

WEB BASED DESIGN OF BUILDING MATERIALS MARKETPLACE IN PERCUT SEI TUAN DISTRICT


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ABSTRACT

Marketplace is an internet-based (web-based) online medium for conducting business activities and transactions between buyers and sellers. One business that can take advantage of marketplace technology is a building shop. Transaction activities at building shops in Percut Sei Tuan District are still done manually. Buyers still have to come to the store to shop or just find out information about products. Existing data in a building shop, such as product data to transaction data, are still recorded in a book. In this study, a web-based application for building materials marketplace in Percut Sei Tuan District was developed using the PHP programming language and MySQL database. The results of this study are expected to assist the building shop in processing existing data, ranging from product data to transaction data, as well as helping customers to shop for building materials without having to come to the store, so as to simplify the transaction process that occurs.

Keyword : Marketplace, Building Materials, Web.

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Article history:

Received Jan, 2021
Revised Jan, 2021
Accepted Jan, 2021

1. INTRODUCTION

Marketplace is an internet-based (web-based) online medium for conducting business activities and transactions between buyers and sellers. Buyers can find as many suppliers as possible with the desired criteria, so they get prices according to the market. Meanwhile, suppliers / sellers can find out companies that need their products / services (Opiida, 2014).

The presence of a marketplace provides several conveniences, both for consumers and sellers. One of the conveniences is that consumers do not need to come to the store to choose and buy the desired product. The marketplace can also be a promotional medium for shops or sellers, so that it can reach a wider range of consumers. The convenience presented by the marketplace makes various business or business sectors take advantage of this opportunity. One of the businesses that can take advantage of this marketplace technology is a building shop.

The process of buying and selling building materials generally only occurs directly at the store, namely by means of the buyer coming to the store and shopping for the goods he needs. Data management by shop owners is usually still done manually, such as by taking notes on books. The process was deemed ineffective, both for the buyer and the seller or the shop owner. Some drawbacks for the buyer side, namely, the buyer must come to the store first to buy or find out the product inventory, product prices and other information. This of course will take some time, especially if the item that the buyer is looking for is not available but he has arrived at the store, so he has to look for another store. The disadvantage for the seller's side is that data management is still done manually and tends to use paper media, starting from product data, product stocks, to product transactions

Therefore, it is necessary to have a building material marketplace application system that can facilitate buying and selling transactions. With this application, the process of buying and selling building materials in Percut Sei Tuan District can be easier. Buyers do not have to come to the store to shop for

building materials or just look for information about products, other than that existing data such as product data, transaction data to product stock data for the building shop will be more systemized and safer because they are stored in the database. .

Topics related to this author have previously been discussed in the Journal of Informatics, Management and Computers, Vol.10 No.1 in 2018. The research aims to create a sales application at the Dumai Redha Building Shop so that the sales and purchases process can be made easier. and well recorded. Applications built using the VB 6.0 programming language, with this application the process of data collection of items that previously only used handwriting will be easier because it is computerized (Wira M. Ghofur, Masrizal, Ardi Arianto). Based on this, the authors are interested in raising the topic of sales information systems in building shops with a little development from the systems created in the above research. If the application made by the research above is only for one building shop, this time the author will make it in the form of a marketplace (more than one store) and web-based. The author made observations in several building shops in the Percut Sei Tuan District to obtain the required data. Based on the description above, the authors are interested in creating the title "Web-Based Design of Building Materials Marketplace in Percut Sei Tuan District".

2. LITERATURE REVIEW

2.1 Marketplace

Marketplace is an internet-based (web-based) online medium for conducting business activities and transactions between buyers and sellers. Buyers can find as many suppliers as possible with the desired criteria, so they get prices according to the market. Meanwhile, suppliers / sellers can find out companies that need their products / services (Opiida, 2014).

According to Tata Sutabri (2014: 128), "Marketspace or marketplace is an arena on the internet, a place where potential sellers and potential buyers meet freely as in the real world. The mechanism that occurs in the marketspace is essentially an adoption of the concept of "free market" and "open market", which means that anyone is open to entering the arena and is free to carry out various business initiatives that lead to the exchange of goods or services".

