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Implementation Of Teak Furniture Sales Information System In Mass Furniture Shop

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ABSTRACT

The rapid development and growth of information technology has a positive impact on agencies engaged in industry, sales, and services. Currently, sales are no longer carried out by sellers and buyers who meet face-to-face at the point of sale. Sales can already be done without having to go to the point of sale, and the seller and the buyer do not have to meet in person. Sales systems such as utilizing internet services for buying and selling online This research was conducted at the Mass Furniture Store using a field research methodology and library research. The Mass Furniture Shop is a shop that sells teak furniture. In selling furniture, it turns out that the shop has problems providing information to the public about the activities that exist in the store. Data processing is still done manually, or, in other words, there is no special program designed to process sales data, so the preparation of sales reports often experiences delays. The Mass Furniture Store's website design for socialization media, ordering media, and online sales media is built with the PHP programming language and MySQL database, and it is expected to optimize product sales, facilitate sales transactions, and make data processing faster, more precise, and more efficient. With the design of the website as a medium for socializing, selling, and ordering goods online, it can provide convenience for users, both the general public and customers, to get to know the Mass Furniture Store more easily, closely, and without being limited by space or time.

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1. Introduction

Internet technology is one of the fields that is experiencing very fast development. There have been many sectors that have applied this technology, one of which is in the field of sales. Then sales with the internet as the main means, namely e-commerce, The implementation of e-commerce changes almost all business area functions and every activity, from buying and selling transactions to advertising. With the advent of e-commerce, consumers can now conduct buying and selling transactions without having to physically visit the location. Mass Furniture Store is a business engaged in the sale of furniture. The sales process at the Mass Furniture Store is still manual. Mass Furniture Stores only market their wares in-store as well as by word of mouth. For consumers who want to buy furniture, they must come to the store; thus, they need time. Currently, a business field is certainly less competitive if it does not have online marketing and sales media, such as a website. Consumers find it very difficult to find information about the existence of the

Mass Furniture Store, which of course results in the business being less well known by many people. Based on the problems faced, it can be hypothesized that:

1. By implementing the system, customers can easily access and find product information on offer.
2. By implementing the system, it is able to support the performance of the store in managing transaction data and goods.
3. By implementing this system, it is easy for customers to make transactions online.
4. The system created makes it easier for shop owners to obtain transaction data about customers, employees, and products offered.

The system is a collection or set of elements, components, or variables that are organized, interacting, interdependent, and integrated. A system consists of parts or components that are integrated for one purpose [1]. Information is an appropriate term in general usage. Information can be about raw data, structured data, the capacity of a communication channel, and so on [2]. Information is like the blood that flows in the body of an organization, so this information is very important in an organization. The value of information is determined by two things, namely the benefits and costs of obtaining it [3]. If the benefits obtained outweigh the costs incurred in obtaining it, information is said to be valuable. However, it should be noted that the information used in an information system is generally used for several purposes, so it is not possible or difficult to link information about a problem with the cost to obtain it because most of the information used is not used by only one party in the process. company. The benefits of most of the information cannot be calculated with a dollar value, but the value of its effectiveness can be estimated. The value of information is usually associated with cost-effectiveness or cost-benefit analysis. information system, namely, a tool to present information in such a way that it is useful for the recipient [4]. The goal is to provide decision-making information on planning, initiating, organizing, and controlling the operations of a company's subsystems while also presenting organizational synergies. After that, you need to do system design. System design is one of the stages of the system development methodology and one of its most important parts [5]. This stage is carried out by a system designer who interacts with system users; the design results are evaluated by the user from the point of view of the user's interests and then re-implemented by the system designer. The goal of this study is to develop an e-commerce-based sales information system that will later aid in data processing, promotions, and transactions conducted via the media e-commerce website..[16]

2. Research Method

Explaining the research method used in this study, namely:

1. Field Research

In this case, the author conducted direct research into the field to collect data directly by presenting questions and collecting existing forms.

