E-COMMERCE APPLICATION FOR SALE OF FRAGILE GOODS AT THE WEBSITE-BASED BUSINESS STORE OF PATRAH

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Article Info	ABSTRACT
	The development of information technology today is a necessity that must be mastered by every individual or organization to increase effectiveness and efficiency in a field, especially in business. There is a use of information technology to support a very diverse business, one of which is the use of electronic commerce or what is commonly called electronic commerce. Toko Usaha Patrah is a shop that sells household appliances. So far, the sales processing system has been less than optimal, and it is difficult to reach customers. Based on these problems, Usaha Patrah requires a good online sales business process to support the smooth running of the business. So the implementation of a web-based e-commerce application to expand its business and be known to many people.

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1. INTRODUCTION

The increasingly advanced and developing communication technology creates various influences for its users, apart from the influence of technology, it also provides advantages and disadvantages. Society is required to be more able to utilize technology according to its functions and needs. (Hendriyati & Yusta, 2021) One example is the internet, which is a form of technological development that we often encounter and has now become a necessity for almost all groups.

The development of information technology today is a need that must be mastered by every individual or organization to increase effectiveness and efficiency in a field, especially in business. There is a very diverse use of information technology to support businesses, one of which is the use of electronic commerce or what is commonly called electronic commerce.

E-commerce is one of the implementations of online business, the process of buying and selling products and services offered through the network. Having the right and accurate e-commerce can reduce unnecessary errors and increase profits when purchasing goods or services. (Musthofa, Nurul; Adiguna, 2022)

Toko Usaha Patrah is a shop that sells household appliances. So far, the sales processing system has been less than optimal, and it is difficult to reach customers. Based on these problems, Patrah Business requires a good online sales business process to support the smooth running of the business. So the web-based e-commerce application is implemented to expand its business and be known to many people.

2. THEORETICAL BASIS

2.1. Design

System design is a condition where the developer creates a scheme for the application to be built, which is based on the results of the analysis [3]. According to Sidik, et al. (2018) "system design is the depiction, planning and formation of sketches or arrangements of several separate elements into a complete and functional unit"

2.2. application

An application is a computer program created to work on and carry out specific tasks from a user. According to Rachmad Hakim S, an application is software used for specific purposes, such as processing documents, managing Windows &, games and so on [4]. Applications are also software created with various attribute components that are appropriate for the user in order to help the user in processing each data to produce input and output [5].

2.3. E-commerce

E-commerce is a buying and selling activity carried out online by utilizing the support of information technology accessed through websites or mobile devices with telecommunications media in the form of internet networks. The use of e-commerce technology can be felt by consumers, both business-to-consumer (B2C) consumers and business-to-business (B2B) consumers. One of the factors that causes businesses to currently use e-commerce is to increase business efficiency and effectiveness, it is said to increase efficiency because it can minimize marketing costs, labor, and overhead costs. [6]

2.4. UML

Unified Modeling Language (UML) is a standard visual modeling language used in software engineering and information systems development.[7] UML provides a rich and diverse notation for describing, designing, and documenting various aspects of a software system or information system. It helps in understanding, communicating, and documenting system designs effectively.[8][9]

3. RESEARCH METHOD

3.1. Research Stages

The research stages for creating an e-commerce application system at the Patrah Business Store are as follows:

Figure 1. Research Stages

1. Data Collection

At this stage, the researcher collects data related to the problem to be solved. In this study, the researcher used the interview method and direct observation to the research location, for the target data taken is the sales information data in the store. And after taking the data, the data is processed to filter which data is taken

2. System Design

At this stage, the needs that must be met are collected, both hardware and software, and also at this stage the architecture of the entire system to be implemented is formed, in the design process using UML to facilitate the design of the inventory system to be created

3. System Trial

The design results that have been built in the previous stage are poured into the form of an implementation of each program unit to form a single system. Furthermore, the trial stage of the system created will be carried out.

