



WEB-BASED GOODS STOCK INFORMATION SYSTEM DESIGN ON HELLOMEE

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Abstract

This study aims to design a system that can assist in managing stock data on HelloMee.id, in an effort to improve performance at HelloMee.id. implement a system that can assist workers in managing existing stock data, and can search for stock data more quickly. This research will be made using software development methods and data collection methods and using the PHP programming language. HelloMee.id was founded in 2019 in Batam by looking at business opportunities that are quite productive, with HelloMee.id printing services it is hoped that it can help customer desires, the author sees a problem where it is difficult to find customer data when customers request services from HelloMee.id. The author sees a problem where it is difficult to find customer data, if the customer requests services from HelloMee.id again, therefore the author makes an information system design that will be very helpful from the staff or owner of HelloMee.id.

Keywords— *Printing, Information Systems, Architecture*

INTRODUCTION

Printing is a process of transferring text or images on paper or other objects through a printing machine. Printers usually produce books, magazines, agendas and calendars. Printing can also be a learning medium as well as a tool for exchanging and adding information.

The development of systems and technology in the era of globalization has progressed very rapidly both on a large, medium and small scale. For this reason, many printing companies have started using information systems and technology as tools to support their business activities to achieve company success and also as capital to compete with existing competitors.

HelloMee.id is a small printing-based SME which will sell polaroid photo printing services, stickers, and some A4 paper prints such as paper assignments, etc. Therefore HelloMee.id must prioritize the quality of products and the best service for its customers.

One of the obstacles that HelloMee.id has is that it is difficult to find out the stock data directly, which will slow down sales because they have to stock up suddenly.

Based on the above problems, it is necessary to design an information system for processing goods data as outlined in a practical report on Application and Design of Information Systems with the title "Designing Information Systems for Data Processing of Web-Based Printing Goods at UKM HelloMee.id" which is expected to be able to answer the needs of this system. SMEs, especially in checking goods data.

RESEARCH METHODS

There are two types of research methodologies used, namely software development methods and data collection methods. The method used in the development of this software uses the System Development Life Cycle model. Methods of data collection is done by observation, interviews and literature study. Observations were made to collect data and information by means of surveys and direct observation of the ordering system on HelloMee.id. The interview

method is a method of seeking information directly face to face with HelloMee.id. Literature review, this method is carried out by studying the theory of literature and books and service provider sites as a basic reference at this stage the system planning that will be made in general so as to facilitate its implementation is made using the software engineering model "System Development Life Cycle", the system development process through several stages from the system planning until the system is implemented, operated, and maintained.

The system development method used can be seen in Figure 1.



Figure 1. Waterfall System Development Method

1. Program Narrative

The director will send the required stock data to the staff, then the staff will buy the stock data and then enter the data into the system or database, then the database or system will print a report which will be signed by the director in 2 copies which will be archived.

2. Current Information System Flow

Information System Flow (ASI) here can mean chronological or procedure path of an operation from the beginning to the end of the operation. The flow of Information Systems (ASI) is composed of narrative events or procedures that form a series of work processes or operations, which are then used as a step in the preparation of the system which will later form a program.

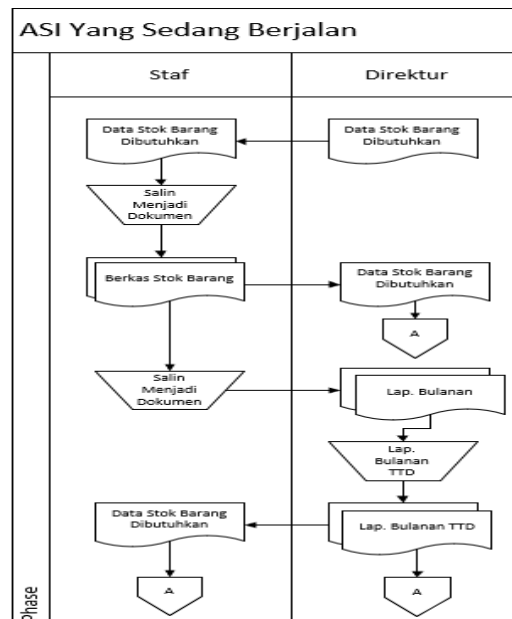


Figure 2. Flow of HelloMee.id Goods Stock Data Information System is Running

3. Proposed Information System Flow

The Information System Flow (ASI) here is the ASI that will be proposed for the program that will later be made for HelloMee.id. The flow of Information Systems (ASI) is composed of narrative events or procedures that form a series of work processes or operations, which are then used as a step in the preparation of the system which will later form a program.

