



Design and Construction of a Transaction System for the Manggis Mandiri Building Store in Teluk Kuantan

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ABSTRACT

Currently, the use of computers is very much needed in the process of processing data into information needed by companies. By implementing a computerized system in a company, it is considered to really help the company in making decisions based on the information produced by the system. The Manggis Mandiri Building Shop is a building shop that is currently developing and operates in the sales of building materials, where data processing of goods and receivables is still done manually and all activity reports on the bookkeeping system are still poorly structured. The obstacles that arise are the time problem where calculating receivables or checking goods data takes too long and also the problem of controlling the stock of available goods which is not very well organized. Therefore, the author designed a web-based application using Php Mysql, Xampp and the Laravel Framework. The source of data obtained is through primary data sources and data collection techniques are carried out by means of observation, interviews and documentation. It is hoped that this system can make it easier for Manggis Mandiri stores to run their business and gain profits amidst a lot of competition. As a result of the research, this application has met the system requirements needed such as recording receivables, stock of goods, reporting goods in and goods out.

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1. Introduction

Information systems are something that is very important and interesting to discuss, information systems are ways that are organized to collect, enter, process and store data as well as to control and report information in such a way that an organization can achieve its stated goals. .

The current development of technology has generated the business sector very quickly, every business activity can be supported by advanced technology. The use of technology essentially aims to make human work easier in everyday life. Digital technology is a concrete example of how we as humans today cannot possibly be separated from rapidly developing technology. The Manggis Mandiri Building Store is a place that sells building materials where data processing is still manual, for example in processing data on stock, receivables and making reports that are not yet effective. For example, processing receivable invoices is still done by recording and storing them in the form of files and recording invoices. Apart from that, there are also other problems, namely, receivable invoices are often lost which are proof of transactions carried out

because documents are still stored using archives, therefore searching for documents that are needed quickly will take quite a long time so that it becomes less effective and efficient. And also when calculating receivable invoices, every time a customer deposits money, the shop employee will recalculate the total amount of the customer's bill, because the customer picks up materials every day, the note will automatically increase and the employee will recalculate the total amount of the customer's receivables every time the customer deposits money. To overcome the problems that exist in the Manggis Mandiri Building Store as mentioned above, an information system is needed that can process data adequately so that when accessing data it will be easier to get it, calculating receivables and checking stock of goods will be easier, and making reports will be easier. more precisely without any difficulty.

2. Research Method

The following are the research stages used in completing this research.

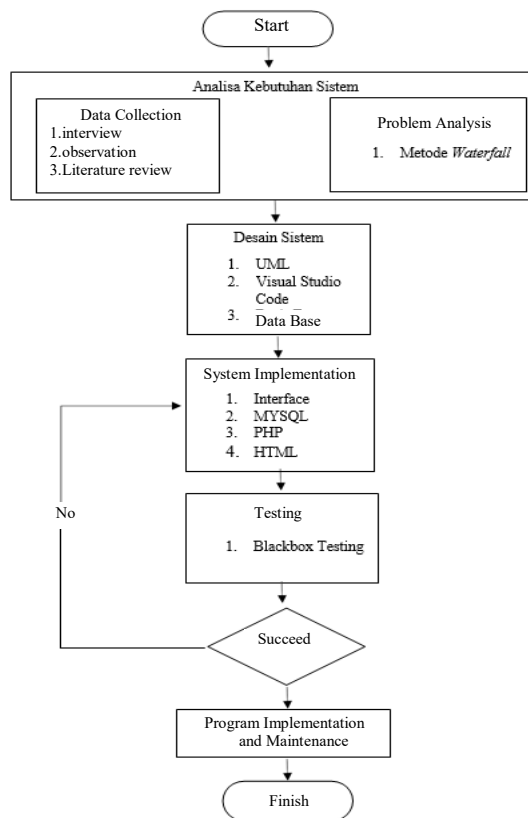


Figure 1. Research Flow Diagram

The data collection techniques are:

1. Literature Study

This stage is the stage of gathering knowledge to study topics from sources such as books, journals, the internet, documents or publications from various sources and so on.