3.2. System Design

In this study, the author uses Object-Oriented modeling with the UML approach. The diagrams included include Use case diagrams. Use Case is an interaction that occurs between systems, in the e-commerce application system there are 2 users, namely customers and admins, more details can be seen in the image below:
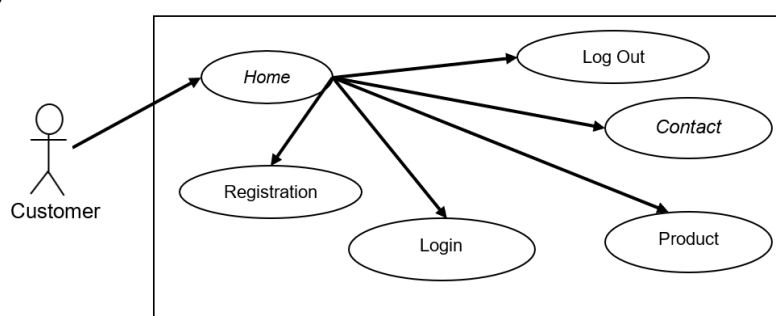
Figure 2. Use Case Diagram Customer
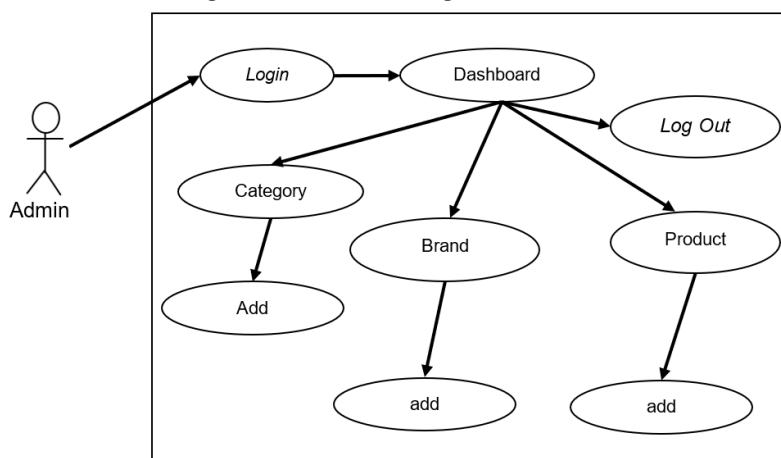
Figure 3. Use Case Diagram Admin

4. RESULTS AND DISCUSSIONS

In the research of making an e-commerce system at Toko Usaha Patrah, the author describes the results of the system created in the form of an application display. For more information, see the display below:

1. Home display

The display that first appears when we first access the store application that was created, can be seen in the image below:
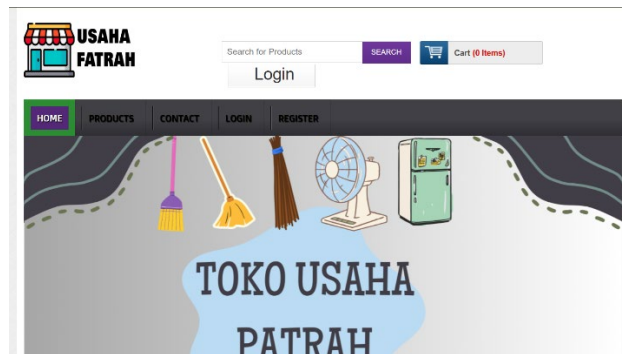
Figure 4. Home display

2. Product Display
The display that appears when we click on "product" on the home menu, the product itself displays several pieces of information such as information on the product being sold, incoming goods data and outgoing goods data, as can be seen in the image below:
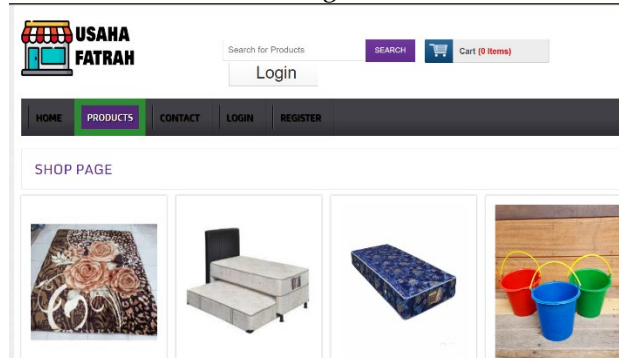

