

Design of the 'SI ULET' Accounting Information System for Quick Calculation of Merchandise Inventory at AtariaShop Plastic Houseware Bandung Barat

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Abstract: Accounting information systems are very important to business activities. The amount of merchandise inventory owned by the company must be monitored for its availability because it is sold for profit. It is known that AtariaShop Plastic Houseware still uses a manual system to calculate its merchandise inventory. This causes the calculation of merchandise inventory to be slow, and the resulting information is often inaccurate. The qualitative approach method was used by the researchers in this study. Assisting in the calculation of computerized merchandise inventory requires the design of an accounting information system named SI ULET. This system as a whole displays the final report in the form of merchandise stock cards. SI ULET is proven to help business activities run effectively because this system can display the mobility of in-out merchandise due to purchases and sales so that the amount of merchandise inventory in stores can be quickly identified.

Keywords: accounting information systems; merchandise inventory.

1. Introduction

In the current era of globalization, the need for information in a business activity requires that everything be done quickly and precisely. Information technology can make it easier for people to carry out business activities from small to large scale in Indonesia. The Accounting Information System is a computer-based system designed to transform accounting data into information which includes the transaction processing cycle, the use of information technology, and the development of information systems (Gunawan et al., 2020).

The accounting information system is very important in business activities, because the system used can be used as a procedure for recording information related to the accounting data of a company and the resulting information is needed by company management. One of the factors that influence the course of a business activity is inventory.

According to Entity Financial Accounting Standards Without Public Accounting (SAK ETAP) Chapter 11 in the journal (Prihatiningsih, 2018) states that inventory is a current asset available for sale in the ordinary course of business, in the sales production process or in the form of materials or equipment for use in the production process or the rendering of services.

Inventory in a trading company requires good management, one of which is through the application of an inventory accounting information system that aims to facilitate the process

of recording data. In business activities, the amount of merchandise inventory owned by the company must be monitored for its availability because it is sold for profit.

Inventory recording using an accounting information system is easier and faster than doing it manually. Therefore, an inventory accounting information system must be able to meet the criteria as a good system and can quick recording, data processing, calculations to produce information in the form of reports needed by the company.

The results of research conducted by previous researchers stated that the absence of inventory records also caused ineffectiveness and hampered the company's operational activities because the warehouse staff needed to count the items in the warehouse one by one (Giovani & Novianty, 2020). Subsequent research states that companies that do not yet have a specific information system to handle inventory of goods and documents, result in frequent delays in searching for documents, inaccurate inventory counts, and the absence of reports and documents that are properly organized to be given to management (Nasri et al., 2022).

Subsequent research states that computer-based data processing can facilitate data access and data search so that it can help speed up decision making for leaders (Suhimarita & Susianto, 2019). Subsequent research states that companies are advised to change the manual system to computerized, in order to increase the company's effectiveness and efficiency in processing transaction data (Wahyuning & Rary, 2021). Subsequent studies state that designing an inventory accounting information system makes an inventory system that is easier for users to use, generates inventory information and reports (Kuserawati et al., 2021).

Along with the development of information system technology and intense business competition, inventory accounting information systems within the company must be carried out. One of them is AtariaShop Plastic Houseware, which must have speed in calculating merchandise inventory, so that AtariaShop Plastic Houseware can obtain information regarding merchandise inventory correctly. AtariaShop Plastic Houseware is a business engaged in the trading business by providing various plastic household appliances. This trading company is located on Jl. Kavalari No. 33, Cilame, Kecamatan Ngamprah, Kabupaten Bandung Barat, Jawa Barat 40552.

The following is data for December 2021-December 2022 from AtariaShop Plastic Houseware which can be submitted to find out alleged problems regarding merchandise inventory.

Table 1. Merchandise Inventory in 2021-2022

Month	Category	Purchase Quantity	Month Quantity	Category Quantity
December 2021	Peralatan Aksesoris	106	85	21
	Peralatan Dapur	1.835	1.818	17
	Peralatan Halaman	70	51	19
	Peralatan Kamar Mandi	203	181	22
January 2022	Peralatan Aksesoris	99	68	31
	Peralatan Dapur	1.749	1.726	23
	Peralatan Halaman	51	24	27
	Peralatan Kamar Mandi	135	102	33
February 2022	Peralatan Aksesoris	80	38	42
	Peralatan Dapur	1.564	1.534	30
	Peralatan Halaman	40	4	36

Month	Category	Purchase Quantity	Month Quantity	Category Quantity
March 2022	Peralatan Kamar Mandi	138	93	45
	Peralatan Aksesoris	116	62	54
	Peralatan Dapur	1.351	1.313	38
	Peralatan Halaman	64	18	46
April 2022	Peralatan Kamar Mandi	244	186	58
	Peralatan Aksesoris	146	79	67
	Peralatan Dapur	1.427	1.380	47
	Peralatan Halaman	72	15	57
May 2022	Peralatan Kamar Mandi	171	99	72
	Peralatan Aksesoris	156	75	81
	Peralatan Dapur	1.515	1.458	57
	Peralatan Halaman	84	15	69
June 2022	Peralatan Kamar Mandi	277	190	87
	Peralatan Aksesoris	191	95	96
	Peralatan Dapur	2.002	1.934	68
	Peralatan Halaman	102	20	82
July 2022	Peralatan Kamar Mandi	218	115	103
	Peralatan Aksesoris	275	163	112
	Peralatan Dapur	2.373	2.293	80
	Peralatan Halaman	99	3	96
August 2022	Peralatan Kamar Mandi	266	146	120
	Peralatan Aksesoris	242	113	129
	Peralatan Dapur	1.833	1.740	93
	Peralatan Halaman	116	5	111
September 2022	Peralatan Kamar Mandi	247	109	138
	Peralatan Aksesoris	189	42	147
	Peralatan Dapur	1.378	1.271	107
	Peralatan Halaman	130	3	127
October 2022	Peralatan Kamar Mandi	250	93	157
	Peralatan Aksesoris	250	84	166
	Peralatan Dapur	1.018	896	122
	Peralatan Halaman	149	5	144
November 2022	Peralatan Kamar Mandi	313	136	177
	Peralatan Aksesoris	236	50	186
	Peralatan Dapur	805	667	138
	Peralatan Halaman	163	1	162

Month	Category	Purchase Quantity	Month Quantity	Category Quantity
December 2022	Peralatan Kamar Mandi	312	114	198
	Peralatan Aksesoris	251	44	207
	Peralatan Dapur	958	803	155
	Peralatan Halaman	30	0	30
December 2021	Peralatan Kamar Mandi	337	117	220
	Total	26.426	21.676	4.750

Source: Data processed by the author in 2023.

It is known that AtariaShop Plastic Houseware still uses a manual system in calculating its merchandise inventory. However, due to the increasing types of goods and sales, the calculation of merchandise inventory was not carried out again until the time this research was conducted. As a result, AtariaShop Plastic Houseware does not have a report on merchandise inventory because the data collection is getting more complicated. This causes the calculation of merchandise inventory to be not fast and the resulting information is often inaccurate.

