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E-Commerce AF Parfum System Website Based Using Design Thinking Method

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ABSTRACT

Perfume is a fragrance that is produced from the extraction process of aromatic ingredients that are used to provide a fragrant aroma to the human body. E-commerce that develops in the field of information technology that provides convenience and advantages, if compared to conventional sales such as consumers can buy goods online and make it easier for consumers to transact and sellers get large profits because the merchandise is more familiar with the public and can manage data systematic sales.The development method in building AF Perfume E-commerce System is based on the theory of model design thinking. Design thinking is a software development methodology that proposes approaches to solve problems and gather ideas in order to get solutions. The purpose of research writing is to produce a Website-Based AF Perfume E-Commerce System. With the application of this system will facilitate and benefit many parties both consumers and sellers.
Keywords: E-Commerce, Parfume, Design Thinking, Website

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1. INTRODUCTION

Perfume or perfume is a fragrance that is produced from the process of extracting aromatic ingredients that are used to give fragrances to the body, objects or rooms. The extraction process produces essential oils that have a very thick fragrance. The perfume that is usually sold does not consist of completely pure essential oils, but has gone through a mixing and dilution process, the mixture consists of the essential oil itself, distilled water and alcohol.

Af perfume is a perfume business where the products provide aroma of about 400 variants, as for the problems found in the perfume AF system, the sales data manager is still manual, making it difficult for shop owners to find sales data and products for perfume are less well known to the public so that shop owners do not reach the target. sales and also buyers from outside the city of Medan have difficulty buying af perfume products and difficulties in payment because buyers have to come to af perfume shops.

The solution to this problem is to build an e-commerce system after a website-based perfume, the author uses the Design Thinking method to solve the problems faced by users of the E-Commerce AF Perfume System, because the design thinking method is used to collect ideas so as to produce solutions in solving problem (Zaki and Sukoco, 2018). There are several stages, namely:

1. Emphaty understands the problem.
2. define the problem.
3. ideate determine and identify solutions to existing problems.
4. Prototype makes an overview of solutions to solve problems.
5. System testing test.

so that this system helps store owners in finding sales data that has been systemized and makes it easier for buyers to buy goods at a perfume shop online and the transaction process is carried out via bank transfer.

Based on previous research conducted by (Pradipta et al., 2016), this study has shortcomings in its E-Commerce System, namely there is no feature to interact or communicate between sellers and

buyers. So I want to make my Perfume AF E-Commerce System use the via chat feature so that buyers and sellers can communicate well, so that buyers are satisfied when they want to ask the seller something.

Electronic commerce or called E-commerce is one of the results of the development of internet technology. Understanding E-commerce According to (Yusuf et al., 2015) E-commerce stands for Electronic Commerce which means exchanges mediated by technology between several groups (individuals or organizations) electronically based on intra-organizational or interorganizational activities that facilitate the exchange.

According to Wahyuni and Cahyana (2016), "A website or site can be interpreted as a collection of pages used to display text information, still images or motion, animation, sound or a combination of all of them. In a website, there is a page known as the home page. Homepage is a page that is first seen when someone visits a website". According to MADCOMS (2016) "MySQL is an open source SQL database management system and is the most popular today. MySQL Database System supports several features such as multithreaded, multi-user and SQL Database management system (DBMS)". According to Kadir in Susanti (2016), MySQL is a type of database server that uses SQL as the basic language to access its database ". According to Novianto (2016) states that, "A framework is a collection of basic commands or functions that form certain rules and interact with each other so that in making website applications, it is required to follow the rules of the framework".

Meanwhile, according to Raharjo (2018) defines "Codeigniter is a web framework for the PHP programming language, created by Rick Ellis in 2006, the founder and founder of EllisLab, a work team founded in 2002 which is engaged in software development and tools for web developers.

According to Sukamto in Taufik and Ernmawati (2017), "UML is a visual language for modeling and communication about a system using diagrams of supporting texts".

The objectives of the Unified Modeling Language (UML) are as follows:

1. Modeling a system (not just software) using object-oriented concepts.
2. Creating a modeling language that can be used by both humans and machines.
3. Provides a language that is free from various programming languages.