Figure 5. Product Display

3. Contact Display
The display that appears when we click "contact" on the home menu, this display provides some shop contact information, which can be seen in the image below.:
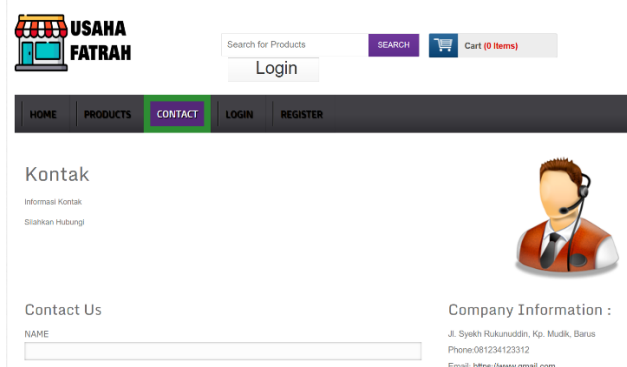

Figure 6. Contact View

4. Registration Display
The display that appears when we click "registration" on the home menu, on this display we are asked to fill in data for account registration, can be seen in the image below:
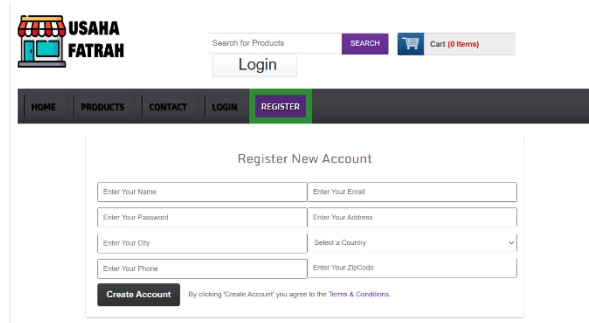
Figure 7. Registration Display

5. Login Display
The display that appears when we click "login" on the home menu, on this display we are invited to log in, can be seen in the image below:
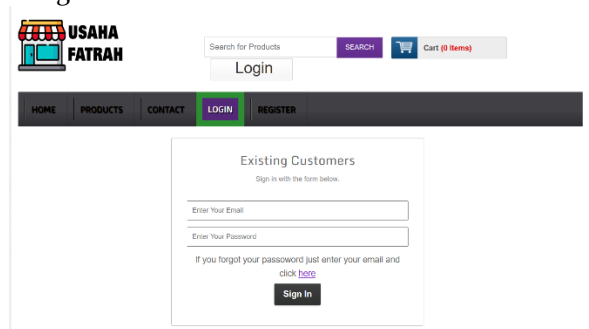

Figure 8. Login Display

6. Admin Login Display
This page is to access the admin system to add or change sales data in the store, in this display we are also asked to enter a username and password for login access, as can be seen in the image below:
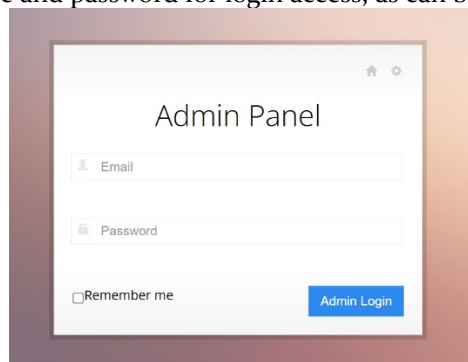

Figure 9. Admin Login Display

7. Dashboard Display
After we log in to admin access, we are directed to the dashboard page, on this page we can see some information, for more details, see the image below:
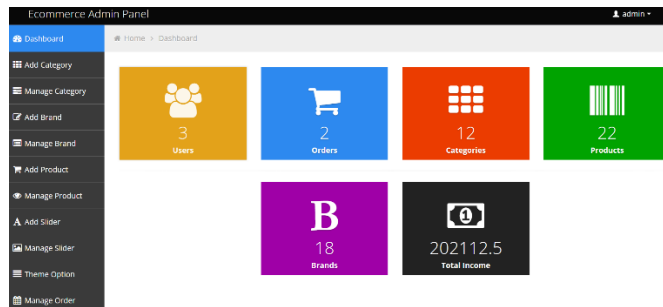
Figure 10. Dashboard Display