Based on the data in table 1, it is known that there are 4 types of categories of merchandise in AtariaShop Plastic Houseware for the period December 2021-December 2022, including accessories equipment, kitchen equipment, yard equipment and bathroom equipment. For a total purchase quantity of 26,426 pieces, a sales quantity of 21,676 units and an inventory quantity of 4,750 pieces.

By looking at the mobility of the purchase quantity, sales volume and then the final remainder of the merchandise inventory, it is therefore necessary to make efforts to simplify the calculation of merchandise inventory. And to support the smooth resolution of these problems, a system was created that facilitates the monitoring of merchandise inventory.

Because if it is done manually, it will require a lot of paper, a lot of time, a lot of human resources involved, high costs and slow in calculating merchandise inventory.

Based on the description above, a research and system design was carried out regarding merchandise inventory with the research title "Design of the 'SI ULET' Accounting Information System for Quick Calculation of Merchandise Inventory at AtariaShop Plastic Houseware Bandung Barat".

2. Literature Review

2.1. Design

According to Jogiyanto (2005:196) in the journal (Sudrartono & Firamida, 2021) design is the stage after analysis of the cycle of drawing, planning and sketching or arrangement of several separate elements in a unified whole and functioning, including regarding the configuration of the components software and hardware components of a system.

Information system design is the development of a new system from an existing old system, where problems that occur in the old system are expected to be resolved in the new system (Azis, 2022:1).

2.2. Accounting information system

According to Marshall B. Romney (2017) in the journal (Wahyuning & Rary, 2021) an accounting information system is a system that collects, records, stores, and processes data to

produce information for decision making. All data that is processed into information can be generated quickly and precisely using a computerized system.

An accounting information system is an integration of a transaction processing system or cycle and a transaction processing system has components of hardware, software, brainware, procedures, databases and communication network technology, or in other words an accounting information system is the integrity of several components that make up a processing system or cycle transactions (Erica et al., 2019:6).

2.3. Merchandise Inventory

According to Heizer, J. and Render, B., (2015) in the book (Simbolon, 2021:2) states that inventory is one of the most expensive assets of many companies, representing as much as 50% of the total invested capital. Merchandise inventory is a current asset that is used in trading company activities by purchasing it with the aim of reselling it without changing the form of the goods (Ferawati et al., 2020).

2.4. SI ULET

To assist the calculation of computerized merchandise inventory, it requires the design of an accounting information system named SI ULET. Being tenacious at work means solving problems quickly at work and being tenacious in learning means not giving up easily. So, SI ULET is a system that is not easily discouraged and fast in dealing with problems of merchandise inventory to produce the right information so that business activities run effectively.

3. Research Methods

3.1. Research Approach

In this study, researchers used a qualitative approach method. The qualitative approach method is an investigative process. Research also places more emphasis on objectivity which is realized by explaining research. The data and information used in this study were obtained from observations and interviews. This information is in the form of documents and activity records that are processed into data (Wijoyo et al., 2020).

3.2. Research Subjects and Objects

The subjects in this study were the owners of AtariaShop Plastic Houseware and the objects of research were goods data, supplier data, customer data, purchasing data and merchandise sales data along with documents related to the merchandise inventory accounting information system implemented by AtariaShop Plastic Houseware. This is a source for designing a merchandise inventory accounting information system.

3.3. Research Instruments

The research instrument used in this study was a list of interview questions directly with the owner of AtariaShop Plastic Houseware. The type of data used by researchers is primary data, because researchers come directly to the place of business that is used as the object of research by conducting observations, interviews, documentation, and literature studies. In this study, researchers designed a system using the web-based PHP programming language, MySQL as a database, Adobe Dreamweaver CS6 as a text editor and Canva as a medium in making the background system for calculating merchandise inventory at AtariaShop Plastic Houseware.

4. Results and Discussion

At this stage, the researcher created a system that was designed to be able to overcome the company's problems regarding merchandise inventory with the waterfall development method. It is called a waterfall because the stages that are passed must wait for the completion of the previous stage and run sequentially (Wahid, 2020).

The steps taken are:

4.1. System Requirements Analysis

At this stage the aim is to search based on the needs of the software system. By analyzing what should be input into this information system (Mirani et al., 2022).

- a. Functional requirements are types of needs that contain an overview of activities that can be performed by the system.
 - 1) The system can log in user
 - 2) The system can input supplier data, customer data, category data, unit data, goods data, purchasing data and sales data.
- b. Non-Functional Requirements are types of requirements that contain a future description of the workflow of the system.
 - 1) The system must be accessible to warehouse admins and shop owners
 - 2) The system must be able to display merchandise inventory reports
 - 3) The system must be able to print merchandise stock cards
 - 4) The system must be accessible quickly.

4.2. System Design

At this stage, the researcher makes an overview of the system model which consists of:

- a. Use Case Diagram
In this system, the warehouse admin and shop owner log in to the system to access the system. After logging in, the warehouse admin can process supplier data input, customer data input, category data input, unit data input, goods data input and the system can display master data reports. Then input purchasing data, input sales data. After that, the system can display purchasing data reports, sales data reports, merchandise inventory reports, stock opname and the system can print merchandise stock cards. After the system has finished running, the warehouse admin and shop owner can log out of the system.
- b. Data Flow Diagram (DFD)
In this system, the warehouse admin processes user data input to log in to the system. Warehouse admin also performs the process of inputting some data such as supplier data, customer data, category data, unit data, goods data, purchasing data and sales data. Then, the system displays a master data report as output for the warehouse admin. After that, the results of the input process carried out by the warehouse admin, namely the system informing reports in the form of supplier data reports, customer data reports, category data reports, unit data reports, merchandise inventory reports, purchasing data reports, sales data reports, stock opname and merchandise stock cards. To access the report, the shop owner inputs user data so he can log in to the system.
In this system, there are 4 stages to access the system. The first step is logging in. At this stage, the warehouse admin and shop owner process user data input to log in to the system. Then the second stage, namely input master data in the form of supplier data, customer data, category data, unit data and goods data. The third stage, namely the

system generates master data reports in the form of supplier data reports, customer data reports, category reports and unit reports, while goods data is stored to complete the calculation data input stage. The fourth stage, namely the input of calculation data from purchasing data and sales data which is inventory in out. After that, the system generates reports in the form of purchasing data reports, sales data reports, merchandise inventory reports, stock opname and merchandise stock cards. And these reports can be accessed by shop owners after carrying out the process of inputting user data so they can log in to the system.

