

Web-Based Inventory Information System at PT. Tunas Tasik

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Article Info :	ABSTRACT
Article History : Received : 02 June 2024 Revised : 10 July 2024 Accepted : 13 July 2024 Available Online : 28 August 2024 Keyword : Information Systems, Inventory, PHP, Web.	<i>The complexity of the company, driven by changes in the very dynamic environment, needs to be supported by a new design for the processing of stock data at PT. Tunas Tasik is still done manually, so efforts are being made to implement a special application system for the management of goods data; therefore, a responsive web-based information system is needed that can speed up the process of managing goods data. The methods used in this study are observation and interview methods. From the results of the analysis of the web-based goods data management application, which will be described using UML (Unified Modelling Language) notation, Activity Diagram and ERD, to be further implemented using the PHP programming language and database using MySQL. so that it can further improve work effectiveness and provide information quickly and accurately.</i>

1. INTRODUCTION

In today's era of free competition, the speed of processing and delivering information has a very important role for every company, especially in companies that have a high level of routine and have a lot of data to process. The amount of data and information that must be processed is no longer effective if it is done using manual methods. Processing of a large amount of data requires a tool that has a level of speed and accuracy in calculating and conveying information. These tools are in the form of hardware and software

The complexity of the company driven by the change in a very dynamic environment needs to be supported by a new design design that can support the service of information needs to the increasing system users in order to keep the company ahead of competitors and keep itself on par with the technological revolution and its impact on the company's products or services.

Processing of stock data at PT. Tunas Tasik is still done manually, namely using a ledger, as a result of which the data processing takes a long time. In fact, to process data on goods, precision and precision are needed. Documentation of goods data in a company / business entity is very important. With more and more data on goods entering and exiting a company/business entity, it is necessary to computerize data recording.

To overcome this problem, efforts are being made to implement a special application system for the management of goods data, which can handle the data of goods to be processed into a database and design an application that can help the complexities experienced so far, in the hope that the information needed can run quickly and accurately.

In order to get maximum results, adequate tools or facilities are needed, for example, data processing tools in the form of computers and supporting devices and human resource capabilities are needed for its operation. With these considerations, the author considers it important to raise the above case in this report by taking the title: "Goods Inventory Information System at PT. Web-Based Lake Shoots"

2. METHOD

The methods used in this study are observation and interview methods. Method. Observation is a method of data collection through direct observation or careful and direct review in the field or research location. Observation at PT. Tunas Tasik is carried out by directly observing the condition of the place. In addition, data collection is also carried out by the interview method, which is a stage of data collection by asking questions directly by the interviewer to the respondent, and the respondents' answers are recorded or recorded with a recording device. Interviews were conducted directly with employees to obtain information in this study. The data obtained based on observation and interview methods used to build this system is a waterfall model. This model is an approach to systematic software development.

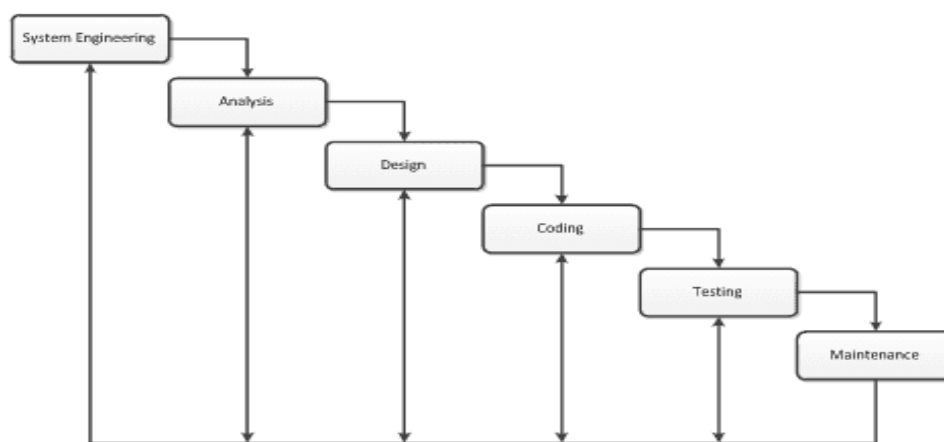


Figure 1 Stages of the Waterfall Paradigm (Classic Life Cycle).