2.2 Application

According to Pipin Asropudin (2013), "Applications are software created by a computer company to do certain tasks, for example, Ms. Word, Ms. Excel".

2.3 Website

A website is a system related to documents used as a medium for displaying text, images, multimedia and others on the internet network (Sibero, 2011).

According to Yuhefizar (2013: 2), "Website is all web pages that are available from a domain that contains information". A website is usually built on many interconnected web pages. The relationship between one web page and another web page is called a hyperlink, while the text that is used as a connecting medium is called Hypertext

2.4 Database

According to Didik Setiawan (2018: 9), "A database or database is a collection of many data that are interrelated and collected in the same place and used by an application system that is centrally controlled and has valuable value to the owner".

According to Eri Mardiani et al (2016), "A database is a complete set of operational data from an organization / company that is organized / managed and stored in an integrated manner using a specific method, using a computer so that it is able to provide optimal information needed by its users".

2.5 Unified Modeling Language (UML)

According to Nugroho (2014: 6), "UML (Unified Modeling Language) is software that has an "object-oriented" paradigm. Modeling is actually used to simplify complex problems in such a way that they are easier to learn and understand".

3. RESULTS AND DISCUSSION

3.1. System Design

The following is a system designed in this study.

3.1.1. Use Case Diagram

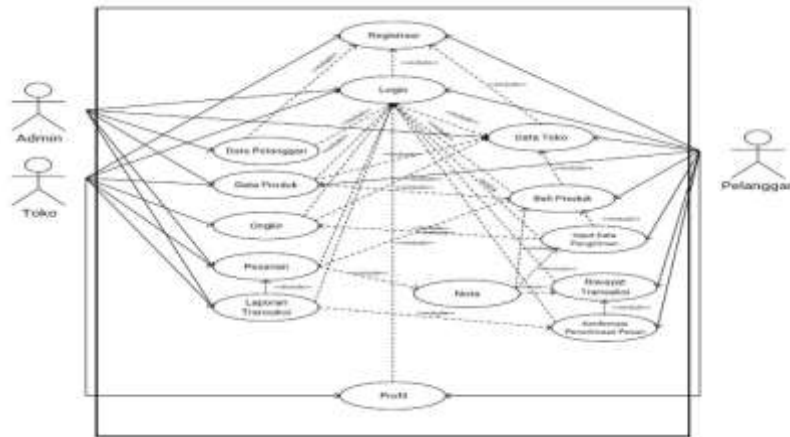


Fig. 1 Use Case Diagram

3.1.2. Class Diagram

The database design on the building materials marketplace is made using the MySQL database, the following is a class diagram of the database that was built.

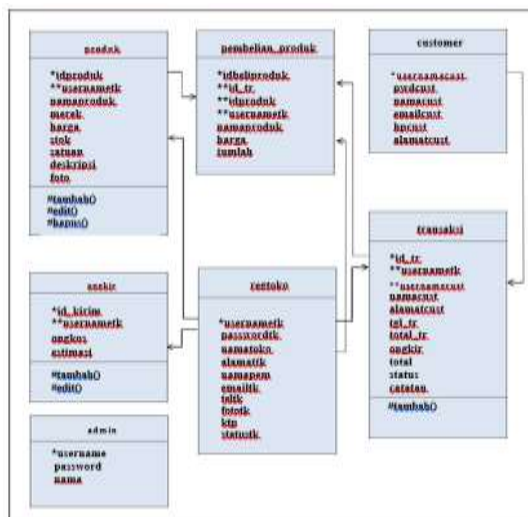


Fig 2. Class Diagram

3.2. Discussion

This research produces several input and output forms, here are some input and output forms that are generated from the topic that the author raises.

3.2.1. Data Store

Data store is inputted by the shop that uses this application, and has been confirmed by the admin to be able to use the application. The confirmed store data can be seen by customers, so that customers know which stores sell building products.