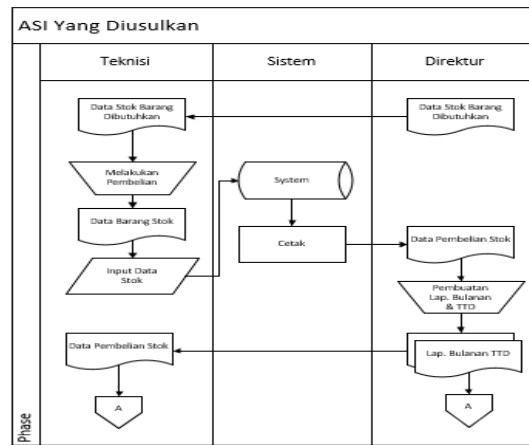


Figure 3. Flow of the Proposed HelloMee.id Goods Stock Data Information System

3. Use Case Diagrams

Use Case Diagrams are used for the depiction process carried out to show the relationship between users and the Staff and Leadership use case diagram system in the image above shows that staff and leaders can login, input stock data, search for item data, reports, and logout, the only difference is the difference. is in the staff account input. The Use Case Diagram for designing a stock information system at hellomee.id is as follows:

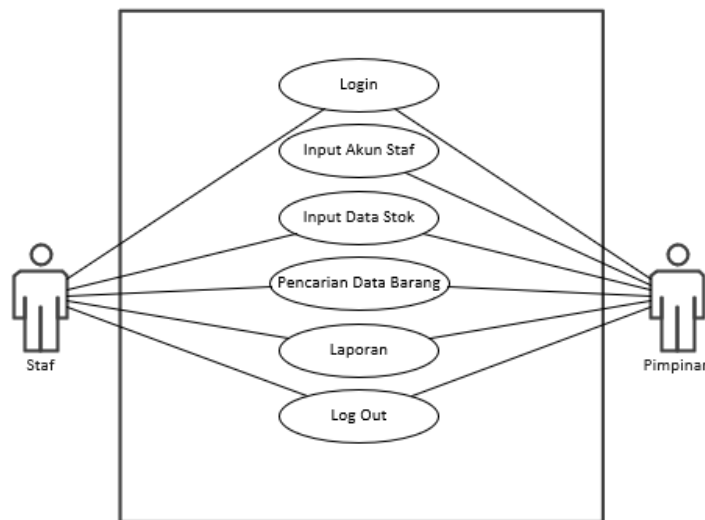


Figure 4. Use Case Diagram of a Stock Information System Design HelloMee.id

4. 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, the following images describe each activity. Activity Diagrams can be seen as shown in the figure below.