2. Observation

At this stage the author collects data by researching directly in the field to obtain accurate data and information sources and interacting directly with system users.

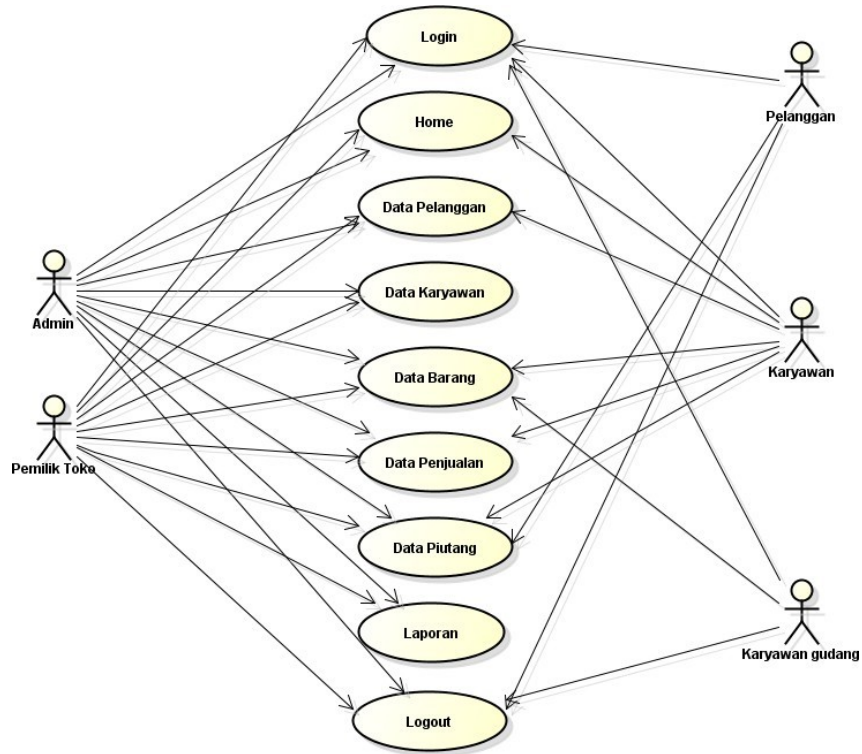
3. Interview

This is a technique carried out by directly interviewing the boss and employees at the independent Mangosteen building shop to obtain the necessary information.

3. Result and Discussion

1.1 Use Case Diagram

There are five actors in the picture below, namely admin, shop owner, employee, warehouse employee and customer.



Gambar 2. Use Case Diagram

1.2 Sequence Diagram

1. Sequence Diagram Login

Sequence process design The following describes the Login Sequence Diagram which can be seen in Figure 3.2

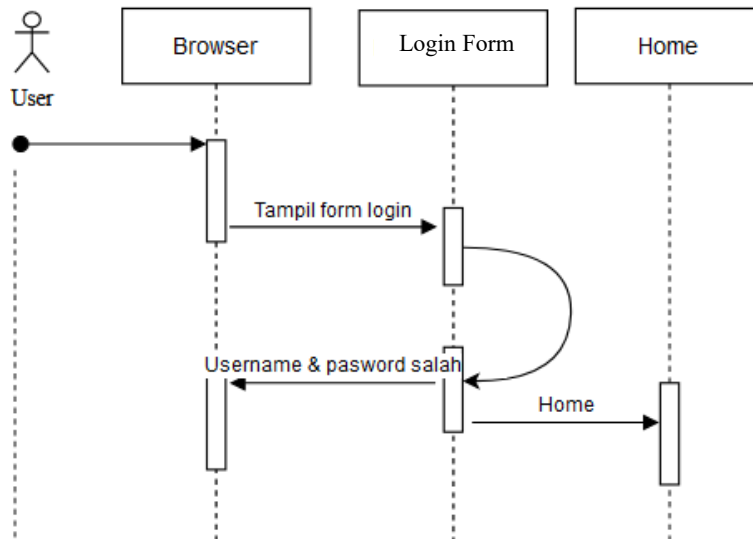


Figure 3. Login Sequence Diagram

2. *Sequence Diagram Admin*

Sequence process design The following describes the Admin Sequence Diagram which can be seen in Figure 3.3

