

Cash Sales Information System Multiuser Based On Human Computer Facilities Semarang

Dwi Prasetyaningsih
Universitas Sam Ratulangi
Email: Dwi@gmail.com

UFujiana Diapoldo Silalahi
Universitas Sam Ratulangi
Email: Dwi@gmail.com

Toni Wijanarko Adi Putra
Universitas Sam Ratulangi
Email: Dwi@gmail.com

Jl. Majapahit 605, Semarang, tel/fax : (024) 6723456

***Abstract .** Sarana Insan Computer (SIK), a sales company operating in the computer sector in Central Java, has utilized Information Systems even though they are not yet well integrated between one system and another. Therefore, in this thesis the author will develop a cash sales system model by choosing SIK as the research object. The cash sales information system created includes a system for ordering goods, sending goods, sales returns and cash sales reports. This research aims to make it easier to present reports directly, accurately, quickly and to enable systems that do not yet exist to be integrated into an integrated system. So that the cash sales information system can be implemented well, a software development process is carried out which is based on correct software engineering. The software development model used in this research is a multiuser development model. Information technology which is developing rapidly today really provides support for the development of a cash sales information system for a computer sales company such as SIK, especially with the use of computer-based information technology or better known as a Computer Based Information System, because of the use of computer technology in a system. information will be able to process data more quickly with minimal error rates, save labor and save costs. The Cash Sales Information System is designed using direct data processing methods. The use of the direct data processing method is intended so that every incident of cash sales information can be processed directly. The procedures that will be processed consist of the administration section which handles administration, the purchasing section which handles incoming goods, the sales section which handles customer service and the computer goods sales section, the personnel section and the leadership itself.*

Keywords: Information Systems, Cash Sales, Multiuser

1. INTRODUCTION

In today's business environment, information is a vital resource for company survival. In the business world, information can come from the internet or external to the company. At any time information is needed either by management or other users in order to make decisions.

To produce accurate information, good data processing is needed. Before presenting it as a report that meets your needs, the required data must be recorded and classified. This information is processed and then presented in a form that suits the user's needs. This information is needed to make decisions and policies for users, for example company managers. However, if the recording process is carried out using a method that is not computerized, it will take a long time. Therefore, it is necessary to develop an information system that utilizes computer technology.

Computer Human Facilities located at Jl. Dworowati II No.13 Semarang is a manufacturing company whose business activities are in the field of cash sales. The products sold include computers, laptops, hardware and accessories. The business started in 2000 with quite minimal initial capital, namely Rp. 10,000,000,- has proven the seriousness of his business. Now his business is growing quite well. For Sarana Insan Computer customers, to date it has covered several areas on the island of Java such as Semarang, Surabaya, Yogyakarta and many small cities in Java. Sales turnover was able to reach a maximum figure, namely around Rp. 100,000,000,- per month. Now the number of employees has reached 10 people. The sales data for the last three months can be seen in the following table:

Table 1 lists goods sales for June, July and August 2010
 Source of Semarang Computer Human Facilities

Types of goods	Sold
Intel Pentium 4 computer	95 units
Acer Laptops	110 units
Toshiba Laptops	44 units
laptop, Zyrex	40 units
Compaq Presario CQ46-609TU laptop	60 units
Compaq Presario CQ46-653TU laptop	70 units
Compaq Presario CQ46-416TU laptop	80 units
Compaq Presario CQ46-609TU laptop	66 units
Compaq Presario CQ3035L laptop	75 units
Compaq Presario QCQ3132L laptop	70 units
Compaq Presario CQ3138L laptop	45 units
Compaq Presario 4068L laptop	49 units
Compaq Presario CQ3035L laptop	68 units
Compaq Presario QCQ3132L laptop	50 units
Compaq Presario CQ3138L laptop	70 units
Compaq Presario CQ3932L laptop	77 units
Compaq Presario CQ3035L laptop	74 units
Compaq Presario QCQ3132L laptop	50 units
Hp Pavillion s5289d PC laptop	47 units