a. Activity Diagram Login

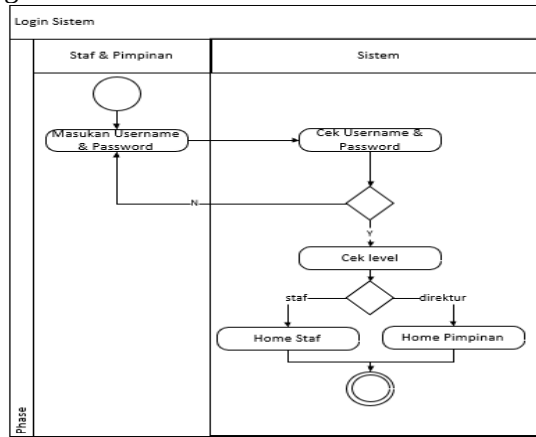


Figure 5. Activity Diagram of Stock Data Login HelloMee.id

b. Activity Diagram LogOut

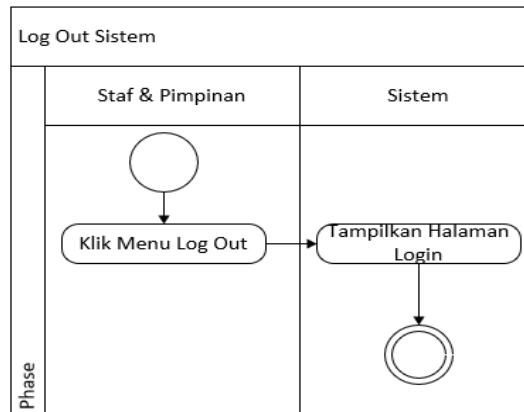


Figure 6. Activity Diagram of the HelloMee.id Stock Data Logout

c. CRUD Activity Diagrams

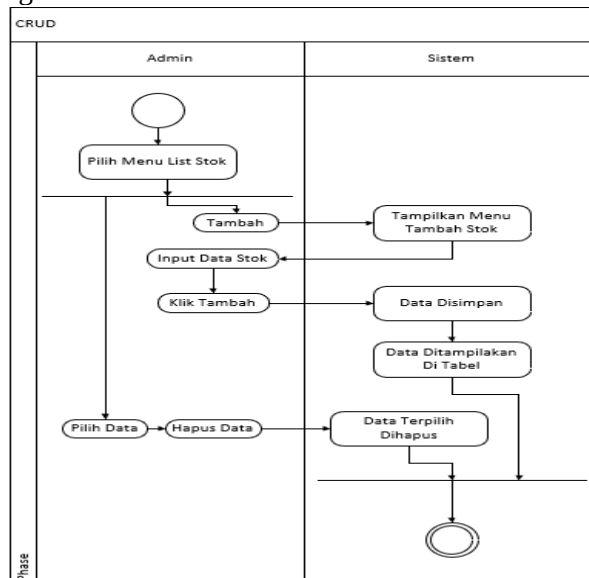
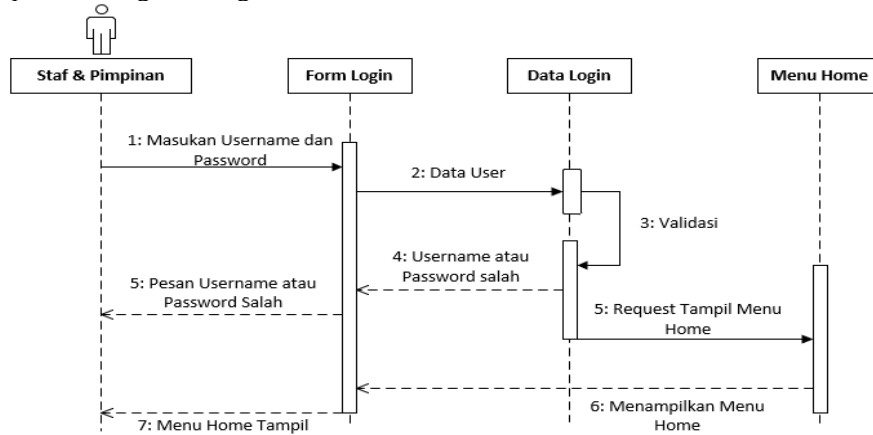


Figure 7. Activity Diagram of CRUD Stock Data HelloMee.id

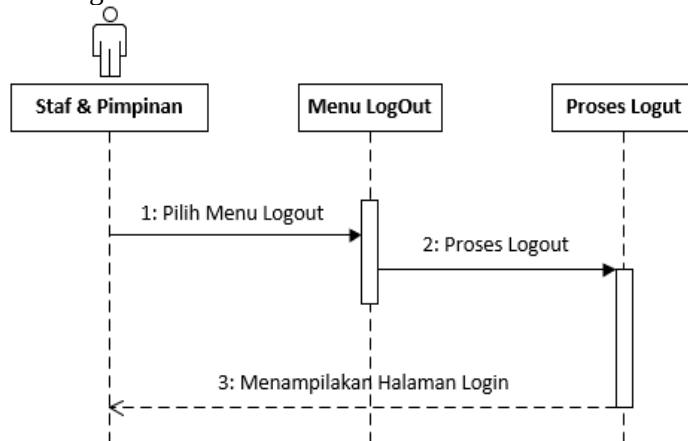
5. Sequence Diagrams

Sequence diagrams are used to describe interactions between objects in and around the system in the form of messages depicted against time. Sequence diagrams consist of a vertical dimension (time) and a horizontal dimension (related objects). A clear description of the sequence diagram can be seen in the image below.