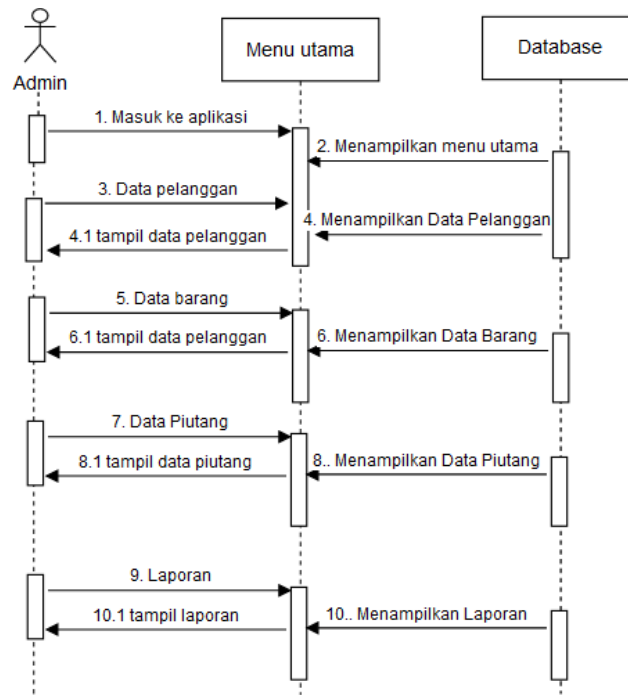


Figure 4. Admin Sequence Diagram

3. *Customer Sequence Diagram*

Sequence process design The following describes the customer sequence diagram which can be seen in Figure 3.4

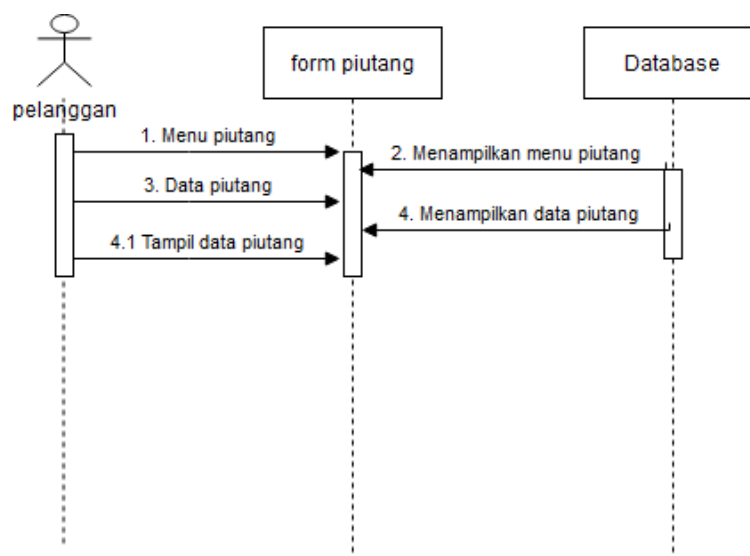


Figure 5. Customer Sequence Diagram

1.3 Class Diagram

The following is a class diagram of the transaction system for the independent Mangosteen building shop Teluk Kuantan.