Hp Pavillion DV2 1203AU laptop	60 units
Hp Pavillion DV2 1122AX laptop	35 units
Hp Pavillion DV2 1014 TU laptop	45 units
Hp Pavillion DV2 1009 AU laptop	30 units
KZ28AA keyboard	80 units
FQ481AA keyboard	87 units
KJ270AA headset	90 units
RF823AA headset	89 units
EY18AA mouse	78 units
KM407AA mouse	90 units
FQ983AA mouse	97 units
Web Camera KQ245AA	20 units
Web CameraKQ245AA	11 units

The word application program has not been developed due to limited human resources, such as when inputting data is still done repeatedly, when making a report, namely when it is going to be printed, the data must be opened from the file one by one and recapped, causing delays in the report, for data security there is no because there is no password so everyone can access it.

With the obstacles and problems above, it is necessary to implement a new system that is computerized, and based on multi-user with a computer network organized in a database with SQL Server 2000, as the database. The reason why multi-user was chosen is because in the organizational structure of Computer Personnel Facilities it consists of several sections such as the administration section which handles administration, the purchasing section which handles incoming goods, the sales section which handles customer service and the sales section of computer goods, the personnel section, and the leadership itself. .With the new system which has been computerized and organized in a database, it is hoped that it will help in recording and collecting data on goods so that if the leader or anyone who needs goods data is needed at any time, it will be more effective and efficient in searching and presenting it, and in the sales system it is also hoped that will assist in recording goods sales data so that it is recorded directly into the computer and reports can also be displayed quickly and accurately and automatically.

2. THEORETICAL BASIS

1. Understanding Systems

a. BASIC SYSTEM CONCEPTS

There are two groups of approaches in defining a system, namely those that emphasize procedures and those that emphasize components or elements. The systems approach is closer to procedures, defining a system as a network of interconnected procedures, gathered together to carry out an activity or to complete a certain target.

The systems approach which is a network of procedures emphasizes the sequence of operations in the system. Procedures are defined by Richard F. Neuschel as a sequence of clerical (writing-writing) operations, usually involving several people in one or more departments, which are implemented to ensure uniform handling of business transactions that occur.

An approach that emphasizes elements or components defines a system as a collection of elements that interact to achieve a certain goal. A systems approach that emphasizes components will make it easier to study a system for the purposes of analyzing and designing a system.

A system has a specific purpose. Some say, the purpose of a system is to achieve a goal (goal) and some say it is to achieve a target (objectives). Goals are usually associated with a broader scope and targets within a narrower scope. If it is a main system, for example a business system, then the term goal is more appropriate to apply. For accounting systems or other systems, which are parts or subsystems of business systems, the term objectives is more appropriate. So, it depends on the scope from which you view the system.

3. METHODOLOGY

In conducting research the author used several methods, including:

Method of collecting data

Data processing requires supporting data that must be accurate and precise in order to get good and correct results. The methods or techniques used in the data collection method are:

A. Observation Method

The method of collecting or retrieving data is by observing objects directly and recording things or activities related to these objects. The author made observations at Sumber Insan Computer Semarang with a sales system.

B. Interview Method

The interview method is carried out by conducting questions and answers directly to parties related to the object being researched by the author. The author uses this method to obtain precise and definite data by asking questions and answers to the management or employees of Sumber Insan Computer Semarang so that it can be used as material for proposals.

C. Library Method

The data collection method is by searching for data through books regarding the object being studied as a reference for making proposals. The author collected data by reading books related to sales and supporting data obtained directly from research objects at Sumber Insan Computer Semarang, especially the sales section.

D. Archival Method

This method is carried out by reading and studying data through archives within the company. The author uses this method to be able to study things or problems that occur at Sumber Insan Computer Semarang.

E. System development methods

The system development method that the author uses is the SDLC system development method.