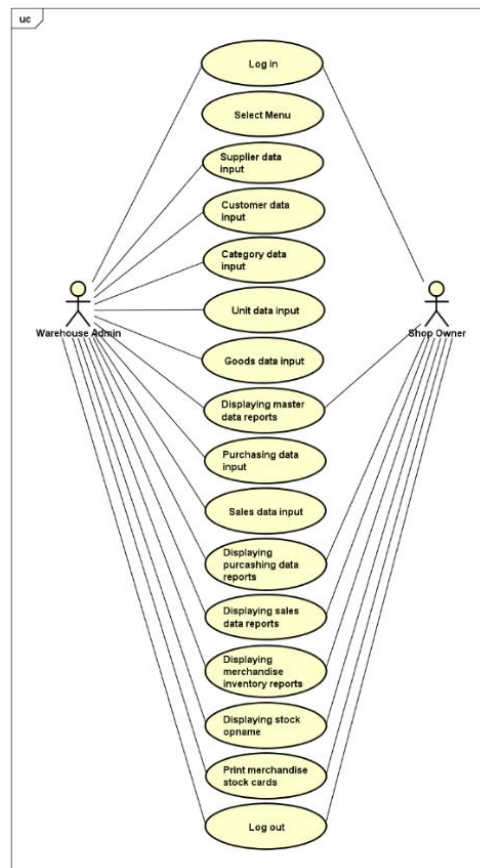


Figure 1. Use Case Diagram

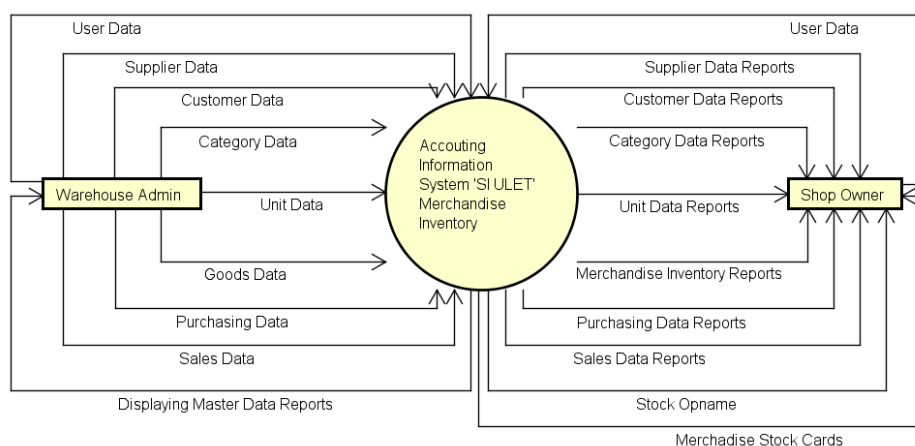


Figure 2. Context Diagram

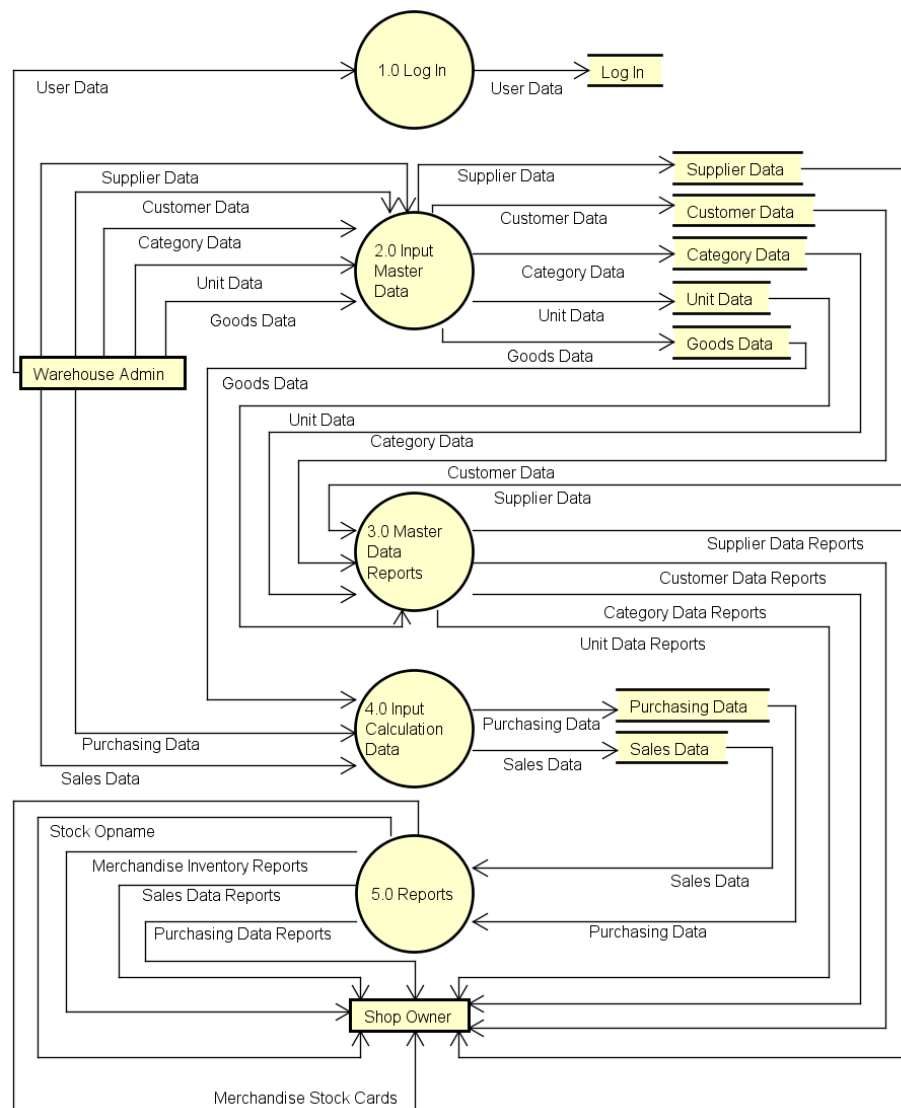


Figure 3. Data Flow Diagram Level 1

c. System Flowchart

In this system, the system starts from logging in by entering a username and password. If the username and password entered are incorrect, then remain on the log in page and try again. Meanwhile, if the username and password entered are correct, a menu will appear. Then, click the data input menu or report menu. If you select the data input menu, a data input form appears which can include supplier data, customer data, category data, unit data, goods data, purchasing data and sales data. Meanwhile, if you select the report menu, the system can display master data reports, purchasing data reports and sales data reports. The system can also display merchandise inventory reports in which it can display stock opname and merchandise stock cards. Merchandise stock cards are the final printable overall output. The results of input data and reports are connected to the database. After that, all results of checking data reports and printing results of merchandise stock cards are submitted to the shop owner. Finished.