2. Library Research

Data collection is also done by reading literature books, lectures, books related to this research, magazine clippings, and articles from the internet.

3. Laboratory Research

After the data is collected, it needs to be processed and implemented into the application to form a system. in laboratory research using relevant hardware and software.

After that, it is necessary to analyze the system; the system analysis stage is carried out before the system design stage. The system analysis stage is an important stage in the design of a system because errors in this stage will cause errors in the next stage. We analyze to find weaknesses in the system that is running in an organization or company during the system analysis stage so that the system can be improved.The purpose of system analysis is to find the right system with minimal errors that is easy to use and to determine the right system design flow for online sales that will be built.

The existing system at the Mass Furniture Store for processing sales data still uses a manual process, so it takes a long time to archive reports that accumulate a lot. If at any time there is a related section that requires data, this causes difficulties in finding the required archive. The sales calculation process at the Mass Furniture Store itself still uses paper and a calculator.

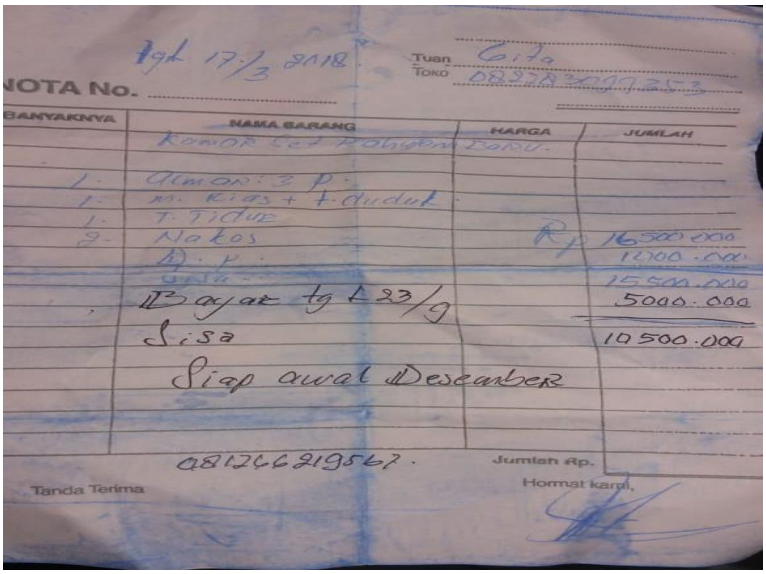

Figure 1. Sales Invoice

Based on the analysis conducted on the output of the current system at the Mass Furniture Store, it can be seen that the current system has not been able to produce the required information and reports properly. The outputs contained in the Mass Furniture Store are based on the results of the input and processing and include item data reports as well as daily and monthly sales data reports. After conducting the analysis, it is necessary to design the system, which is one of the stages in the information system development life cycle where system analysts design the new system to be created. The new system is expected to further improve the performance of the old system so that it can be one of the supports for achieving the seller's goals and have value for all buyers. The system to be built is not to replace the current system but to take advantage of opportunities by creating a new system based on a web application. UML (Unified Modeling Language) is a modeling language for systems or devices. object-oriented paradigm [17]

In this study, the author uses the Unified Modeling Language (UML) in the design of the system, which requires tools for system design, namely:

1. Designing a Use Case Diagram

The use case diagram [18] depicts the information system's design. The displayed use-case diagram will be used to explain the features that can be used by the user or users. This diagram is also used to verify whether all the functions described in the use case have been implemented in the system. The use case model serves to describe the functional requirements, the behavior of the system to be created, and an interaction between one or more actors and the system to be created. Use cases contain what the system does or what happens to the system, not how the system does it.