4. RESULTS AND DISCUSSION

Login Form Display



Login Form Display Image

The login form appears the first time the application is run, so that users who do not have a username and password cannot enter the application. Users are divided into 3 parts, namely managers, administration and sales. Each section has its own authority according to its powers and duties. The manager section can only enter the report and administration menu, the sales section can only enter transactions, sales reports and return reports, while administration can only enter master data and item reports.

2. Main Menu Display



Main page display image

The main display contains menus provided by the system, namely:

- a. **Files**
 - i. **Change User**
Used to replace another username.
 - ii. **Go out**
Used to exit the application.
- b. **Data**
 - i. **Goods**
Used to enter the item form.
 - ii. **Customers**
Used to enter the customer form.
- c. **Transaction**
 - i. **Sale**
Used to enter the sales form.
 - ii. **Sales Returns**
Used to enter the sales return form.
- d. **Report**
 - i. **Item report**
Used to view item reports.
 - ii. **Sales report**
Used to view sales reports.
 - iii. **Return report**
Used to view sales return reports.
- e. **Administrator**
Used to enter the add user form.

2. DISPLAY THE ITEM FORM

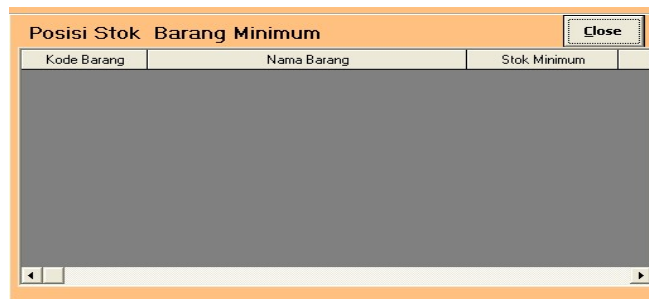


Image of Minimum Stock Display

The first time the goods form is opened the form will be closed by displaying minimum stock information. To enter the main form, this display must be closed by pressing the close button.

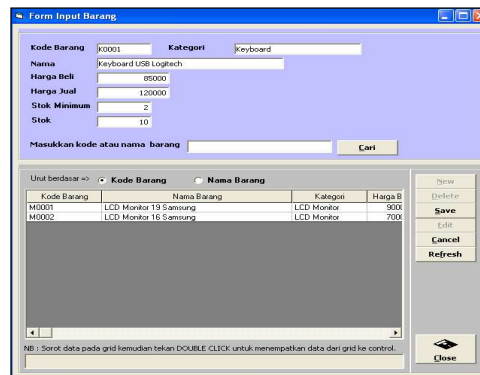


Image of Item Form Display

The function of the buttons on the item form is:

- i. New button
The new button is used to enter new item data. Pressing this button will empty all fields in the textbox for new data to be entered. All fields are entered manually.
- ii. Delete button
This button is used to delete item data that is no longer used. The way to do this is by selecting one of the items in the table by clicking or double clicking the mouse. The text box will be filled in according to the selected data, after that the deletion process can be carried out.
- iii. Edit button
This button is used to change stored item data. The way to do this is by selecting one of the items in the table by clicking or double clicking the mouse. The text box will be filled according to the selected data, after that the change process can be carried out.

- iv. Save button
The save button is used to save new data or changes to be saved into the database.
- v. Cancel button
Used to cancel entries that have been made during the data input or edit process.
- vi. Search button
To search for item data based on item code or name.
- vii. Refresh button
The refresh button is used to update the display in the table after searching or sorting item data based on code or item name.
- viii. Close button
Used to close the item form.

