data, customer data, order data, sales reports and shipping reports.

2. Design

At this stage the author designs the system using several stages: System Design by Describing the data flow that exists in the system using UML (Unified Modeling Language) tools using 4 UML diagram models, namely Use Case Diagrams, Activity Diagrams, Component Diagrams, Deployment Diagrams. Database Design by Designing database requirements by using ERD (Entity Relationship Diagram) and forming into normal tables in order to create a database that is not redundant and Create LRS (Logical Record Structure) for the description of the relationship. Design Input (Input) by Designing input forms based on input documents that run on the sales information system at CV. Desta. Designing Output by Designing an output form based on input documents that run on the sales information system at CV. Desta (Torre, et al., 2022).

3. Code Generation

In making the program the author uses structured or procedural programming techniques. The stages are: create a database, create a table and make it happen on the web to match the system that the author created.

4. Testing

The author tests the login form and sales form by means of black box testing, where this testing aims to ensure that all kinds of content contained in this program run according to the desired system.

5. Support

At this stage to keep the system running well, productively and the system has durability for years by using the appropriate hardware and software. Hardware is the physical devices that make up a computer and help enable the computer to work. The hardware that I use is the Intel® Atom™ CPU Z530 @ 1.60 GHz or equivalent, 2.00 Gb hard drive, 2 GB DDR2 RAM, Microsoft XP Professional Operating System or later, while the software I use is Macromedia Dreamweaver Text Editor, Apache Web Server, MySQL database, browse Mozilla Firefox.

C. Related research

The supporting theory will explain several theories taken from the journal. The journals used are: Umami Collections is a store that provides various kinds of Muslim headscarves and clothing, in conveying product information Umami Collections still uses conventional methods such as billboards, brochures, as well as telephone and sms. The development of the E-Commerce application is a solution that is expected to help convey the promotion of Umami Collections products, with the features found on the e-commerce website to assist customers in communicating and ordering online. By using this e-commerce website, the delivery of information about the products owned can be wider in scope, for that the promotion of products owned by Umami Collection can be maximized (Damayanti, 2019).

Color AC Company is a company that is in the process of developing the market, where there are still many SMEs that have not used a sales system via the internet or E-Commerce. The cash sales system that has been used by Warna AC is using a manual cash sales system so that its performance has not been effective due to irregular archive buildup. On the other hand, customers have difficulty obtaining information about the types of goods, pictures, availability,

product descriptions, and product price information, which is one of the obstacles faced during the use of conventional systems. To see information about the products needed, customers must come to the store to find out detailed information(Jurgelaitis & Butkienė, 2022).

3. Results and Discussions

A. Software Requirements Analysis

1. Analysis Stage

Web-based online sales system where sellers and buyers do not meet face-to-face. Prospective buyers make purchases through a media browser. The following is a specification of the requirements (system requirements) of the e-commerce system. Buyer Page:

- A1. Buyers can register.
- A2. Buyers can select the items to be purchased and added to the shopping cart.
- A3. Shoppers can filter items by category.
- A4. Buyers do finished shopping.
- A5. The system facilitates the selection of delivery couriers.
- A6. Buyers can print product order receipts.
- A7. Buyers can login with the account that has been created when shopping the next day.
- A8. Buyers can confirm payment.

Administration Page:

- B1. Admin can manage item data.
- B2. Admin can manage customer data.
- B3. Admin can manage order data.
- B4. Admin can manage confirmation reports.
- B5. Admin can manage delivery reports.

2. Use Case Diagram

The use case diagram is used to describe what this sales system should do, the following is an overview of buyers and admins when using and interacting through online sites