The author uses the Design Thinking method to solve problems faced by users of the E-Commerce AF Perfume System, because this design thinking method uses an approach model that can be carried out by a business entity, the design thinking concept approach model is chosen because it has several stages, namely Emphaty, define, ideate, Prototype, Test. As well as a flow of thought that is systematic, mutually sustainable, and easy to understand and apply, so that this design thinking method can collect lots of ideas for solutions to the problems experienced (Fauzi, 2019).

Therefor this study aims to understand the users of the E-Commerce AF Perfume System, with this method developers can be creative with their ideas, but also they can find out the needs of users of the E-Commerce AF Perfume System.

So based on the author's research, the author wants to create and raise the title, "Website-based E-Commerce AF Perfume System using the Design Thinking method (Case Study AF Perfume Shop)".

2. RESEARCH METHOD

Software Development Methods In developing software, the author uses methods to solve problems and describe the steps that exist. The system development method used is the Design Thinking method. The author uses the Design Thinking method because the system process is carried out systematically starting from empathy, define, ideate, prototype, test, in accordance with the development of the E-Commerce System to be built.

A. Design Thinking Methods

The design thinking method is a method that provides a solution-based approach to solving a problem. The following are the stages in the design thinking method, which are as follows:

1. At this stage the author takes the empathy stage which is the first step taken in building an E-Commerce system by understanding the problem that you want to solve in the AF Perfume shop. In a perfume shop, the problems that often occur are: managing sales data that are still manual, the less familiar product of perfume by the surrounding community, the buyer must come to a perfume shop to buy a perfume product and pay for the product must also come to a perfume shop.

2. Furthermore, the define stage is to determine the problems that occur in the AF Perfume shop that will be identified so that this stage is very helpful for solving user problems because the problem has been determined. Based on the define stage, the essence of the problems that occur in a perfume shop is found, such as problems with managing product data, payments, communication between buyers and sellers.
3. After that, go to the third stage, namely ideate, which is an idea to produce a solution, all these ideas will be accommodated to solve problems that will be applied to the system. So the idea that the author will create is: building a website-based E-Commerce AF perfume system, by building a perfume E-Commerce system this can make it easier for shop owners to manage product / sales data, make it easier for buyers to buy perfume products online, payment done online / via bank transfer, as well as creating an AF Perfume E-Commerce System so that AF Perfume can be recognized and purchased within the city and outside the city.
4. Furthermore, the fourth stage, namely the prototype stage, is the stage where the focus is on making a program system including database structures, system design, interface / face-to-face design, and program coding procedures, at the prototype stage using draw.io to design a system or design an interface system design.
5. And the last stage, namely the test stage is the stage of testing and evaluation of the system, carried out to obtain responses and feedback in accordance with the results of the prototype that has been made to find out whether the solution made by the author overcomes the problems that occur in a perfume shop.

B. Systems Design

The author uses a system design using UML. The UML method used in the design of the web-based E-Commerce AF Perfume System application includes Use Case Diagrams, Sequence Diagrams, Activity Diagrams and Class Diagrams.

1. Use Case Diagram

This use case diagram identifies in detail the components being designed. The purpose of depicting a use case diagram is to provide a general overview of system users (E. R. Syahputra & Oktavianasembiring, 2019). The picture of the Use case diagram can be seen as follows:

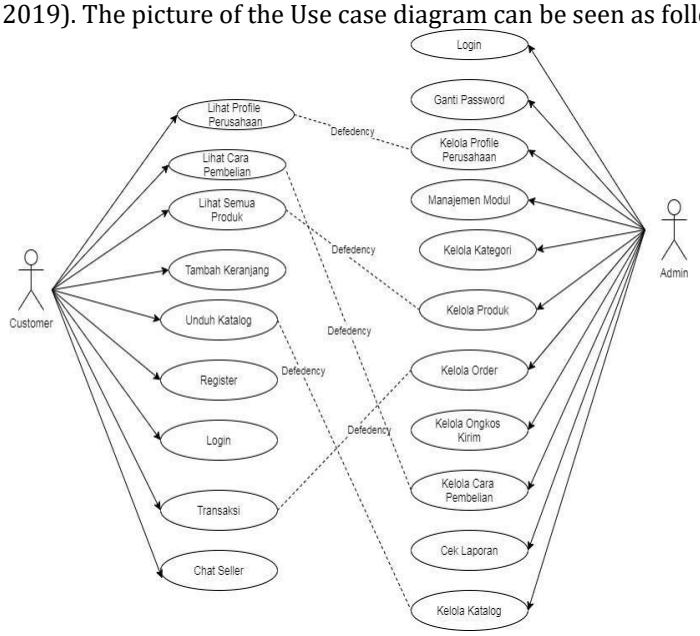

Fig 1. Use Case Diagram

2. Class Diagram

Class diagram is a static model that demonstrates the structure and description of classes and the relationships between classes. The following is the Class diagram system design as follows:

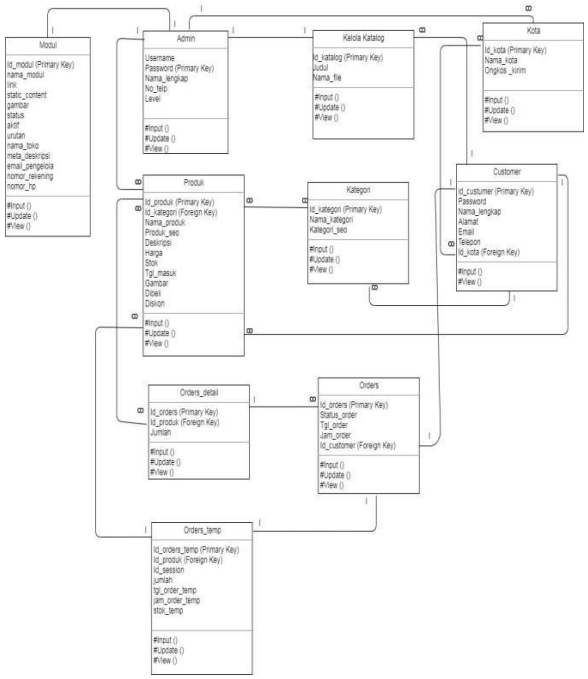

Fig 2. Class Diagram

3. RESULTS AND DISCUSSION (10 PT)

A. Research result

In the results of this study, the authors implemented the programming language and tested the system after the system design was carried out. In its implementation, it includes a design that has been built in the system design. After implementing it, the system is tested, if the system that is seen has deficiencies then there is further system development. In this study, in building a website-based E-commerce AF Perfume system using the design thinking method, in this chapter the authors display (screen capture) each display of the software that has been implemented. After the system has been analyzed and designed in detail, it will go to the implementation stage. Implementation aims to confirm the design module so that the user can provide input to the system builder. The results of the research conducted by the author, namely building a website-based E-commerce AF Perfume System, the existence of this system can benefit shops and buyers, because it makes it easier for shop owners to work on sales data and buyers can make transactions online.

1. Admin Login Menu view

On the admin login menu, there is a username and password input form, which is used to be input by the admin to enter the administrator page, following the admin login menu display, namely:

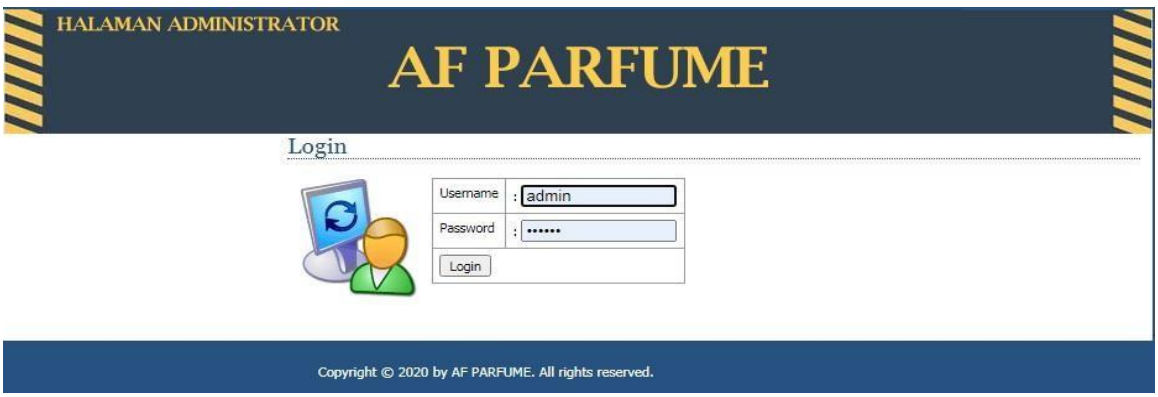

Fig 3. Login Admin

2. Customer Login View

In the customer login display, there is a login input form so that they can enter the system, the following is the customer login display, namely:

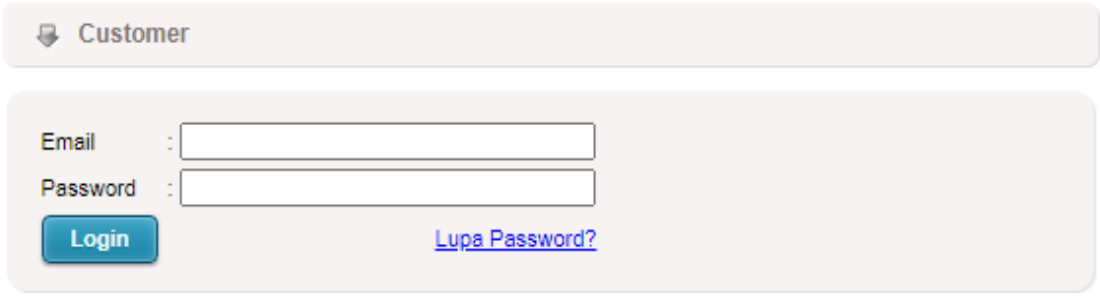

Fig 4. Login Costumer

3. Add Cart view

In the added basket view, there is a display of the items selected by the customer to access buy at af perfume shop, here is the added display basket, namely:

Fig 5. Add cart

5. Transaction View

In the transaction view, there is a display of the payment process for goods at a perfume shop, here is a display of the transaction, namely:

Fig 6. Transaction

6. Check Report View

In the report check display, there is a sales report at the JAF Perfume store, the following is the check report display, namely:

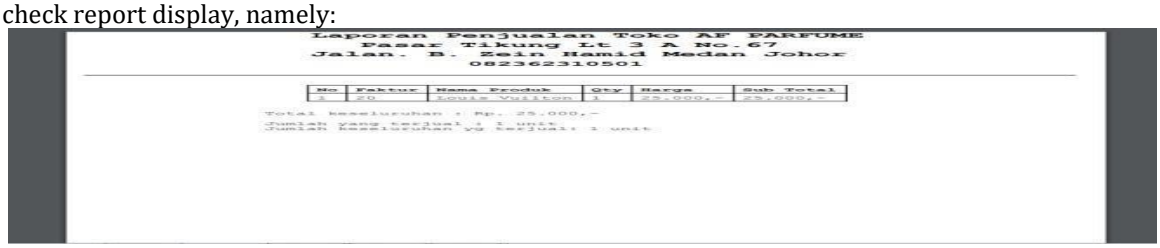

Fig 7. check report

4. CONCLUSION

The following conclusions can be concluded by the author of the Website-based E-commerce AF Perfume System, namely:

1. This E-commerce AF Perfume system makes it easy for customers to buy goods at the AF Perfume shop online and makes it easier to process goods payments via bank transfer.
2. The E-commerce AF Perfume system makes it easy for shop owners to sell their perfumes online, manage sales data.
3. The E-commerce AF Perfume system can communicate with the shop owner / admin via chat which is transferred to via WhatsApp.
4. The E-commerce AF Perfume system was built using the PHP programming language and mysql database and using the Codeigniter framework.
5. The E-commerce AF Perfume system uses a design thinking method that provides a solution-based approach to solving problems faced by users.

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