4. Display Customer Form

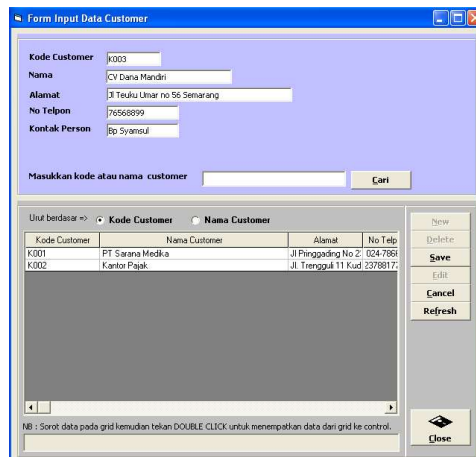


Figure 4.13 Customer Form Display

The function of the buttons on the item form is:

(1) New button

The new button is used to enter new customer data. Pressing this button will empty all fields in the textbox for new data to be entered. All fields are entered manually.

(2) Delete button

This button is used to delete customer data that is no longer used. The way to do this is by selecting one of the items in the table by clicking or double clicking the mouse. The text box will be filled in according to the selected data, after that the deletion process can be carried out.

(3) Edit button

This button is used to change stored item data. The way to do this is by selecting one of the items in the table by clicking or double clicking the mouse. The text box will be filled according to the selected data, after that the change process can be carried out.

(4) Save button

The save button is used to save new data or changes to be saved into the database.

(5) Cancel button

Used to cancel entries that have been made during the data input or edit process.

(6) Search button

To search customer data based on customer code or name.

(7) Refresh button

The refresh button is used to update the display in the table after the search process or sorting customer data based on code or item name.

(8) Close button

Used to close the customer form.

5. Sales Form Display

Sales Form Display Image

On the sales form, the note number and date will be filled in automatically when the form first appears or when ending a transaction. The function of the buttons on the sales form is:

(1) New button

The new button is used to enter new sales details. Pressing this button will empty the fields in the item code, quantity and subtotal text boxes for new data to be entered. Enter the customer code using the combo box facility while the item code is entered manually. Filling in the item code will display the name of the item and its selling price. After the number of

items has been filled in, the subtotal will be filled in according to the product of price and quantity.

(2) Save button

The save button is used to save details of new data or changes to be saved into the database. Pressing this button will empty the fields in the item code, quantity and subtotal text boxes for new data to be entered. The stored data will be displayed in the table. This process will reduce the final stock amount in the item table.

(3) Edit button

This button is used to change saved sales data. The way to do this is by selecting one of the items in the table by clicking or double clicking the mouse. The text box will be filled according to the selected data, after that the change process can be carried out.

(4) Delete button

This button is used to delete erroneous or incorrect sales data. The way to do this is by selecting one of the items in the table by clicking or double clicking the mouse. The text box will be filled in according to the selected data, after that the deletion process can be carried out. This process will add the final stock amount to the item table

(5) Cancel button

Used to cancel entries that have been made during the data input or edit process.

(6) Search button

To search sales data based on note number.

(7) Refresh button

The refresh button is used to update the display in the table after the search process,

(8) Print Note button

This button is used to print sales receipts according to the invoice number displayed on the form. After finishing printing, this button must be pressed once again.

(9) Pay Button

Used to close transactions. This process will empty all text boxes and change the note number to the old note number plus 1.

(10) Close

Used to close the sales form.

6. Display of Sales Note

SIK SARANA INSAN KOMPUTER						
NOTA PENJUALAN						
No	Tanggal	Kode Barang	Nama	Harga	Banyak	Sub Total
00000025	12/03/2010	K0001	Keyboard USB	120000	1	120000
					Total	120000

Image of Sales Receipt Display

7. Display the Sales Return Form

Image of Sales Return Form Display

On the sales return form the return number and date will be filled in automatically when the form first appears or when ending a transaction.

The function of the buttons on the sales return form is:

(1) New button

The new button is used to enter new sales return details. Pressing this button will empty the fields in the item code, quantity and subtotal text boxes for new data to be entered. Enter the customer code using the combo box facility while the item code is entered manually. Filling in the item code will display the name of the item and its selling price. After the number of items has been filled in, the subtotal will be filled in according to the product of price and quantity.