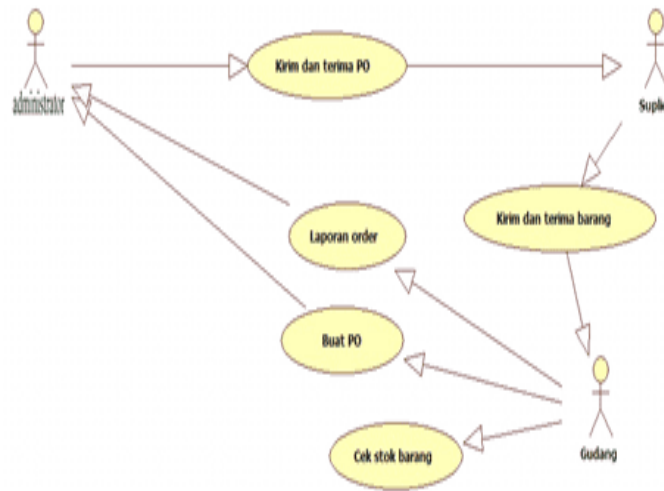
3. RESULTS AND ANALYSIS

a. Result

Design of the Daily Inventory Report Information System at PT. Tunas Tasik went through the stages of analysis, design, and implementation using the PHP programming language. This system can run well and is easy to operate and makes it easier for admins and employees to manage Inventory reports.

b. Functional Design

Functional design uses Activity Diagram and Use Case Diagram to communicate the system design to users or stakeholders.



Gambar 2 Use Case diagram

c. Testing

To test the system, researchers used the black box method. Black box testing is a program test based on the functions of the program. The following is a test table of the system using the blackbox method

Table 1 : Black Box Testing

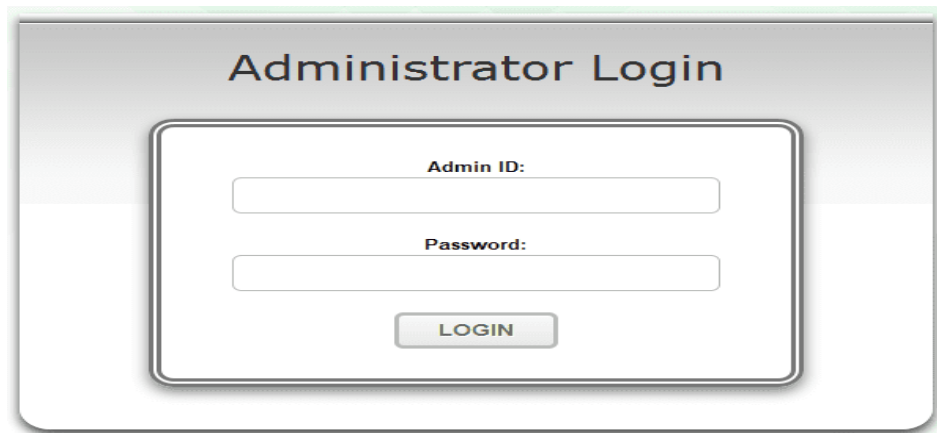
No	Command Menu	Testing	Result
1	Displays a login page when clicking Login on the Menu Bar	The login page appears after clicking the menu click Login on the Menu Bar	Appropriate
2	Displays the main menu page on the system after logging in	The main menu appears after logging in	Appropriate
3	Displays menu options when clicking the Master Data menu	The Master Data menu appears When clicked	Appropriate
4	View the incoming goods report data form	Incoming Goods Report Data Form Appears	Appropriate

d. Implementasi User Interface

User interface is a display of the results of implementation from design analysis and design. Here are some of the features of the user interface:

1. The login page view

This login page is the page that is displayed for the first time when the application is run, as for the login page display as shown in the following figure 5:



The image shows a web form titled "Administrator Login". It contains two input fields: "Admin ID:" and "Password:". Below these fields is a button labeled "LOGIN". The form is centered on a light gray background with a subtle gradient.

Figure 3 Login page view

2. Main page view (App Main Menu)

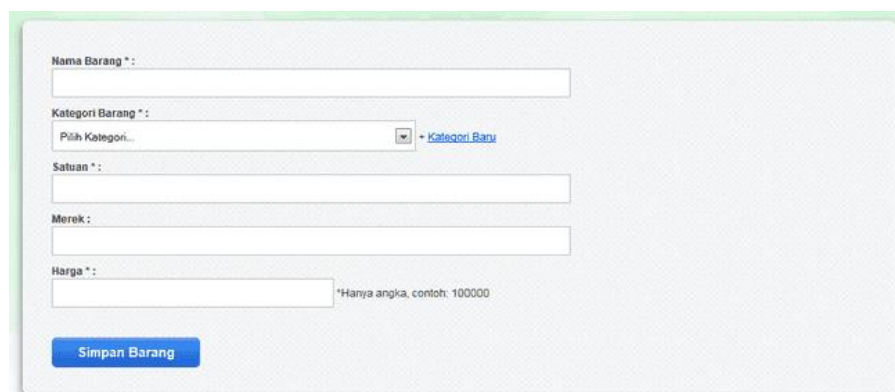
The main page is a page that will be displayed if you have successfully entered the correct username and password, as for the dashboard page as shown in the following figure 6:



The image shows a dashboard titled "BERANDA". At the top, there is a green navigation bar with links: BERANDA, BARANG, SUPPLIER, PEMBELIAN, RETUR PEMBELIAN, PEMAKAIAN, and LAPORAN. Below the navigation bar, there are six main menu items, each with an icon and a label: "Data Barang" (with a folder icon), "Data Supplier" (with a person icon), "Pembelian" (with a shopping cart icon), "Retur Pembelian" (with a green arrow icon), "Pemakaian" (with a checklist icon), and "Laporan" (with a document icon).