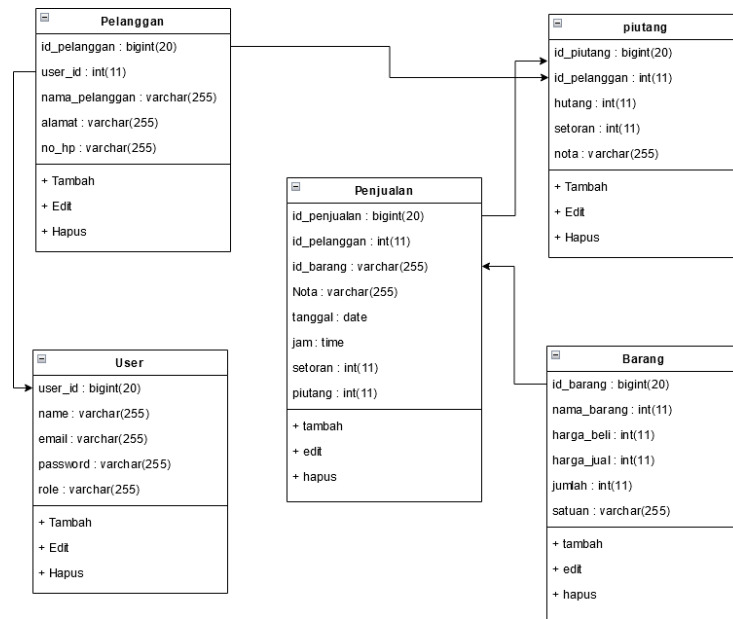


Figure 6. Class Diagram

1.4 Design Results

1. Login Page Display

The following is the login page display on the Mangosteen Independent Building Store transaction application in Teluk Kuantan.

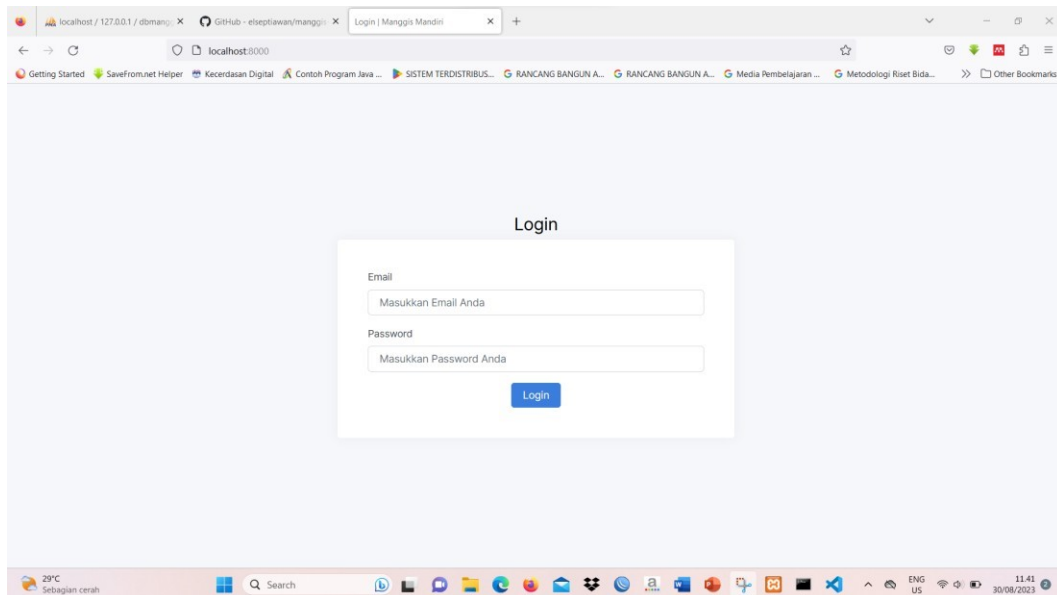


Figure 7. Login Page Results

2. Display page displaying item data

The following is a display of the goods display page on the Mangosteen Mangosteen Mandiri Building Store transaction application in Teluk Kuantan.

#	Nama Barang	Harga Beli	Harga Jual	Jumlah	Satuan	Status
1	pvc power 1/2 inci	28000	-	250	batang	Barang Masuk
2	pvc power 3/4 inci	36000	-	500	batang	Barang Masuk
3	pvc power 1 inci	50000	-	100	batang	Barang Masuk
4	pvc power 1 1/2 inci	87000	-	50	batang	Barang Masuk
5	pvc power 1 1/4 inci	75000	-	50	batang	Barang Masuk
6	pvc power 2 inci	109000	-	100	batang	Barang Masuk
7	pvc power 2 1/2 inci	144000	-	100	batang	Barang Masuk
8	pvc power 3 inci	220000	-	100	batang	Barang Masuk
9	pvc power 4 inci	369000	-	150	batang	Barang Masuk
10	pvc power 5 inci	485000	-	100	batang	Barang Masuk
11	Semen 3 roda	69000	-	420	sak	Barang Masuk

Figure 8. Display of item data

3. Customer Data Page Views

The following is the customer data page display on the Mangosteen Independent Building Store transaction application in Teluk Kuantan.