(2) Save button

The save button is used to save details of new data or changes to be saved into the database. Pressing this button will empty the fields in the item code, quantity and

subtotal text boxes for new data to be entered. The stored data will be displayed in the table. This process will add the final stock amount to the item table.

(3) Edit button

This button is used to change detailed sales data that has been saved. The way to do this is by selecting one of the items in the table by clicking or double clicking the mouse. The text box will be filled according to the selected data, after that the change process can be carried out.

(4) Delete button

This button is used to delete incorrect or incomplete sales details. The way to do this is by selecting one of the items in the table by clicking or double clicking the mouse. The text box will be filled in according to the selected data, after that the deletion process can be carried out. This process will reduce the final stock amount in the item table

(5) Cancel button

Used to cancel entries that have been made during the data input or edit process.

(6) Search button

To search sales return data based on return number.

(7) Refresh button

The refresh button is used to update the display in the table after the search process

(8) Print Return button

This button is used to print sales return notes according to the return number displayed on the form. After finishing printing, this button must be pressed once again.

(9) Return OK button

Used to close transactions. This process will empty all text boxes and change the return number to the old return number plus 1.

(10) Close

Used to close the sales return form.

8. Display of Sales Return Note

SIK		SARANA INSAN KOMPUTER				
NOTA RETURN PENJUALAN						
Nota	Tanggal	Kode Barang	Nama	Harga	Banyak	Sub Total
00000014	12/03/2010	K0001	Keyboard USB	120000	1	120000
Total						120000

Image of Sales Return Note Display

9. Display of Goods Report

SIK		LAPORAN DAFTAR BARANG SARANA INSAN KOMPUTER			
				Tanggal : 03/12/2010	
Kode	Nama Barang	Harga Beli	Harga Jual	Stok Minimum	Stok Akhir
M0001	LCD Monitor 19	900000	1300000	1	2
M0002	LCD Monitor 16	700000	900000	1	3
K0001	Keyboard USB	85000	120000	2	10
Total Stok Barang					15

Image of Goods Report Display

10. Sales Report Display

Figure 4.19 Display of Report Date Selection Form

This form is used to determine the sales range based on a certain date, it could be a daily, weekly, monthly or annual range. Fill in the date format, namely month/day/year. To display the report, you must press the preview button which will change the button to refresh. To exit the form press the refresh button then press the exit button.

SIK		LAPORAN PENJUALAN SARANA INSAN KOMPUTER			
Tanggal	Kota	Customer	Kode Barang	Nama	Banyak
12/02/2010		PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010		PT Sarana Medika	M0001	LCD Monitor 19	1
12/02/2010		PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010		PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010		PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010		PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010		PT Sarana Medika	M0001	LCD Monitor 19	1
12/02/2010		PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010		PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010		Kantor Pajak	m0001	LCD Monitor 19	1
12/02/2010		PT Sarana Medika	m0001	LCD Monitor 19	2
12/03/2010		PT Sarana Medika	m0002	LCD Monitor 16	1
12/02/2010		Kantor Pajak	m0002	LCD Monitor 16	1
12/02/2010		PT Sarana Medika	m0002	LCD Monitor 16	1
12/02/2010		PT Sarana Medika	m0002	LCD Monitor 16	1

Image of Sales Report Display

11. Display Sales Return Report



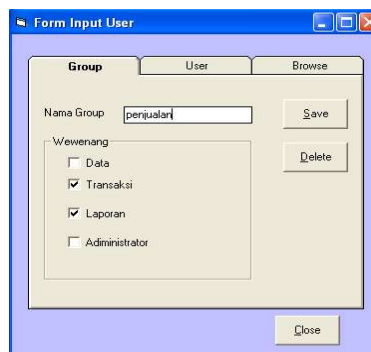
Figure 4.21 Report Date Selection Display

This form is used to determine the sales return range based on a certain date, it could be a daily, weekly, monthly or annual range. Fill in the date format, namely month/day/year. To display the report, you must press the preview button which will change the button to refresh. To exit the form press the refresh button then press the exit button