Figure 4 Main page view (App Main Menu)

3. Add Item Data Page



The image shows a form for adding item data. It contains several input fields: "Nama Barang *:", "Kategori Barang *:" (with a dropdown menu), "Satuan *:", "Merek:", and "Harga *:". Below the "Harga *" field, there is a small text note: "*Hanya angka, contoh: 100000". At the bottom of the form, there is a blue button labeled "Simpan Barang".

Figure 5 Item Data Add Page View

To add new items, users must fill in the item data completely on the form that has been provided, then save it by clicking the "Save Items" button.

4. Supplier Data Page



Kode Supplier	Nama Supplier	Alamat	Kota	Telepon	Manage
S00000001	MULYA INTI PERSADA	JL. ANTAPANI NO. 67	BANDUNG	022-123450	EDIT HAPUS
S00000002	TOKO BUKU ATRA	JL. SUKASENANG NO. 60	BANDUNG	022-123123	EDIT HAPUS
S00000003	samtono	melatir raya blok 1 no 245	bekasi	021-8219996	EDIT HAPUS

Figure 6 Supplier Data Page View

This page displays the data of suppliers / suppliers of goods that have been entered into the database, users can add new data, edit it, or delete it.

5. Item Purchase Data Page



Nomor	Tanggal	Supplier	Total	Manage
BL00000004	21-08-2017	samtono	1,000,000	DETAIL EDIT HAPUS
BL00000003	17-08-2017	samtono	62,000	DETAIL EDIT HAPUS
BL00000002	17-08-2017	MULYA INTI PERSADA	20,600,000	DETAIL EDIT HAPUS
BL00000001	17-08-2017	TOKO BUKU ATRA	158,000	DETAIL EDIT HAPUS

Figure 7 Item Purchase Data Page Display

This page displays data on the purchase of goods that have been entered into the database. On this page, a link is provided to create a new transaction, edit, or delete a transaction.

6. Item Purchase Return Data Page



Nomor	Tanggal	Supplier	Total	Manage
RB00000001	30-08-2017	Toko DIRGA MEDIA	42,000	DETAIL EDIT HAPUS

Figure 8 Item Purchase Return Data Page View

This page displays the transaction data of return purchases of goods that have been entered into the database. On this page, a link is provided to create a new transaction, edit, or delete a transaction.

7. Item Usage Data Page

Nomor	Tanggal	Total	Keterangan	Manage
PK00000005	25-09-2013	5,000,000	TEST	DETAIL / EDIT / HAPUS
PK00000004	20-09-2013	14,500,000	TEST	DETAIL / EDIT / HAPUS
PK00000003	18-09-2013	3,000,000	TEST	DETAIL / EDIT / HAPUS
PK00000002	18-09-2013	57,500,000	TEST	DETAIL / EDIT / HAPUS
PK00000001	18-09-2013	1,500,000	TEST	DETAIL / EDIT / HAPUS

Figure 9 Item Usage Data Page Display

This page displays the transaction data of the use of goods that have been entered into the database. On this page, a link is provided to create a new transaction, edit, or delete a transaction.

8. User Data Page

User ID	Nama Pengguna	Level Pengguna	Manage
admin	ADMINISTRATOR	Administrator	EDIT / HAPUS
ti	Ti Ad Saputro	User	EDIT / HAPUS
user	USER	User	EDIT / HAPUS

User ID * : * Alpha-numeric (tanpa spasi)

Nama * :

Level * :

Password * :

Ketik Ulang Password * :

[Tambah](#)

Figure 10 User Data Page View

This page displays the data of users / users who can use the application.

4. CONCLUSION

Based on the results of observations that have been carried out at PT. Tunas Tasik, in order to build a goods reporting system. So the author draws several conclusions as follows:

1. The integration of PHP and MySQL programming can help record data on the entry and exit of goods at PT Tunas Tasik, so that it can further improve work effectiveness and provide information quickly and accurately.
2. An organized information system can help in reporting goods data at PT. Lake Buds.

5. DECLARATION OF COMPETING INTEREST

We declare that we have no conflict of interest.

6. DAFTAR PUSTAKA

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