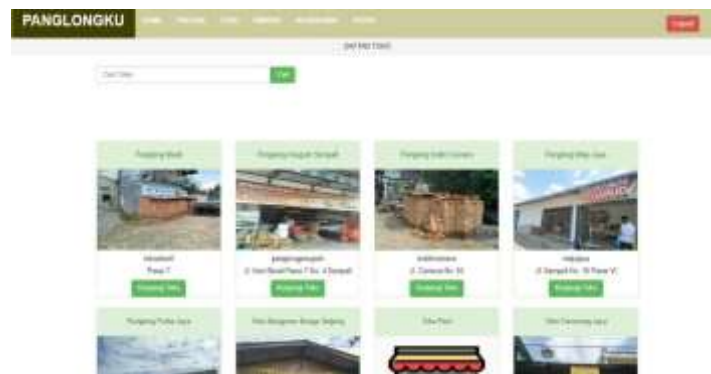


Fig 3. Data Store

3.2.2. Customer Data

Customer data is inputted by the customer which will be confirmed by the admin.

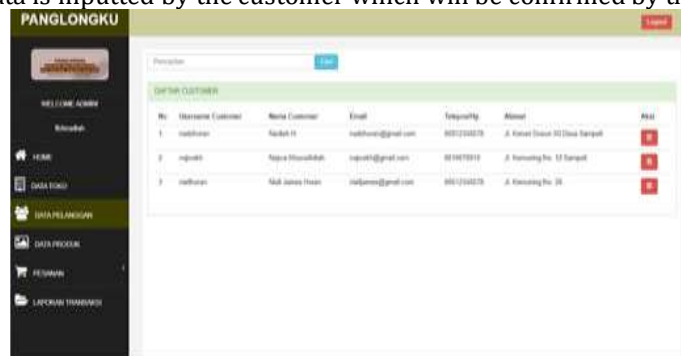


Fig 4. Customer Data

3.2.3. Product Data

The shop that has been confirmed by the admin can input data on the products it sells in the application. The the shop can be customers who their products. data input by seen by want to buy

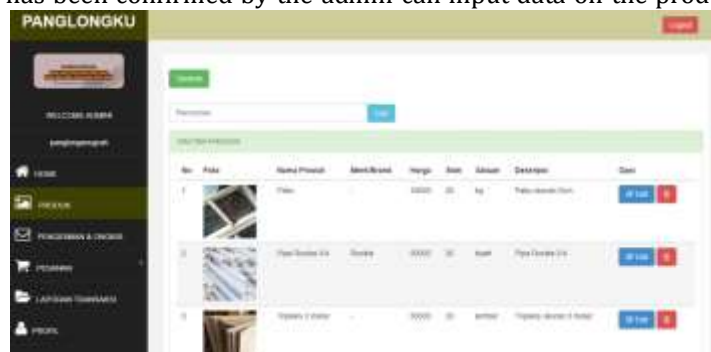


Fig 5. Product Data

3.2.4. Shopping Cart

The shopping basket is a form used by customers to input the products they want to buy from the store in the application, from this input basket, the store will be able to find out the products purchased by the customer.



Fig 6. Shopping Cart

3.2.5 Notes

The note page displays the shopping details starting from shipping data



displays the of the customer. product data, to

Fig 7. Notes

3.2.6 Order messages that by the shop



Data data contains all have been ordered customer to the concerned.

Fig 8. Order Data

3.2.7 Reports

The shop can print all transaction details or notes that occur in the shop.



Fig 9. Reports

4. CONCLUSION

Based on the results and discussion of the Web-Based Building Materials Marketplace in the Web-based Percut Sei Tuan District that has been explained, the following conclusions are obtained.

1. The Web-based Building Materials Marketplace application in Percut Sei Tuan District can facilitate the buying and selling of building materials, both for customers and sellers.
2. This application can help customers to shop for building materials without having to come to the store.
3. This application can assist the building shop in processing data, ranging from product data to transaction data.
4. This application is a web-based application that uses the PHP programming language MySQL database.

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