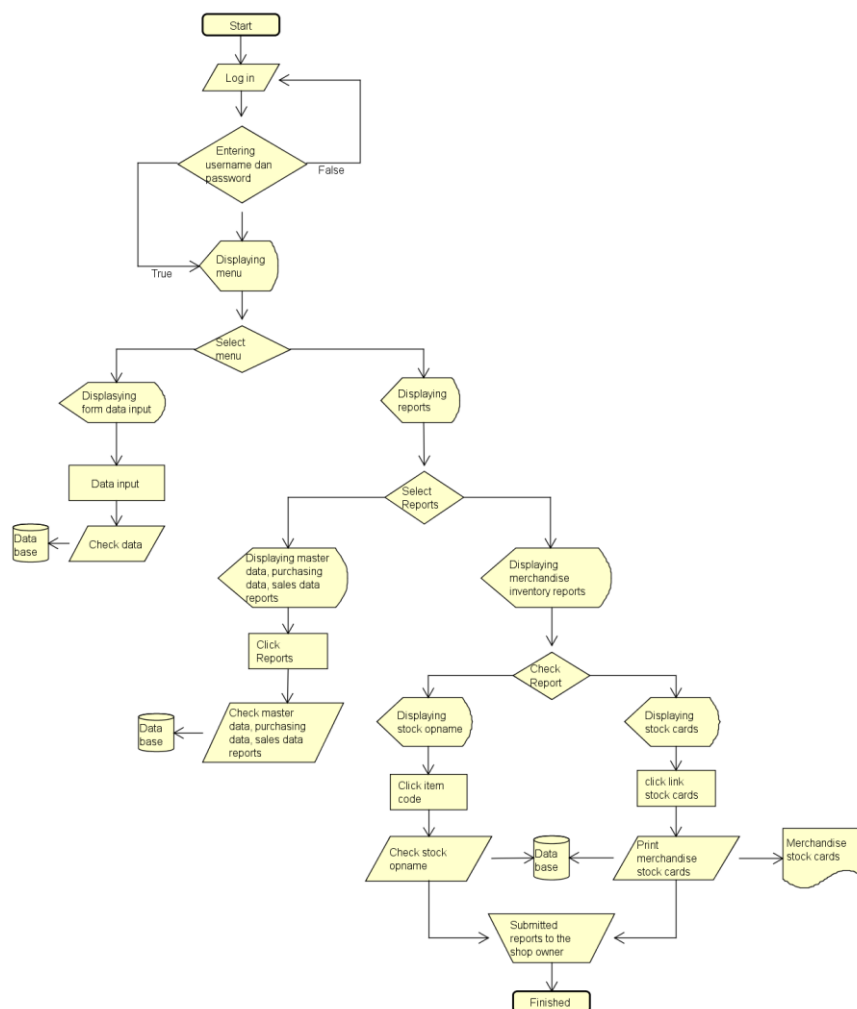


Figure 4. System Flowchart

4.3. System Implementation

At the implementation stage of this system, the researcher applies the details that have been carried out during the system requirements analysis and system design stages up to completing the system design with user approval.

a. System Input Stage

1) Log In System

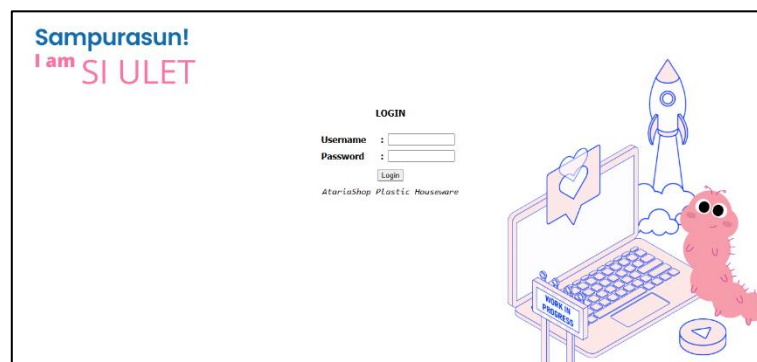


Figure 5. Display of log in system

At the system log in stage, the warehouse admin or shop owner enters the username and password in the text fields provided, then clicks the log in button.

2) Select Menu



Figure 6. Display of menu

At the menu selection stage, if you want to carry out the data input process, then click on the supplier, customer, category, unit or goods menu. If you want to display output in the form of a report, then click the report menu. And if you want exit the system, then click log out.

3) Supplier Data Input

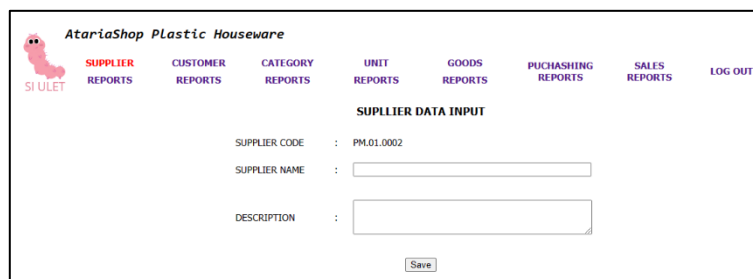


Figure 7. Display of supplier data input

At the supplier data input stage, in this input form, enter the supplier's name and description in the text field provided. The supplier code appears automatically sequentially according to the data that has been entered in the database. When finished, click the save button to save the supplier data.

4) Customer Data Input

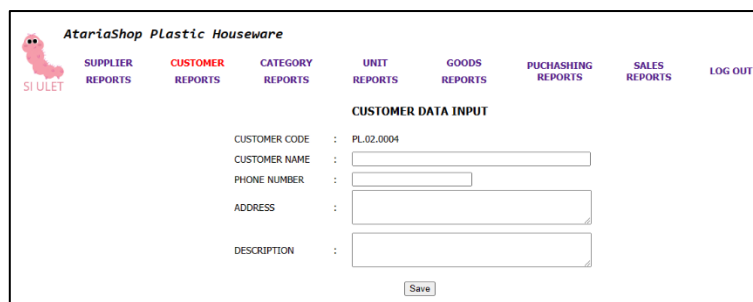


Figure 8. Display of customer data input

Customer data input stage, in this input form enter the customer name, phone number, address and description in the text fields provided. For the customer code,

it appears automatically sequentially according to the data that has been entered in the database. When finished, click the save button to save the customer data.

5) Category Data Input

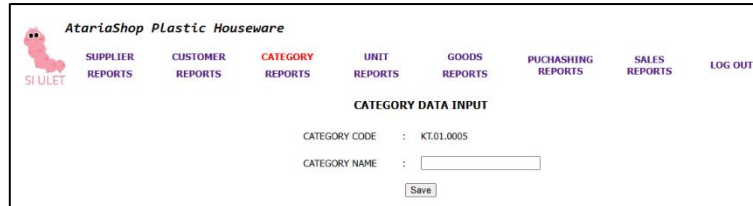


Figure 9. Display of category data input

At the category data input stage, then in this input form enter the category name in the text field that has been provided and for the category code to appear automatically sequentially according to the data that has been entered in the database. When finished, click the save button to save the category data.