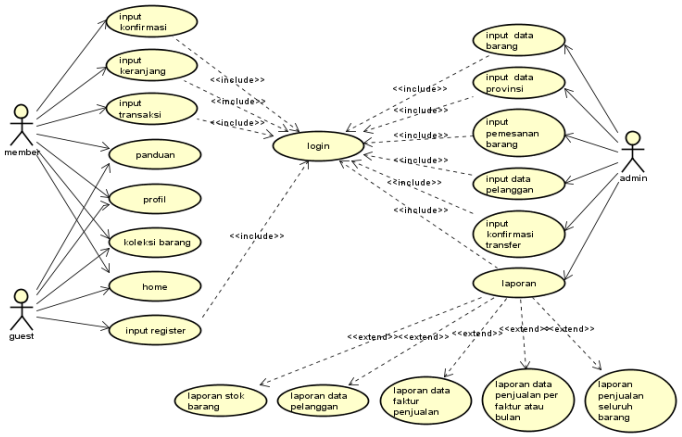

Figure 2. Use Case Diagram of Mass Furniture Store Sales

2. Designing Class Diagrams

The class diagram is an overview of the system structure in terms of defining the classes that will be used to build the system [19]. Class diagrams show the existence or nonexistence of classes and relationships in the logical design of a system. A class is a specification that, when instantiated, produces an object and is the core of object-oriented development and design. Class diagrams help the developer understand the structure of the system.[21].

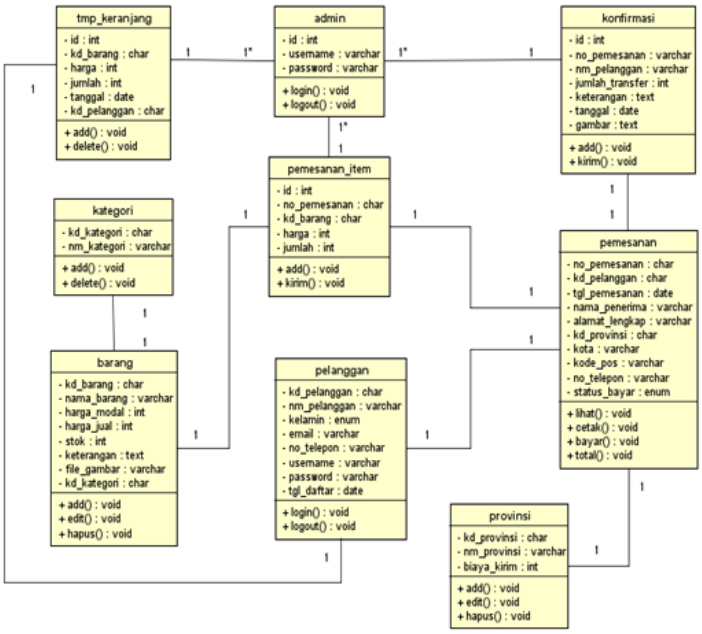

Figure 3. Class Diagram of Mass Furniture Store Sales

3. Designing Sequence Diagrams

Sequence diagrams are used to describe the behavior of a scenario in detail over time. This diagram shows a number of examples of objects and messages that are placed between objects in a use case. Sequence diagrams are UML, which describes the interaction between objects in and around the system, including the user, display, and so on, to form the message described against time. [22]

4. Designing Activity Diagrams

Activity diagrams describe the various flows of activity in the system being designed, how each flow begins, the decisions that may occur, and how they end. Activity diagrams can also describe parallel processes that may occur in several executions. Activity diagrams model the events that occur in the use case. [24]

An activity diagram is a special state diagram where most of the states are actions and most of the transitions are triggered by the completion of the previous state (internal processing). Therefore, activity diagrams do not describe the internal behavior of a system (and interactions between subsystems), but rather describe processes and activity paths at the top level in general.

This diagram describes all the activities that can be done by selecting the menus available on the system. can perform the activities of adding, editing, and deleting data contained in the database.