#	Nama Pelanggan	Email	Alamat	Nomor HP
1	Ipep Aan	ipep@gmail.com	Pintu Gobang	082170904566
2	Diles Kontraktor	Ardiles@gmail.com	Sinambek	082286573455
3	Hutahuruk	hutahuruk@gmail.com	jake	081234098711
4	Sagala	sagala@gmail.com	Sinambek	081993234524
5	Fajar	fajar@gmail.com	Bandar alai	085264673351
6	Idat/ises	ises@gmail.com	Sitorajo kari	082245673455
7	Iron	iron@gmail.com	Sitorajo kari	081993233467
8	Jalur Koto Kari	ardiman@gmail.com	Koto Kari	082245738911
9	Sirih	sirih@gmail.com	Koto Kari	082145678708
10	Muhasfar	Muhasfar@gmail.com	Kopah	082247897654
11	Surau Taman Surga	bujang@gmail.com	Bandar alai	082243567865

Figure 9. Customer Data Page Results

4. Sales Data Page Display

The following is the customer data page display on the Mangosteen Independent Building Store transaction application in Teluk Kuantan.

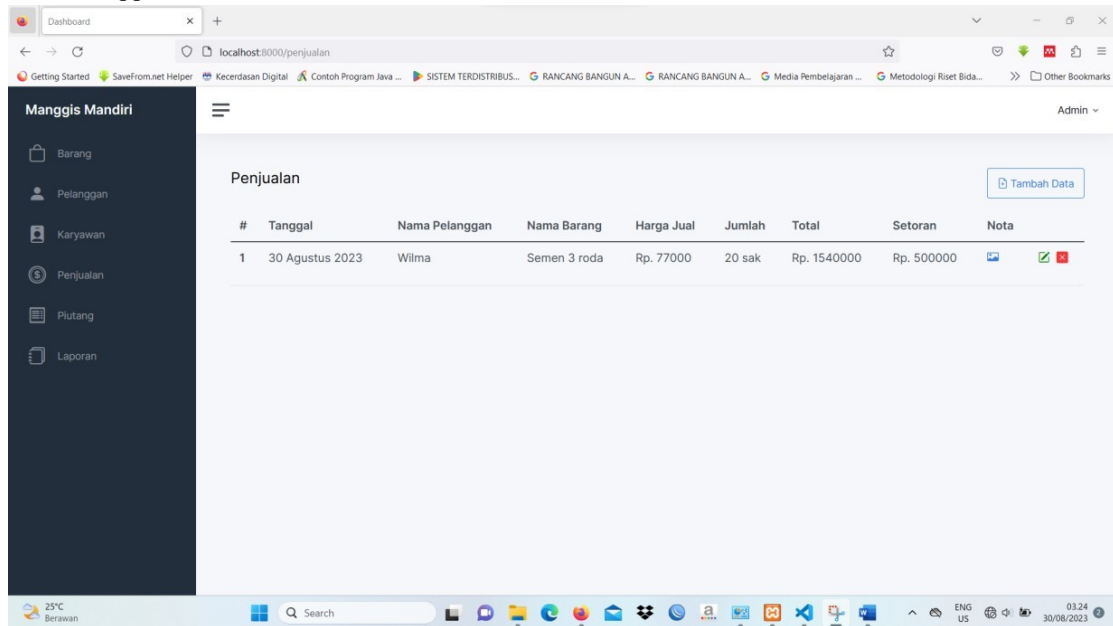


Figure 10. Sales Data Page Results

5. Display of Sales Receipt

The following is a display of the sales receipt in the Mangosteen Independent Building Store transaction system.

TB. Manggis Mandiri
 Jalan Lintas Teluk Kuantan - Lubuk Jambi, Desa Koto Kari, Kecamatan Kuantan Tengah
 Hp : 082171741021

Sabtu, 02 September 2023

Pelanggan 1

jl. Proklamasi no.1

NOTA NO.