6) Unit Data Input

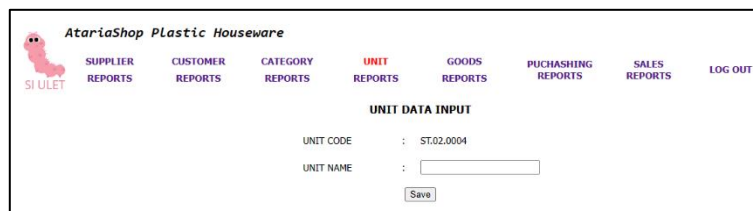


Figure 10. Display of unit data input

At the unit data input stage, then in this input form enter the unit name in the text field that has been provided and the unit code appears automatically sequentially according to the data that has been entered in the database. When finished, click the save button to save the unit data.

7) Goods Data Input

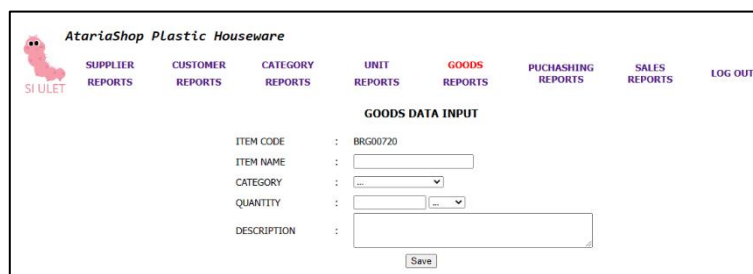


Figure 11. Display of goods data input

At the goods data input stage, then in this input form enter the item code, item name in the text field that has been provided. Then, select the category by clicking select that has been provided. After that, enter quantity in the text field and click select the item unit. And enter a description in the text field that has been provided. When finished, click the save button to save the item data.

8) Purchasing Data Input

Figure 12. Display of purchasing data input

At the purchasing data input stage, first click the items menu, then click the link in the merchandise inventory report status table. Then this input form appears, then click select supplier, enter ref number, po number, date, quantity, price in the text fields provided. Invoice number appears automatically sequentially according to the data that has been entered in the database. Meanwhile, the item code and item name appear automatically according to the item selected when clicking the link in the status table for the merchandise inventory report. When finished, click the save button to save the purchasing data.

9) Sales Data Input

Figure 13. Display of sales data input

At the sales data input stage, first click the items menu, then click the out link in the merchandise inventory report status table. Then this input form appears, then click select customer, enter the date, amount, price in the text field that has been provided. Invoice numbers appear sequentially according to the data that has been entered in the database. Meanwhile, the item code and item name appear automatically according to the item selected when clicking the link out in the status table for the merchandise inventory report. When finished, click the save button to save sales data.

b. System Output Stage

1) Displaying Supplier Data Reports

SUPPLIER DATA			
FIND DATA :			SEARCH
CODE	SUPPLIER NAME	DESCRIPTION	STATUS
PM.01.0001	NK LISTYA	-	[Edit] [Delete]

Figure 14. Display of supplier data output

At the stage of displaying supplier data output, the system displays a table containing code data, supplier name, description and status. This data can be searched by entering keywords in the text field provided and then clicking the search button. In the status table there is an edit link to update data and a delete link to delete data.

2) Displaying Customer Data Reports

CUSTOMER DATA					
FIND DATA : <input type="text"/> SEARCH					
CODE	CUSTOMER NAME	PHONE NUMBER	ADDRESS	DESCRIPTION	STATUS
PL.02.0003	SHOPEE	-	-	-	Edit Delete
PL.02.0002	TOKOPEDIA	-	-	-	Edit Delete

Figures 15. Display of customer data output

At the stage of displaying customer data output, the system displays a table containing code data, customer name, phone number, address, description and status. This data can be searched by entering keywords in the text field provided and then clicking the search button. In the status table there is an edit link to update data and a delete link to delete data.

3) Displaying Category Data Reports

CATEGORY DATA		
FIND DATA : <input type="text"/> SEARCH		
CODE	CATEGORY	STATUS
KT.01.0001	Peralatan Aksesoris	Edit Delete
KT.01.0002	Peralatan Dapur	Edit Delete
KT.01.0003	Peralatan Halaman	Edit Delete
KT.01.0004	Peralatan Kamar Mandi	Edit Delete

Figure 16. Display of category data output

At the stage of displaying category data output, the system displays a table containing code, category name and status data. This data can be searched by entering keywords in the text field provided and then clicking the search button. In the status table there is an edit link to update data and a delete link to delete data.

4) Displaying Unit Data Reports

UNIT DATA		
FIND DATA : <input type="text"/> <input type="text" value="CARL"/>		
CODE	UNIT NAME	STATUS
ST.02.0002	BUAH	Edit Delete
ST.02.0003	LUSIN	Edit Delete
ST.02.0001	PCS	Edit Delete

Figure 17. Display of unit data output

At the stage of displaying unit data output, the system displays a table containing code, unit name and status data. This data can be searched by entering keywords in the text field provided and then clicking the search button. In the status table there is an edit link to update data and a delete link to delete data.

5) Displaying Purchasing Data Reports

NO	DATE	SUPPLIER	ITEM NAME	QTY	PRICE	STATUS
PR00001	2021-12-01	NK LISTYA	1pc-set Mangkuk Plastik Safala Uk.M Anti Gores Anti Lengket	1 Buah	9,630	EDIT
PR00002	2021-12-01	NK LISTYA	Cetakan agar puding Doni G. 1066 modif garis	1 Buah	3,530	EDIT
PR00003	2021-12-01	NK LISTYA	Nampan plastik corak bunga NGT-729K Biru muda-34x25x3.5cm	2 Buah	9,540	EDIT
PR00004	2021-12-01	NK LISTYA	Seawarna-toples Isolat Dassy 1kg Viola-9709 Hg.au-14x18cm	1 Buah	15,660	EDIT
PR00005	2021-12-01	NK LISTYA	Cetakan nasi bento-kuning-agar-puding karakter Model-Kura2	12 Buah	3,330	EDIT
PR00006	2021-12-01	NK LISTYA	Cetakan nasi bento-kuning-agar-puding karakter Model-Kura2	12 Buah	3,330	EDIT
PR00007	2021-12-01	NK LISTYA	Gelas takar-measuring cup Green Leaf 250ml	1 Buah	8,435	EDIT
PR00008	2021-12-01	NK LISTYA	Keranjang Dendra G. 3103 mini container sebagaiuna Coffee-35.2x26.2x8.6cm	1 Buah	20,896	EDIT
PR00009	2021-12-01	NK LISTYA	Mangkuk Soup Fun-tastic Blossom R601 set 3pc	2 Buah	18,450	EDIT
PR00010	2021-12-01	NK LISTYA	Cetakan jelly aneka karakter binatang	2 Buah	5,130	EDIT
PR00011	2021-12-01	NK LISTYA	Cetakan nasi bento-kuning-agar-puding karakter Model-Kelinci	5 Buah	3,330	EDIT
PR00012	2021-12-01	NK LISTYA	Cetakan nasi bento-kuning-agar-puding karakter Model-Kura2	5 Buah	3,330	EDIT
PR00013	2021-12-01	NK LISTYA	Hanger baju anak Metro Kids R&K rs 12buah	2 Buah	8,380	EDIT
PR00014	2021-12-01	NK LISTYA	Sikat bany krombasan NGT-041 Laundry brush	12 Buah	7,200	EDIT
PR00015	2021-12-01	NK LISTYA	Tempat sendok tutup 3 sekat VIOLA LOTUS Pink-16x12x28cm	3 Buah	27,000	EDIT
PR00016	2021-12-01	NK LISTYA	Cetakan nasi bento-kuning-agar-puding karakter Model-Kura2	1 Buah	3,330	EDIT
PR00017	2021-12-01	NK LISTYA	Pisau pemang kacang tempel sambal-saus ukuran mini	1 Buah	2,250	EDIT
PR00018	2021-12-01	NK LISTYA	Pelarian kue- Spatula karet Hawai 5596	1 Buah	5,175	EDIT
PR00019	2021-12-01	NK LISTYA	Cercong nasi - rice spoon Hello Kitty set of 2 Pink-25cm	1 Buah	22,850	EDIT
PR00020	2021-12-01	NK LISTYA	[Green.kuf] Botol kecap Sharon GL1550 (S) Merah-6cmx17.8cm	4 Buah	7,200	EDIT
PR00021	2021-12-01	NK LISTYA	Cetakan nasi bento-kuning-agar-puding karakter Model-Kelinci	2 Buah	3,330	EDIT
PR00022	2021-12-01	NK LISTYA	Cetakan nasi bento-kuning-agar-puding karakter Model-Kura2	7 Buah	3,330	EDIT