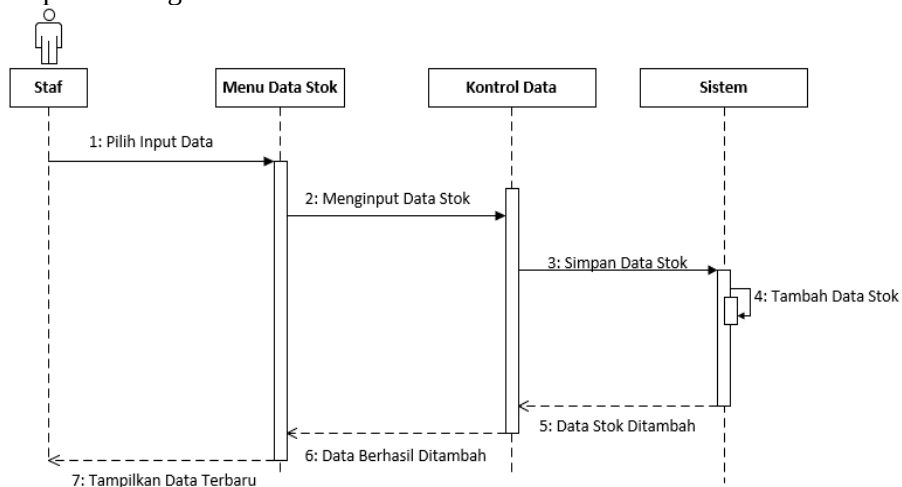
a. Sequence Diagram Login



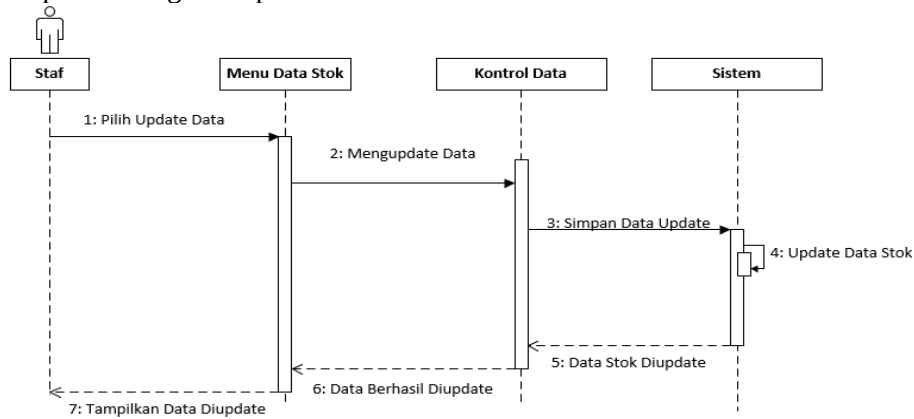
b. Logout Sequence Diagram



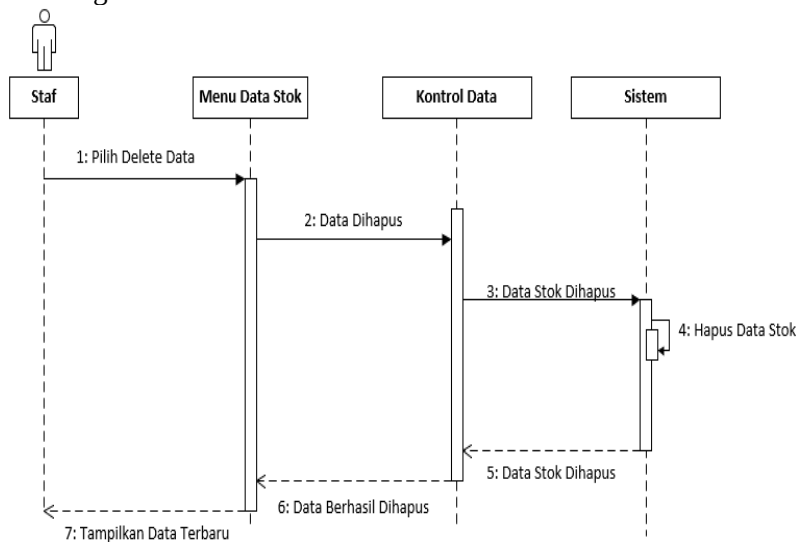
c. Input Sequence Diagram



d. Sequence Diagram Update Data



e. Sequence Diagram Delete Data



5. Class Diagram

class diagram describes the structure of the system in terms of defining the classes that will be created to build the system. Classes have what are called attributes and methods or operations. A clear description of the class diagram can be seen in the image below.