5. Create a Deployment Diagram.

The Deployment Diagram depicts the relationship between the system's software and hardware, as well as the output produced during deployment. A deployment diagram is a diagram that is used to map software to processing nodes. shows the runtime configuration of the processing elements and the software contained within them [25]. Figure 4 depicts the layout of a physical system by showing the software components running on the hardware components.

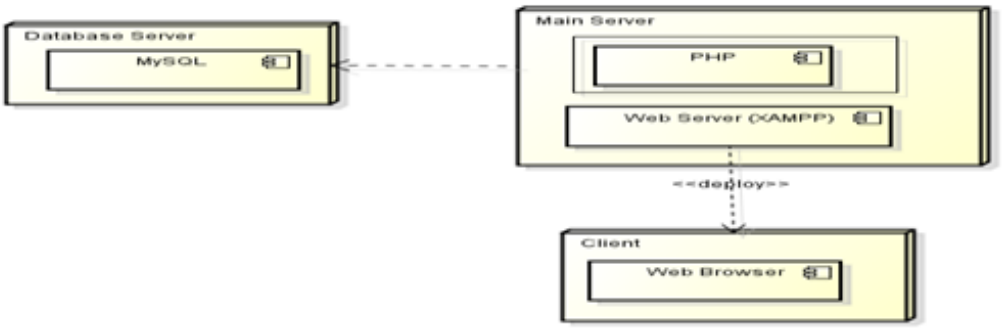

Figure 4. Deployment Diagram of Mass Furniture Store Sales

6. Creating a Program Structure

Program structure design is a design that describes the relationship between a program module and other program modules.

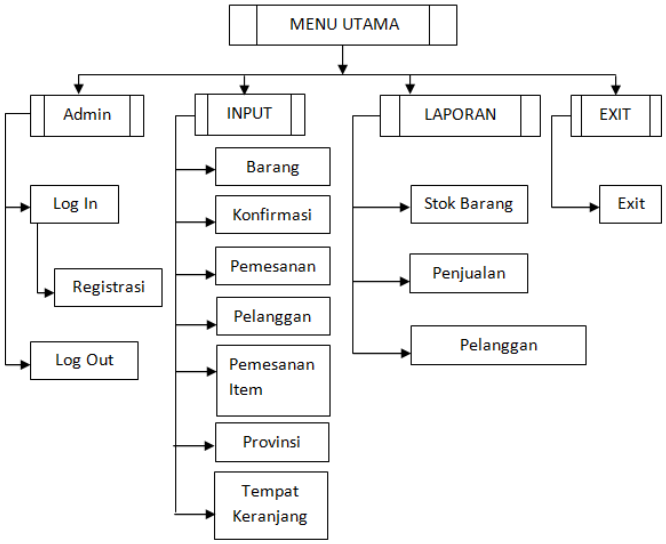

Figure 5. Mass Furniture Store Sales Program Structure

3. Result and Discussion

After conducting field research by collecting the necessary data from the Mass Furniture Store, conducting library research, laboratory research, and designing system requirements, it will get results that need to be implemented on the system that has been created. System implementation is the process of putting the system in place so that it is ready for operation. In the implementation of the system, there are several stages that must be carried out, including implementing an implementation plan, carrying out implementation activities, and implementing follow-up. To carry out or implement an application program that has been designed, we need a tool in the form of a computer, which, to operate itself, requires three supporting components, such as:

1. Hardware (Hardware)

The hardware used to design the program that has been made is a computer or laptop unit that is complete with all its devices and is directly connected to the internet network.

2. Software (Software)

To run the application program as designed, you must use some supporting software. Supporting software that must be installed is server application software such as Xampp, which functions as localhost, and web browser software such as Google Chrome, which functions as a place to run the program.

3. Human (Brainware)

Brainware is an operator that functions to operate or run application programs. So the three components above have an interrelated relationship because software is an abstract component of the composition of a computer system, hardware will live and have a function when used together with software, and brainware is the person who will operate the application program. After installing the software, the system is run with the applications created in succession.