Banyak Barang	Nama Barang	Harga	Jumlah
2 Kg	Paku 2 Inchi	Rp. 10000	Rp. 20000
		Jumlah	Rp. 20000

Tanda Terima Hormat Kami,

Figure 11. Sales Receipt Display

6. Display of Receivables Report

The following is a display of the accounts receivable report in the Mangosteen Independent Building Store transaction system.

7. Receivables Detail Report View

The following is a display of the detailed accounts receivable report in the Mangosteen Mango Building Store transaction system

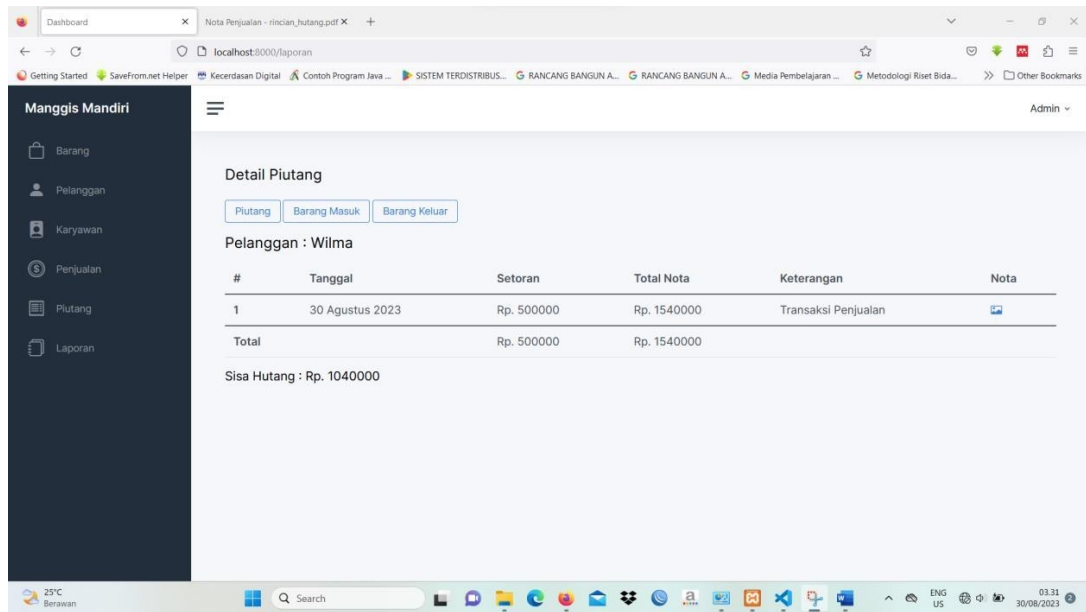


Figure 12. Display of Detailed Accounts Receivable Report

8. Incoming Goods Report Display

The following is a display of the incoming goods report in the Mangosteen Independent Building Store transaction system.