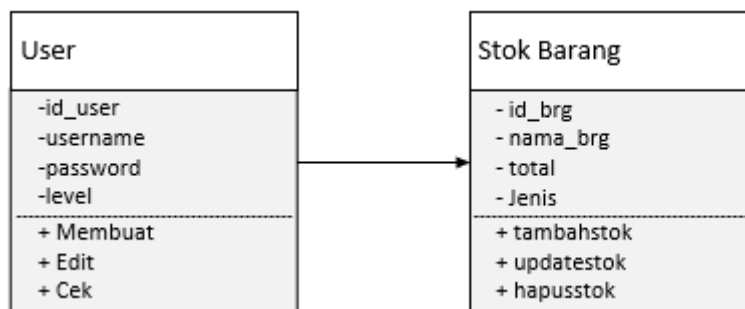


Figure 13. Class Diagram of Stock Information System Data HelloMee.id

5. Desain file

Database : fphellomee
 Tabel : User
 Primary Key: **id_user**

Table 1. User table

No	Nama Field	Tipe Data	Interval	Keterangan
1	id_user	varchar	10	id user
2	username	varchar	35	nama user
3	password	varchar	35	password user
4	level	varchar	40	hak akses user

Tabel : stok
Primary Key: **id_brg**

Table 2. Stock table

No	Nama Field	Tipe Data	Interval	Keterangan
1	id_brg	varchar	20	id barang
2	nama_brg	varchar	35	nama barang
3	jenis	varchar	20	jenis barang

RESULTS AND DISCUSSION

1. IMPLEMENTATION

Implementation can be interpreted as an action taken to find out what if an application that has been built can be implemented into the system, whether this application can provide good benefits for its users or not. Implementation can also be done to find out the system limitations needed to run this application.

2. SYSTEM MANAGEMENT ARCHITECTURE

System testing and implementation aims to see whether the system designed is in accordance with what is desired or not, after testing and implementation, the quality of the system will be seen. The program display is a sub-chapter that describes the process from the beginning to the end of the program being run, the points in this sub-chapter will explain how a form is run and what functions are contained in the form.

3.1. Input

a. Login Display

SIGN IN

Username

Password

LOGIN

Figure 14. Display of Customer Input

In the customer window display, here you can enter your name and password.

b. Item Input Display – Staff

HelloMee	Input Stok	Data Stok Barang	LogOut
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ID Barang

Nama Barang

Jenis Barang

Jumlah Barang

Input

Figure 15. Staff Design – Stock (Add)

In the design of the add stock page which consists of item id, item name, item type, item number.

c. Item Data Edit View

HelloMee	Input Stok	Data Stok Barang	LogOut
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ID Barang

Nama Barang

Jenis Barang

Jumlah Barang

Input Kembali

Figure 16. View edit item data

In the design of the stock data edit page, it will display the item id, item name, item type, quantity, input and return.

d. User Input Display

HelloMee	Input Stok	Input User	Data Stok Barang	LogOut	
<p>ID User</p> <input type="text"/> <p>Username</p> <input type="text"/> <p>Password</p> <input type="text"/> <p>Level</p> <input type="text"/> <p style="text-align: center;">Input</p>					

Figure 17. User Input Display

In the design of the add user leader page, here the Director can add a user if there are additional workers in the Add user view there is a user id, username, password, and level.

2.1. Process

e. Staff Home View

HelloMee	Input Stok	Data Stok Barang	LogOut	
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;"> HALO SELAMAT DATANG !USERNAME </div>				
FOOTER				

Figure 18. Staff Home View

Just like the customer input display, here staff can input sales such as customer id, item id, purchase date, order amount, and cost.

f. Director's Home View

HelloMee	Input Stok	Input User	Data Stok Barang	LogOut	
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;"> HALO SELAMAT DATANG !USERNAME </div>					
FOOTER					

Figure 19. Director's Home View

On the Leader page design, after logging in, you will be presented with a stock input navbar, user input, stock data.

2.3. Output

g. Stock Data View

HelloMee	Input Stok	Input User	Data Stok Barang	LogOut		
DATA STOK BARANG						<input type="button" value="CARI DATA"/>
No	ID Barang	Nama Barang	Jenis Barang	Jumlah Barang	EDIT	DELETE
1	xx	xx	xx	xx	EDIT	DELETE

Figure 20. Display of Stock Data.

In designing the inventory data leader page here, it is made the same as staff, here the leader can directly view, search, edit, and delete data from stock items.

3. APPLICATION IMPLEMENTATION

Implementation of the application aims to provide an overview after the program is ready to be built.