3.1 Home Menu Page

The Home menu page is the initial display on the main menu form. On the Home menu display, there is a menu that can be accessed by the cashier as an administrator. Menu options that can be accessed by the cashier must go through Home, including the main menure is a menu that can be accessed by the cashier as an administrator. Menu options that can be accessed by the cashier must go through Home, including the main menu. In the main menu display, there are menus that can be selected, such as home, profile, collection of goods, guides, confirmation, and admin. In the main menu display, the login form is also designed, where the display used by the user to enter the system is by filling in the username and password.

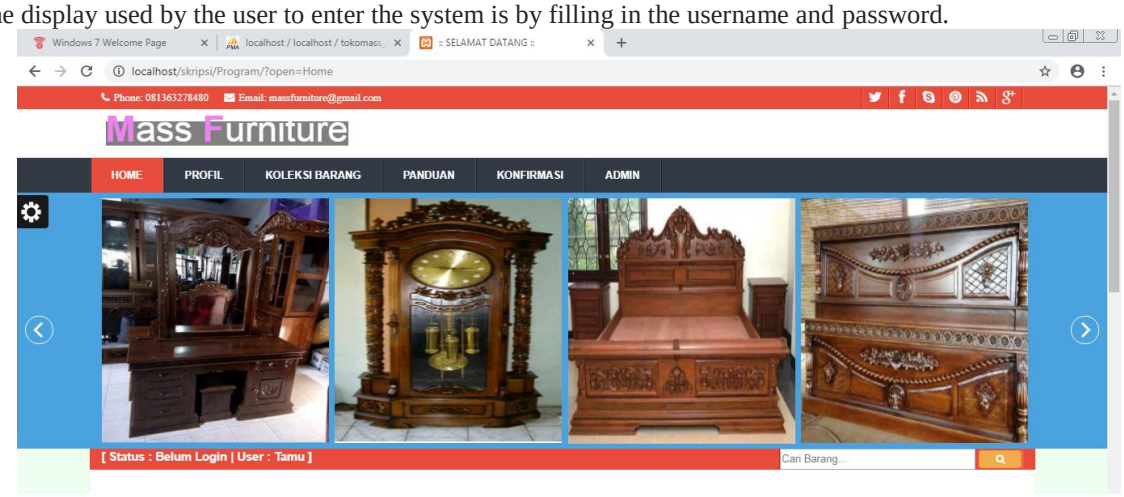

Figure 6. Home Menu Display

3.2 Item Collection Page

The display of the collection of goods is available for visitors to see various collections and, if interested, later make a purchase. The cashier will perform data entry for goods and view and delete collections of goods.