SIK					
LAPORAN RETURN PENJUALAN SARANA INSAN KOMPUTER					
Tanggal	Nota	Customer	Kode Barang	Nama	Banyak
12/03/2010	00000013	PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010	00000010	Kantor Pajak	m0001	LCD Monitor 19	1
12/02/2010	00000011	PT Sarana Medika	M0001	LCD Monitor 19	2
12/02/2010	00000012	Kantor Pajak	M0001	LCD Monitor 19	2
12/02/2010	00000006	Kantor Pajak	m0001	LCD Monitor 19	3
12/02/2010	00000008	PT Sarana Medika	m0001	LCD Monitor 19	4
12/02/2010	00000009	PT Sarana Medika	m0001	LCD Monitor 19	2
12/02/2010	00000001	PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010	00000004	Kantor Pajak	m0001	LCD Monitor 19	1
12/02/2010	00000005	PT Sarana Medika	m0001	LCD Monitor 19	1
12/02/2010	00000002	Kantor Pajak	m0002	LCD Monitor 16	1
12/02/2010	00000003	Kantor Pajak	m0002	LCD Monitor 16	1
12/02/2010	00000007	Kantor Pajak	m0002	LCD Monitor 16	2
12/03/2010	00000014	CV Dana Mandiri	K0001	Keyboard USB	1
Total					23

Figure 4.22 Sales Return Report Display

12. User Form Display



Input Group Display Image

This form tab is used to add new sections. To fill it in, you have to press the Add button first, then enter the data. Pressing the Add button will change the button to Save. To save data, you must press the Save button.

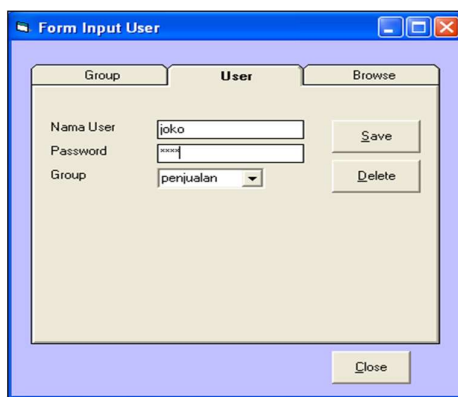


Figure 4.23 User Input Display

This form tab is used to add new user data. To fill it in, you have to press the Add button first, then enter the data. Pressing the Add button will change the button to Save. To save data, you must press the Save button.

To delete data, first press the Delete button, then enter the user, then press the OK button.

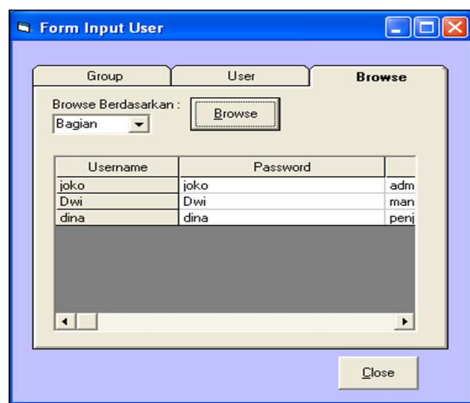


Figure 4.24 User Browse View

This form tab is used to view a list of users sorted by section or user name.

5. CONCLUSION

Based on the results of research conducted by the author at the Semarang Human Computer Facility, the author can draw several conclusions:

1. The sales system at Saran Insan Politik Semarang that is implemented is less efficient in terms of energy, time and accuracy. To overcome this problem, a multiuser-based information system is needed in the process of collecting data on sales results.

2. With a multiuser-based sales system, all sales data and information collection processes can be carried out more quickly and minimize the occurrence of errors.
3. In designing a new system or multiuser-based sales information system, it is necessary to collect data and analyze it carefully and carefully so that the results can be accounted for to all parties involved.

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