3.1. Input

a. Login Display

Login

Figure 21. Login Display

On the login page, the stock information system at HelloMee uses a registered username, if the username and password are correct, the system will enter the stock information system application page, if incorrect, it will enter the login page. Back.

b. Item Data Input Display

INPUT DATA BARANG

ID Barang
B007

Nama Barang

Jenis Barang:
Kertas

Jumlah:
Jumlah Barang

Kirim

Figure 22. Display of Goods Data Input

On the stock input page there is an item id, item name, item type, quantity and input.

c. User Input Display

INPUT USER

ID User
U003

UserName
Username

Password:
Password

Level:
Staf

Kirim

Figure 23. User Input Display

On the user input page, the leader can enter user data to login when there is a new employee.

e. Item Edit View

Ubah Data Barang

ID Barang
B001

Nama Barang

Foto

Jenis Barang
Kertas

Jumlah
200

Submit Kembali

Figure 23. Display of Item Data Update

On the Change Item Data page, the HelloMee stock information system application is used to manage item data, where the system can change item stock data.

3.2. Process

a. Staff Home View

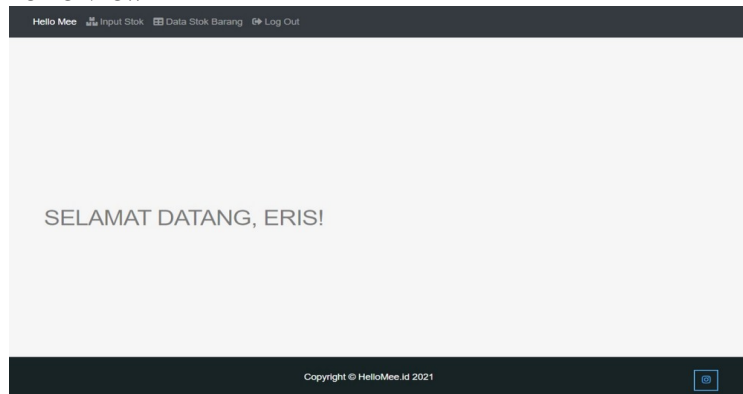


Figure 24. Staff Home View

On the application menu page, the stock information system at HelloMee consists of the Home menu, stock input, stock data, and logout.

b. Director's Home View

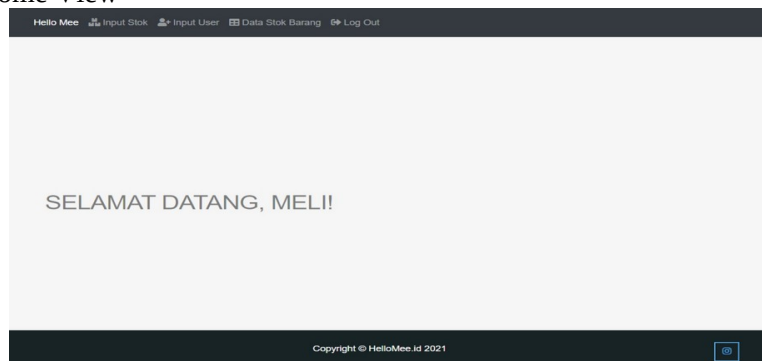


Figure 25. Director's Home View

In the service certificate data on the stock information system application at HelloMee, the leader will be presented with a navbar containing stock input, user input, stock data items, and logout.

3.3. Output

a. Stock Data Display

Nomor	ID BARANG	NAMA BARANG	JENIS BARANG	JUMLAH BARANG	Aksi Edit	Aksi Hapus
1	B001	Foto	Kertas	200	EDIT	Hapus
2	B002	Sticker	Kertas	30	EDIT	Hapus
3	B003	Frame	Kayu	10	EDIT	Hapus
4	B004	Kantong	Plastik	50	EDIT	Hapus
5	B005	PriceList	Kertas	60	EDIT	Hapus
6	B006	Lampu	Kayu	123	EDIT	Hapus

Figure 26. Display of Goods Stock Data

On the Goods Stock Data page, the HelloMee stock information system application is used to manage stock data, where the system can change, delete, and search item data.

CONCLUSION

Based on the discussion that has been carried out in the previous chapters of making this practicum report, we hereby as authors get the following conclusions:

1. This information system or application makes it easy for hellomee.id SMEs to search for stock data on hellomee.id.
2. This information system application is useful as a place to store data because at this time it only stores data in the form of files and writings on WhatsApp, therefore this information system application will be very useful for small SMEs hellomee.id.

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