Figure 18. Display of purchasing data output

At the stage of displaying the output of purchasing data, the system displays a table containing data on purchase number, date, supplier, item name, qty, price and status. This data can be displayed periodically by selecting a date and can be searched by entering keywords in the text field provided, then clicking the search button. In the status table there is an edit link to update the data.

6) Displaying Sales Data Reports

NO	DATE	CUSTOMER	ITEM NAME	QTY	PRICE	STATUS
PR00001	2021-12-01	Shopee	1pc-set Mangkuk Plastik Safala Uk.M Anti Gores Anti Lengket	1 Buah	10,700	EDIT
PR00002	2021-12-01	Shopee	Cetakan agar puding Doni G. 1066 modif garis	1 Buah	3,800	EDIT
PR00003	2021-12-01	Shopee	Nampan plastik corak bunga NGT-729K Biru muda-34x25x3.5cm	1 Buah	10,600	EDIT
PR00004	2021-12-01	Shopee	Seawarna-toples Isolat Dassy 1kg Viola-9709 Hg.au-14x18cm	1 Buah	17,400	EDIT
PR00005	2021-12-01	Shopee	Cetakan nasi bento-kuning-agar-puding karakter Model-Kelinci	12 Buah	3,700	EDIT
PR00006	2021-12-01	Shopee	Cetakan nasi bento-kuning-agar-puding karakter Model-Kura2	12 Buah	3,700	EDIT
PR00007	2021-12-01	Shopee	Gelas takar-measuring cup Green Leaf 250ml	1 Buah	7,150	EDIT
PR00008	2021-12-01	Shopee	Keranjang Dendra G. 3103 mini container sebagaiuna Coffee-35.2x26.2x8.6cm	1 Buah	23,218	EDIT
PR00009	2021-12-01	Shopee	Mangkuk Soup Fun-tastic Blossom R601 set 3pc	1 Buah	20,500	EDIT
PR00010	2021-12-01	Shopee	Cetakan jelly aneka karakter binatang	2 Buah	5,700	EDIT
PR00011	2021-12-01	Shopee	Cetakan nasi bento-kuning-agar-puding karakter Model-Kelinci	5 Buah	3,700	EDIT
PR00012	2021-12-01	Shopee	Cetakan nasi bento-kuning-agar-puding karakter Model-Kura2	5 Buah	3,700	EDIT
PR00013	2021-12-01	Shopee	Hanger baju anak Metro Kids R&K rs 12buah	2 Buah	10,200	EDIT
PR00014	2021-12-01	Shopee	Sikat bany krombasan NGT-041 Laundry brush	12 Buah	8,600	EDIT
PR00015	2021-12-01	Shopee	Tempat sendok tutup 3 sekat VIOLA LOTUS Pink-16x12x28cm	1 Buah	30,000	EDIT
PR00016	2021-12-01	Shopee	Cetakan nasi bento-kuning-agar-puding karakter Model-Kura2	1 Buah	3,700	EDIT
PR00017	2021-12-01	Shopee	Pisau pemang kacang tempel sambal-saus ukuran mini	1 Buah	2,500	EDIT
PR00018	2021-12-01	Shopee	Pelarian kue- Spatula karet Hawai 5596	1 Buah	5,750	EDIT
PR00019	2021-12-01	Shopee	Cercong nasi - rice spoon Hello Kitty set of 2 Pink-25cm	1 Buah	25,200	EDIT
PR00020	2021-12-01	Shopee	[Green.kuf] Botol kecap Sharon GL1550 (S) Merah-6cmx17.8cm	4 Buah	8,800	EDIT
PR00021	2021-12-01	Shopee	Cetakan nasi bento-kuning-agar-puding karakter Model-Kelinci	2 Buah	3,700	EDIT
PR00022	2021-12-01	Shopee	Cetakan nasi bento-kuning-agar-puding karakter Model-Kura2	7 Buah	3,700	EDIT

Figure 19. Display of sales data output

At the stage of displaying sales data output, the system displays a table containing sales data, date, customer, item name, qty, price and status. This data can be displayed periodically by selecting a date and can be searched by entering keywords in the text field provided, then clicking the search button. In the status table there is an edit link to update the data.

7) Displaying Merchandise Inventory Reports

AtariaShop Plastic Houseware

SUPPLIER REPORTS CUSTOMER REPORTS CATEGORY REPORTS UNIT REPORTS GOODS REPORTS PURCHASING REPORTS SALES REPORTS LOG OUT

SEARCH [STOCK CARDS]