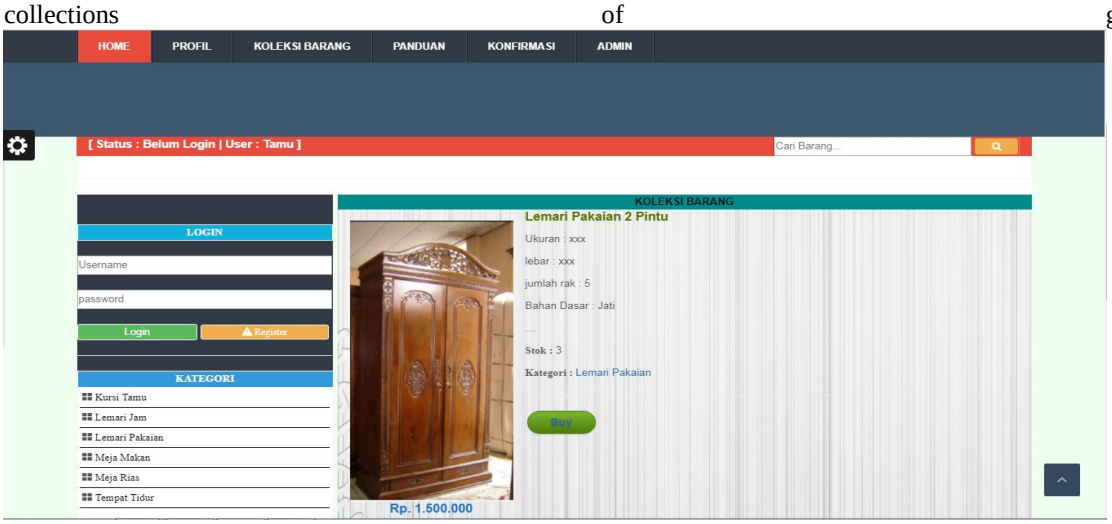

Figure 7. Display of Item Collection Form

3.3 Admin Main Menu Page

Display the admin main menu form to see what will be processed. On the left are home menu options, admin passwords, provincial data, item data, customer data, ordering goods, transfer confirmation,

reports, and logout.

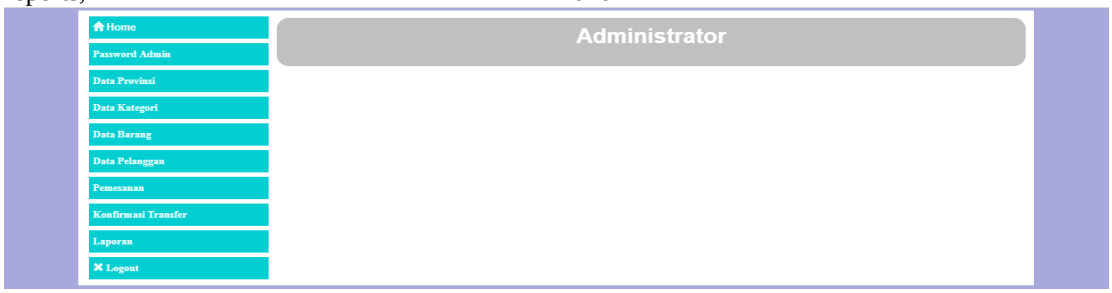

Figure 8. Display of the Admin Main Menu

3.4 Item Data Form Page

The display of this item data form displays item data entered by the admin, which contains item code, item name, stock, and price. In this form, the administrator can also add, edit, and delete item data listed in the program.

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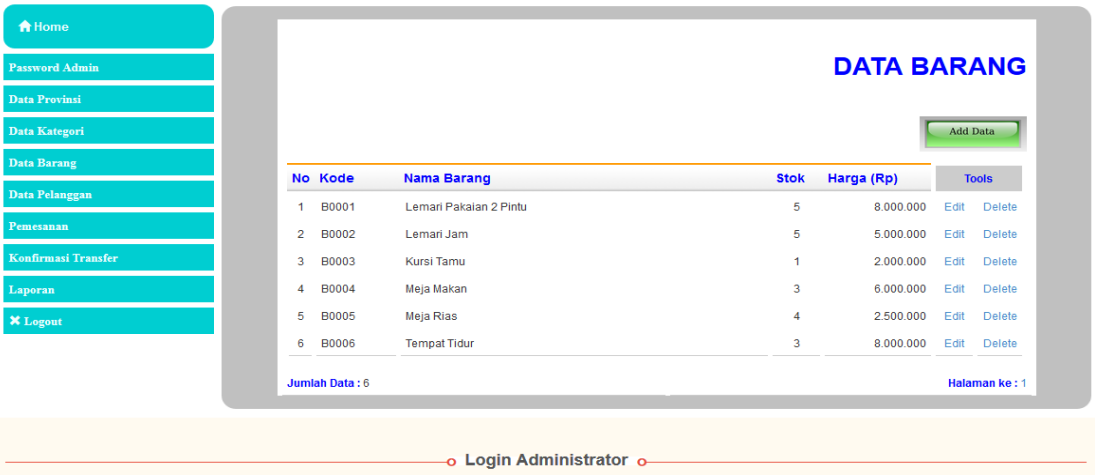

Figure 9. Display of Goods Data Form

3.5 pages of the goods order form

On the display of the order form, the admin can see a list of orders and their payment status. This form contains the message number, date, customer name, total transfer, and payment status of customers who place an order.