8. Category Display

The display that appears when we click "Category" on the admin dashboard menu, in this display we can see existing category information, as seen in the image below:

Figure 11. Category View

9. Add Category Display

The display that appears when we click "Add Category" on the admin dashboard menu, in this display we can fill in data for the latest category, can be seen in the image below:

Figure 12. Add Category View

10. Brand Display

The display that appears when we click "Brand" on the admin dashboard menu, in this display we can see existing brand information, as seen in the image below:
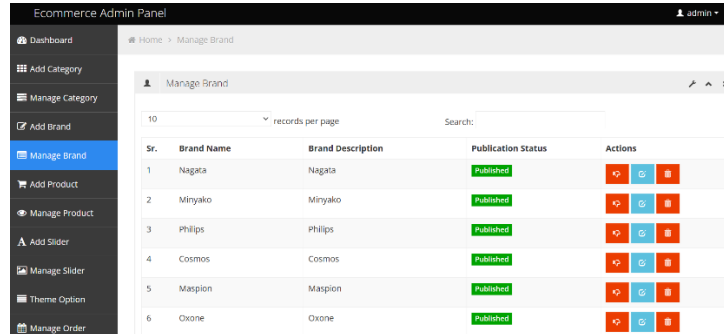
Figure 12. Brand Display

11. Add Brand Display
The display that appears when we click "Add Brand" on the admin dashboard menu, in this display we can fill in data for the latest brand, can be seen in the image below:

Figure 13. Add Brand View

12. Product Display
The display that appears when we click "Product" on the admin dashboard menu, in this display we can see existing product information, as seen in the image below:

Figure 14. Product Display

13. Add Product Display
The display that appears when we click "Add Product" on the admin dashboard menu, in this display we can fill in data for the latest products, can be seen in the image below:
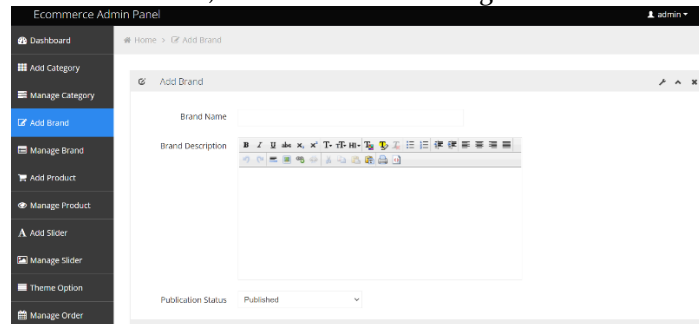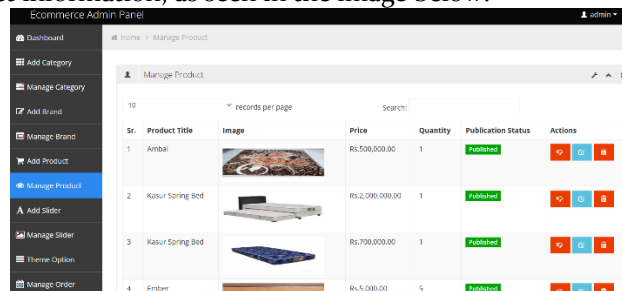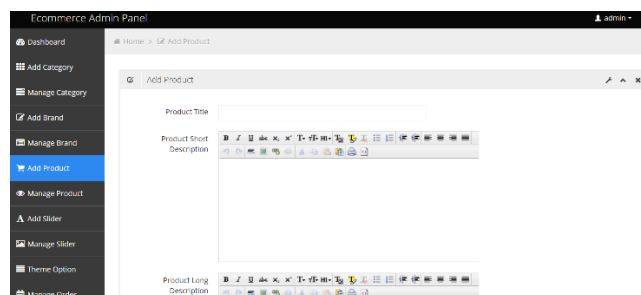
Figure 14. Add Product Display

5.   CONCLUSION

In making the e-commerce application system at Toko Usaha Patrah, it runs with the achievements made, this system can facilitate the fatra business store in promoting products sold to customers. for this sales system, it is still necessary to do some development in terms of features, such as an easier order system and transactions can be safe. This system also makes the author learn more..

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