CODE	ITEM NAME	CATEGORY	STOCK	STATUS
BRG00055	(12pc) Cetakan kue mangkok-kue talam agar perfusin Besar	Peralatan Dapur	0 BUAH	IN OUT STOCK DELETE
BRG00070	(12pc) Cetakan kue mangkok-kue talam agar perfusin Kecil	Peralatan Dapur	1 BUAH	IN OUT STOCK DELETE
BRG00071	(12pc-kasir) Cetakan kue puffu any model bulat	Peralatan Dapur	0 BUAH	IN OUT STOCK DELETE
BRG00072	(12pc-kasir) Cetakan kue puffu any model panjang	Peralatan Dapur	0 BUAH	IN OUT STOCK DELETE
BRG00073	(GL-810) Keranjang Bush-Buahan Model Oval Biji muda-32.3x21.5x10.3cm	Peralatan Dapur	2 BUAH	IN OUT STOCK DELETE
BRG00074	(GL-810) Keranjang Bush-Buahan Model Oval Hiji muda-32.3x21.5x10.3cm	Peralatan Dapur	7 BUAH	IN OUT STOCK DELETE
BRG00075	(GL-810) Keranjang Bush-Buahan Model Oval Pink muda-32.3x21.5x10.3cm	Peralatan Dapur	3 BUAH	IN OUT STOCK DELETE
BRG00076	(KH-MAXIM) Centang nasi warna warni	Peralatan Dapur	8 BUAH	IN OUT STOCK DELETE
BRG00077	(KH-88) Sendok sayur-sendok kuah model besar	Peralatan Dapur	0 BUAH	IN OUT STOCK DELETE
BRG00078	(KH-90) Sendok sayur kecil-sendok sup	Peralatan Dapur	3 BUAH	IN OUT STOCK DELETE
BRG00085	(NGT-0411) Ganyang mandi-Ganyang air ukuran Jumbo	Peralatan Kamar Mandi	23 BUAH	IN OUT STOCK DELETE
BRG00079	(NGT-1201) Corong menyak-corong air model kecil	Peralatan Dapur	11 BUAH	IN OUT STOCK DELETE
BRG00086	(NGT-1212) Sikat WC bulat kombinasi warna Biji-42cm	Peralatan Kamar Mandi	25 BUAH	IN OUT STOCK DELETE
BRG00087	(NGT-1212) Sikat WC bulat kombinasi warna Hiji-42cm	Peralatan Kamar Mandi	3 BUAH	IN OUT STOCK DELETE
BRG00088	(NGT-1212) Sikat WC bulat kombinasi warna Pink-42cm	Peralatan Kamar Mandi	1 BUAH	IN OUT STOCK DELETE
BRG00089	(NGT-1301) Corong menyak-corong air ukuran besar	Peralatan Dapur	3 BUAH	IN OUT STOCK DELETE
BRG00090	(NGT-1303) Sikat WC Model (Ganyang)	Peralatan Kamar Mandi	25 BUAH	IN OUT STOCK DELETE
BRG00092	(NGT-702) Ganyang air ganyang mandi	Peralatan Kamar Mandi	2 BUAH	IN OUT STOCK DELETE
BRG00093	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Abu-11x4x1cm	Peralatan Kamar Mandi	80 BUAH	IN OUT STOCK DELETE
BRG00094	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Biji-11x4x1cm	Peralatan Kamar Mandi	105 BUAH	IN OUT STOCK DELETE
BRG00095	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Hiji-11x4x1cm	Peralatan Kamar Mandi	71 BUAH	IN OUT STOCK DELETE
BRG00096	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Orange-11x4x1cm	Peralatan Kamar Mandi	66 BUAH	IN OUT STOCK DELETE
BRG00097	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Pink-11x4x1cm	Peralatan Kamar Mandi	53 BUAH	IN OUT STOCK DELETE
BRG00098	(NGT-801) Sikat baju-sikat lantai-sikat kamar mandi Biji-11x4x1cm	Peralatan Kamar Mandi	77 BUAH	IN OUT STOCK DELETE

Figure 20. Display of merchandise inventory reports

At the stage of displaying the output of the merchandise inventory report, the system displays a table containing code data, item name, category, stock and status. This data can be searched by entering keywords in the text field provided, then clicking the search button. In the status table there is a link in to direct to the purchasing data input form, link out to direct to the sales data input form, stock link to direct to the item data edit form, delete link to delete data. Then, the item code in the table can be clicked to direct to the stock opname view. Also, the stock card button can be clicked to navigate to the merchandise stock card view.

8) Displaying Stock Opname

AtariaShop Plastic Houseware

SUPPLIER REPORTS CUSTOMER REPORTS CATEGORY REPORTS UNIT REPORTS GOODS REPORTS PURCHASING REPORTS SALES REPORTS LOG OUT

(12pc) Cetakan kue mangkok-kue talam agar perfusin Besar

Item Category Initial Ending Description

(12pc) Cetakan kue mangkok-kue talam agar perfusin Besar Peralatan Dapur 0 BUAH 0 BUAH

CARE DATA: 2021-12-01 S/D 2022-12-31 Get... [Item]

PURCHASING					SALES				
Invoice No	DATE	SUPPLIER	QTY	PRICE	Invoice No	DATE	CUSTOMER	QTY	PRICE
P008179	2022-07-25	NK LISTYA	1 BUAH	5,850	P008179	2022-07-25	Shopee	1 BUAH	6,500
P008746	2022-08-08	NK LISTYA	1 BUAH	5,850	P008746	2022-08-08	Shopee	1 BUAH	6,500
P008890	2022-08-12	NK LISTYA	3 BUAH	5,850	P008890	2022-08-12	Shopee	3 BUAH	6,500
P009094	2022-08-25	NK LISTYA	1 BUAH	5,850	P009094	2022-08-25	Shopee	1 BUAH	6,500
P009991	2022-09-24	NK LISTYA	2 BUAH	5,850	P009991	2022-09-24	Shopee	2 BUAH	6,500
P010446	2022-10-24	NK LISTYA	1 BUAH	5,850	P010446	2022-10-24	Shopee	1 BUAH	6,500
P010912	2022-11-20	NK LISTYA	2 BUAH	5,850	P010912	2022-11-20	Shopee	2 BUAH	6,500
Total : 11 BUAH					Total : 11 BUAH				

Figure 21. Display of stock opname

At the stage of displaying stock opname output, the system displays a header table with the name of the item and a table containing item data, category, initial (initial stock), ending (final stock), description. Next, to see details of inventory mobility, select a date then click the search button. Then, purchase details appear as income and sales details appear as expenses. After that, the result of reducing the purchase quantity and sales quantity must be the same as the contents of the final table in the header table.

4.4. System Testing

At the testing stage of this system, an experiment is carried out by running the system to determine whether the implemented system can run properly or not.

4.5. System Maintenance

In this last stage, the system design can be used, but with supervision in correcting the errors found in the previous stage. It is intended that the workflow of the system can run well.

This system as a whole displays the final report in the form of merchandise stock cards.