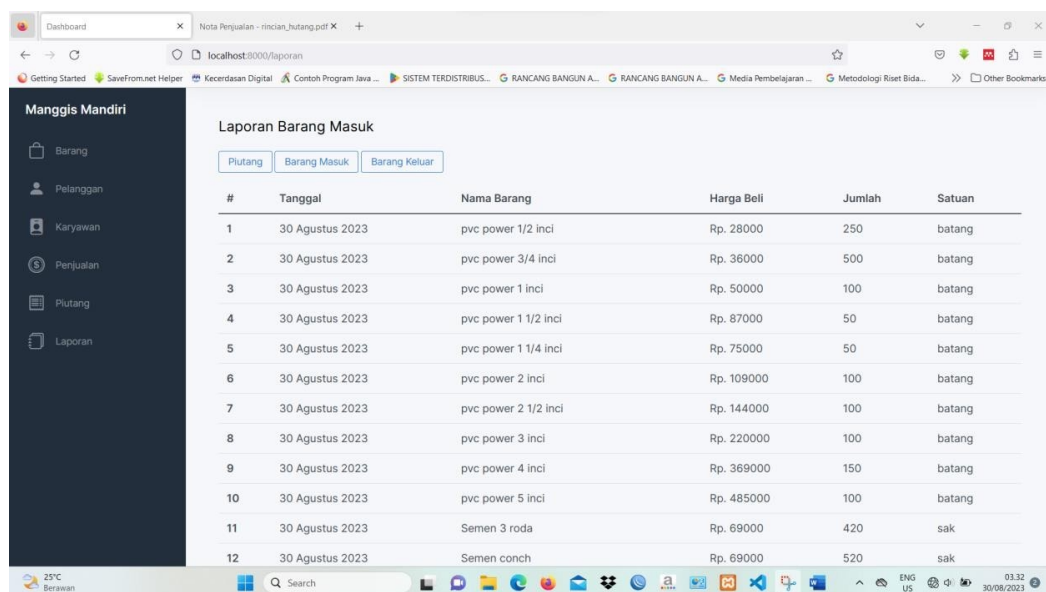
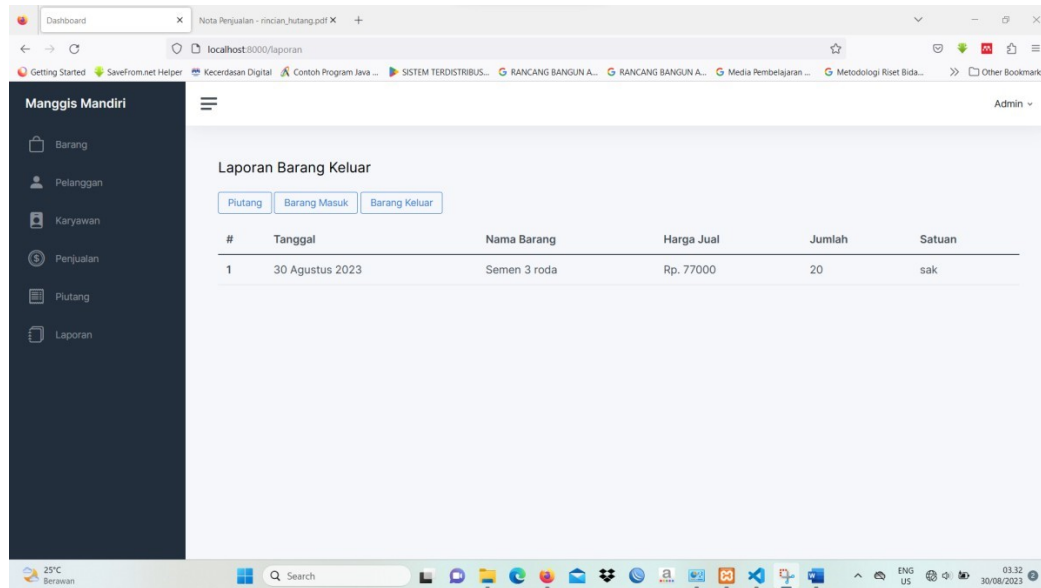


Figure 13. Display of Incoming Goods Report

9. Outgoing Goods Report Display

The following is a display of the outgoing goods report on the Mangosteen Independent Building Store transaction system.



The screenshot shows a web browser window displaying the 'Manggis Mandiri' application. The main content area is titled 'Laporan Barang Keluar' and features three tabs: 'Piutang', 'Barang Masuk', and 'Barang Keluar'. The 'Barang Keluar' tab is active, showing a table with the following data:

#	Tanggal	Nama Barang	Harga Jual	Jumlah	Satuan
1	30 Agustus 2023	Semen 3 roda	Rp. 77000	20	sak

Figure 14. Outgoing Goods Report Display

4. Conclusion

From the research in the form of analysis of the network security system that has been carried out, it can be concluded that, after the implementation stage has been carried out on the Manggis Mandiri Teluk Kuantan Building Store application, it can make it easier for employees to calculate notes and make reports of incoming and outgoing goods at the Manggis Mandiri Building Store. Makes it easier for customers to find out total debt, deposits without having to come directly to the shop. Provide convenience for employees in recording receivables. Because the calculation results are automatic from the system. With this computerized system, goods control will be well controlled, resulting in accurate goods production reports.

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