Figure 10. Display of the Order Form of goods

3.6 Report Form Page

On the report form page shown in the picture on the right, there is a menu of stock data reports, customer data reports, sales data reports per period, sales data reports per date, and monthly sales data reports.

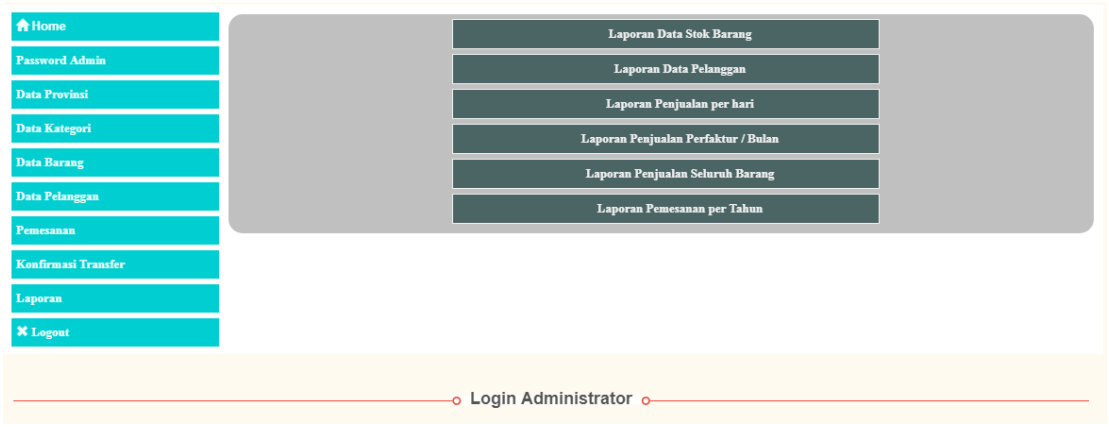

Figure 11. Display of Report Form

3.7 Daily Sales Report Page

To display and print daily sales data reports, it can be done by clicking the report menu and then selecting daily data reports. Then select a date to display the date data, then click Print, and a daily sales data report will appear as shown in Figure 12.

TOKO MASS FURNITURE

Jl. Raya Cengkeh

LAPORAN PENJUALAN PERHARI

Tanggal : **09-01-2019**

No	No Faktur	Nama Pelanggan	Jumlah Item	Sub Total (Rp)
1	PS000001	zulfitri yani	2	Rp. 16.600.000,00
2	PS000002	alfira	1	Rp. 5.300.000,00
3	PS000003	yulihartati	2	Rp. 10.800.000,00
4	PS000004	yuranda	2	Rp. 12.600.000,00
5	PS000005	ella	1	Rp. 4.900.000,00
6	PS000007	sheril	1	Rp. 7.800.000,00
		TOTAL SELURUH :	**9**	**Rp. 58.000.000,00**

Padang, 09/01/2019
Pimpinan

Dimas Purwoto

Figure 12. Daily Sales Report Page

4. Conclusion

Based on the research that has been done, the authors can draw the following conclusions:

1. The development of a website-based furniture sales application using PHP and MySQL can assist the shop in the sales process.
2. With this information system, expected data recording processes and transactions will be more effective and efficient.
3. The development of this application can help the Mass Furniture Store in marketing the products that the Mass Furniture Store sells.
4. The application of this application can expand the marketing area so as to increase the number of consumers.
5. can make it easier for consumers to place orders from the Mass Furniture Store.

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