MERCHANDISE STOCK CARDS				
CODE	ITEM NAME	CATEGORY	STOCK	CHECK
BRG00069	(12pc) Cetakan kue mangkok-kue talam agar perlisin Besar	Peralatan Dapur	0 BUAH	
BRG00070	(12pc) Cetakan kue mangkok-kue talam agar perlisin Kecil	Peralatan Dapur	1 BUAH	
BRG00071	(12pc-lusin) Cetakan kue putu ayu model bulat	Peralatan Dapur	0 BUAH	
BRG00072	(12pc-lusin) Cetakan kue putu ayu model persegi	Peralatan Dapur	0 BUAH	
BRG00073	(GL-910) Keranjang Bua-Buahan Model Oval Biru muda-32.3x23.5x10.3cm	Peralatan Dapur	2 BUAH	
BRG00074	(GL-910) Keranjang Bua-Buahan Model Oval Hijau muda-32.3x23.5x10.3cm	Peralatan Dapur	7 BUAH	
BRG00075	(GL-910) Keranjang Bua-Buahan Model Oval Pink muda-32.3x23.5x10.3cm	Peralatan Dapur	5 BUAH	
BRG00076	(KH-MADRI) Ceting tasi warna wamii	Peralatan Dapur	8 BUAH	
BRG00077	(KH-SB) Sendok sayur-sendok kuah model besar	Peralatan Dapur	0 BUAH	
BRG00078	(KH-SK) Sendok sayur-kecil-sendok sup	Peralatan Dapur	3 BUAH	
BRG00055	(NGT-0411) Gayung mandi-Gayung air ukuran Jumbo	Peralatan Kamar Mandi	23 BUAH	
BRG00079	(NGT-1201) Corong minyak-corong air model kecil	Peralatan Dapur	13 BUAH	
BRG00056	(NGT-121C) Sikat WC bulat kombinasi warna Biru-42cm	Peralatan Kamar Mandi	22 BUAH	
BRG00057	(NGT-121C) Sikat WC bulat kombinasi warna Hijau-42cm	Peralatan Kamar Mandi	5 BUAH	
BRG00058	(NGT-121C) Sikat WC bulat kombinasi warna Pink-42cm	Peralatan Kamar Mandi	1 BUAH	
BRG00080	(NGT-1901) Corong minyak-corong air ukuran besar	Peralatan Dapur	3 BUAH	
BRG00059	(NGT-330) Sikat WC Model Gepeng	Peralatan Kamar Mandi	25 BUAH	
BRG00060	(NGT-702) Gayung air gayung mandi	Peralatan Kamar Mandi	2 BUAH	
BRG00061	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Abu-11x6x4cm	Peralatan Kamar Mandi	80 BUAH	
BRG00062	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Biru-11x6x4cm	Peralatan Kamar Mandi	105 BUAH	
BRG00063	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Hijau-11x6x4cm	Peralatan Kamar Mandi	31 BUAH	
BRG00064	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Orange-11x6x4cm	Peralatan Kamar Mandi	66 BUAH	
BRG00065	(NGT-750) Sikat baju-sikat lantai-sikat kamar mandi Pink-11x6x4cm	Peralatan Kamar Mandi	53 BUAH	
BRG00066	(NGT-801) Sikat baju-sikat lantai-sikat kamar mandi Biru-11x5x5cm	Peralatan Kamar Mandi	22 BUAH	
BRG00067	(NGT-801) Sikat baju-sikat lantai-sikat kamar mandi Hijau-11x5x5cm	Peralatan Kamar Mandi	39 BUAH	
BRG00068	(NGT-801) Sikat baju-sikat lantai-sikat kamar mandi Orange-11x5x5cm	Peralatan Kamar Mandi	25 BUAH	
BRG00069	(NGT-801) Sikat baju-sikat lantai-sikat kamar mandi Pink-11x5x5cm	Peralatan Kamar Mandi	13 BUAH	
BRG00070	(NGT-834) Sikat lantai-sikat kamar mandi Abu-15x5.5x8cm	Peralatan Kamar Mandi	13 BUAH	
BRG00071	(NGT-834) Sikat lantai-sikat kamar mandi Biru-15x5.5x8cm	Peralatan Kamar Mandi	6 BUAH	
BRG00072	(NGT-834) Sikat lantai-sikat kamar mandi Hijau-15x5.5x8cm	Peralatan Kamar Mandi	7 BUAH	
BRG00073	(NGT-834) Sikat lantai-sikat kamar mandi Pink-15x5.5x8cm	Peralatan Kamar Mandi	3 BUAH	
BRG00081	(NGT-861)Talenan Segi-Cutting Board	Peralatan Dapur	0 BUAH	
BRG00082	(NGT-862) Talenan Segi-Cutting Board	Peralatan Dapur	0 BUAH	
BRG00083	(NGT-8647) Tempat Sendok Model Persegi	Peralatan Dapur	6 BUAH	
BRG00074	(SNT-701P) Tempat sabun mandi batang	Peralatan Kamar Mandi	7 BUAH	

Figure 22. Display of merchandise stock cards.

Description:

Item Code : The code given to each trade item name.

Item Name : The name of the item sold at the store.

Category : The name of the category used to classify the types of trade goods.

Stock : Quantity of ending merchandise inventory available.

Check : Table to record the quantity of merchandise inventory when doing stock opname in an annual or monthly period. The trick is to physically count the stock, then check the quantity in the stock table, whether it is the same or not. This aims to avoid the difference between the physical quantity and the existing data on the system.

To print merchandise stock cards, press CTRL + P on the web view, then click the print button, as follows:

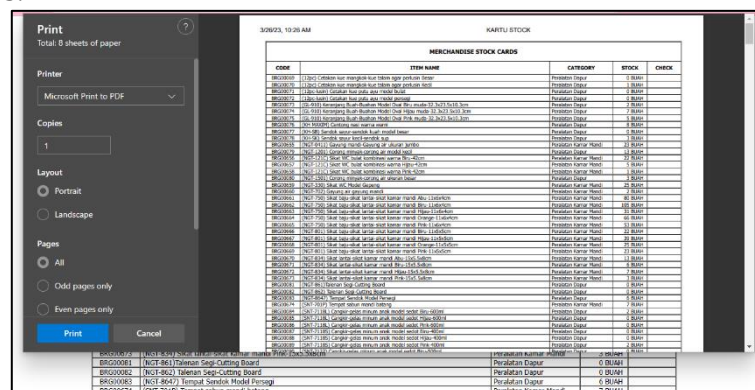


Figure 23. Display of printing merchandise stock cards.

If the SI ULET system is used, it will save paper, save time, does not require a lot of human resources involved, is more cost efficient and quick in calculating merchandise inventory.

5. Conclusion and Suggestion

5.1. Conclusion

- a. To solve the problem of calculating merchandise inventory that occurs, an accounting information system is used using the web-based PHP programming language, MySql as a database, Adobe Dreamweaver CS6 as a text editor and Canva as a medium in making the system background.
- b. The system used is named SI ULET. A system that is not easily discouraged and fast in dealing with merchandise inventory problems to produce the right information so that business activities run effectively.
- c. With the SI ULET system, it is proven for quick calculation of merchandise inventory and can display the final report in the form of merchandise stock cards needed by shop owners in carrying out stock opname activities so that business activities run effectively.

5.2. Suggestion

- a. In order to make it easier to control merchandise inventory so that shop owners have no difficulty in purchasing goods, this system can be used. Because this system can display the mobility of incoming and outgoing merchandise due to purchases and sales, the amount of merchandise inventory at the store can be quickly identified.
- b. This system is designed to be as simple as possible, so that all people who are appointed as users can work with consistency, discipline in coding goods so that the data input process is easy to do.
- c. It is certain that every item that enters must be given an item code, so that the data that comes out of the output can be read by all users or shop owners.
- d. For future researchers, it is advisable to adjust the system that is made to what is needed and develop existing systems by adding menus that can help so that business activities run effectively.

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