a. Use Case Diagram Online Shopping Buyer Page

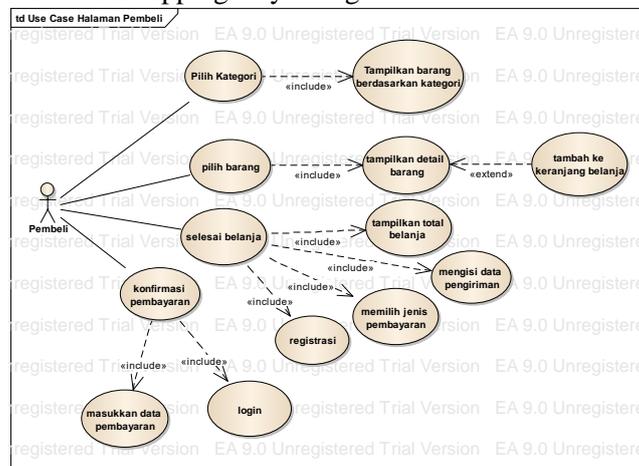


Fig 1. Use Case Diagram Online Shopping Buyer Page

b. Use Case Diagram Online Sales Administrator Page

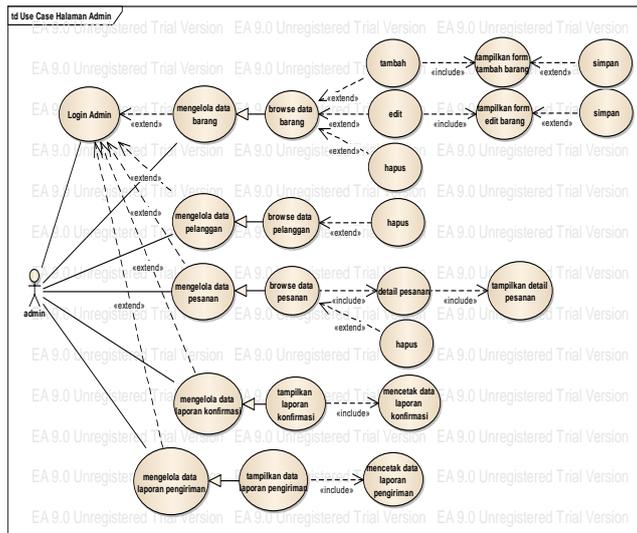


Fig 2. Use Case Diagram Online Sales Administrator Page

3. Activity Diagram

a. Activity Diagram of Online Shopping Buyer Pages

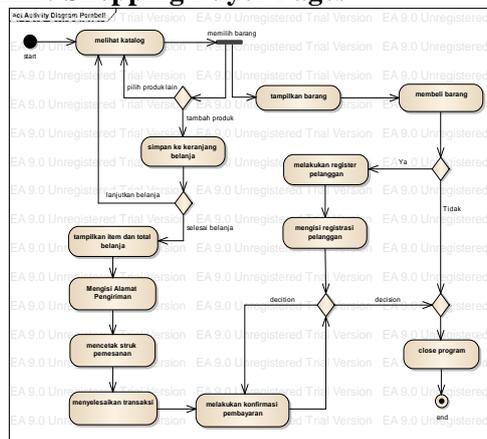


Fig 3. Activity Diagram of Online Shopping Buyer Pages

b. Activity Diagram Managing Item Data

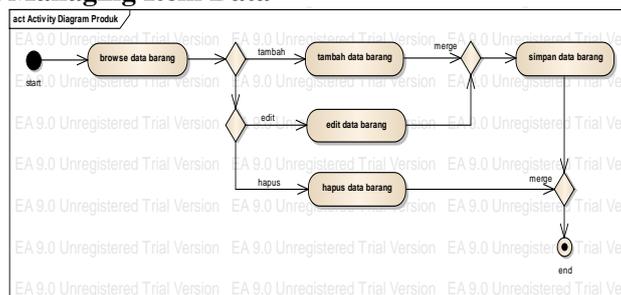


Fig 4. Activity Diagram Managing Item Data

c. Activity Diagram of Managing Customer Data

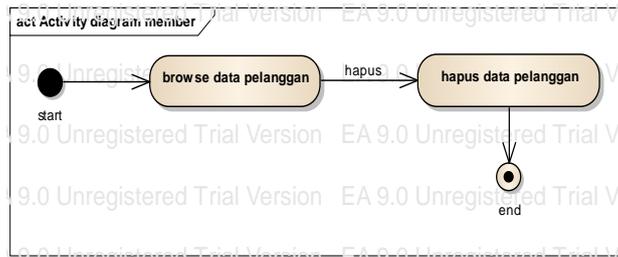


Fig 5. Activity Diagram of Managing Customer Data

d. Activity Diagram Managing Order Data

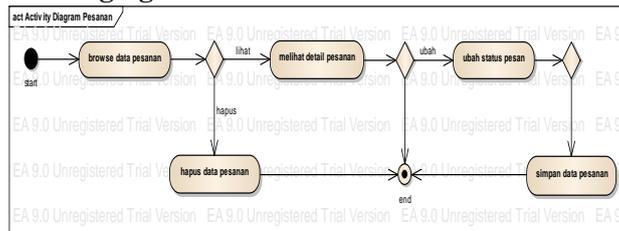


Fig 6. Activity Diagram of Managing Order Data

e. Activity Diagram Managing Confirmation Report Data



Fig 7. Activity Diagram of Managing Confirmation Report Data

f. Activity Diagram Managing Delivery Report Data

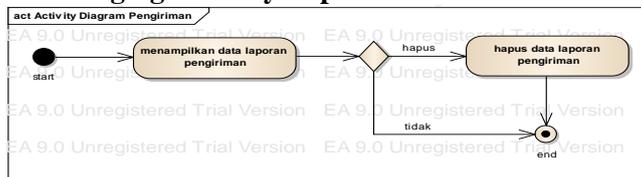


Fig 8. Activity Diagram of Managing Delivery Report Data

2. Software Architecture

For structured programming, the UML (Unified Modeling Language) described are Component Diagrams and Deployment Diagrams, described as follows:

Component Diagram

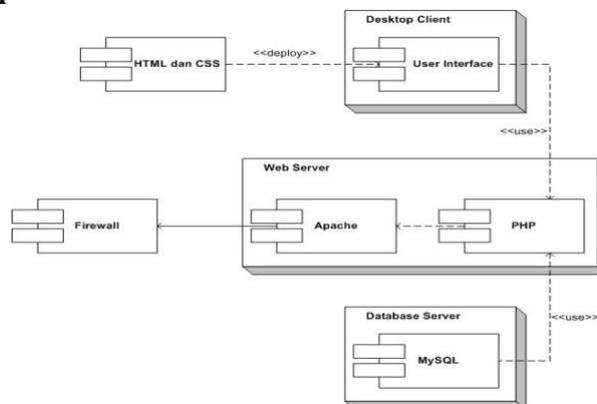


Fig 9. Component Diagram

Deployment Diagram

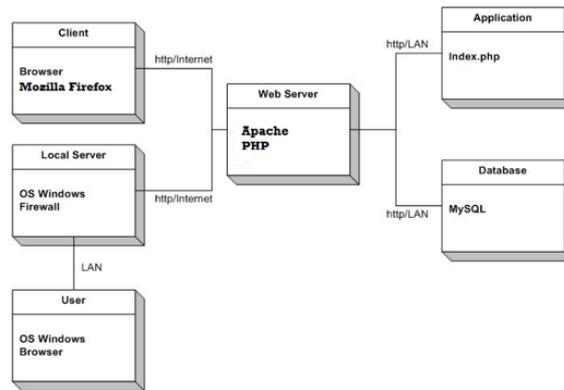


Fig 10. Deployment Diagram

3. User Interface

Some of the proposed system user interface designs on the CV.Desta e-commerce website, including:

a. Home View



Fig 11. Home View

b. Catalog View

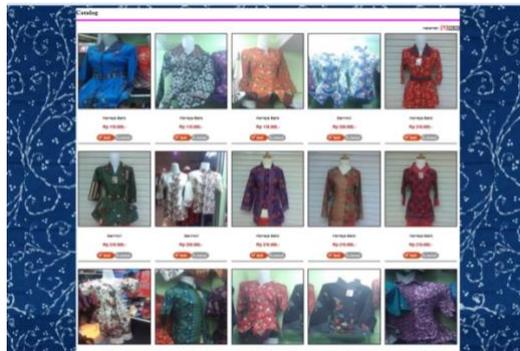


Fig 12. Catalog View

c. Display How to Order



Fig 13. How to Order Page

d. Member List View



Fig 14. Member List View

e. Shopping Cart Display



Fig 15. Shopping Cart Display

f. Receipt Print View

STRUK TRANSAKSI PEMBELIAN BATIK ONLINE

Nama : nuryanti
No. Order : TR-042

No	Kode Produk	Nama Produk	Jumlah	Harga	Subtotal
1	BTK-39	Blus	1	Rp. 210.000	Rp. 210000
2	BTK-38	Blus	1	Rp. 210.000	Rp. 210000
3	BTK-34	Blus	1	Rp. 210.000	Rp. 210000
Ongkos Kirim : Rp.					20000
Total : Rp.					650000

Print Date : 20140901-09:54:21 WIB

Silahkan Simpan Struk ini sebagai bukti pemesanan anda.
Struk Hanya Tampil sekali, silahkan simpan struk ini.
Apabila Anda tidak melakukan pembayaran dalam 3 hari,
maka data order Anda akan terhapus(transaksi batal).

Pembayaran di tranfer ke :
Bank Mandiri : 4097662173084719 atas nama nuryanti
Bank BCA : 6278910400093452 atas nama nuryanti

TERIMA KASIH TELAH BERBELANJA

Fig 16. Receipt Print View

g. Payment Confirmation Display



Fig 17. Payment Confirmation Display

5. Conclusion

The web-based batik clothing sales information system has several advantages, namely it can be accessed anywhere and anytime without space and time limits, provides up-to-date information about batik clothes being sold, for example: the price of batik clothes makes it easier to promote batik clothes, make it easier for consumers to shop without having to come directly to CV. Desta or meet directly with the seller so that it is more efficient. There is an admin page that makes it easy for admins to add, edit or delete data contained in this website. With its user-friendly appearance, anyone can easily use this website. The use of a database system can make it easier to monitor the availability of batik clothes, transaction data and other data quickly, precisely and accurately. The use of the internet makes it easier to promote and sell batik clothes, so that transactions can be done quickly and accurately (Angraini, et al., 2020).

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