Web-Based Inventory Information System in Antariksa Stores.

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Abstract. Antariksa Store is a shop that specializes in electronics and audio. As a seller, the Antariksa Shop must manage inventory items well. Inventory system that runs on the Antariksa Shop, such as recording incoming items, stock, and items out is still running manually, thus causing difficulties in recording items and errors in making reports. Because of these problems, the Antariksa Shop wants to use the information system in the Antariksa Shop to overcome the problems that exist in the Antariksa Shop. Based on these problems, a web-based inventory information system was created to manage existing inventory at the Antariksa Shop. Web-based inventory information system created using the SSAD method and with Waterfall modeling. Data storage uses a MySQL database and the programming languages used to create information systems are html, css, js, and php. Information systems are carried out using the Black Box and User Acceptance Test (UAT) methods. The Web-Based Inventory Information System at the Antariksa Store is expected to help manage incoming items, inventory and outgoing items at the Antariksa Store and make it easier to make reports, and reduce errors in the recording of items.

Keywords: Information Systems, MySql, Inventory, PHP, Web.

1. Introduction
Information technology is a technology used to process data, including processing, obtaining, compiling, storing, manipulating data in various ways to produce quality information, namely information that is relevant, accurate and timely, which is used for personal, business, and governmental purposes and is strategic information for decision making [1]. The development of information technology is developing rapidly at this time. Rapid technological development provides many benefits in various fields. The use of appropriate technology can help in completing various jobs quickly. The development of information technology is currently being applied in various fields, such as Accounting, Management, Business, and others. Many business fields have begun to use information technology in their business processes, from procurement of items to selling to consumers. This Inventory Information Systems at the Antariksa Shop aims to simplify the data collection and management of items contained in the Antariksa shop by using web-based application that can provide information about the stock of items.

2. Method and materials
2.1 Data Collecting Method
In making this Inventory Information System, data collection methods used are interview, direct observation, literature study and discussions to solve problems. Survey and interview was held on Glodok – West Jakarta. While discussions was did on Universitas Tarumanagara.
2.2 System development method
This inventory information system was designed using the SSAD methodology. SSAD is a way to organize the system analysis and design section of a project that aims to create a computer-based information system [2]. And the modeling used is the Waterfall model. The waterfall method or often called the waterfall method is often called the classic life cycle (classic life cycle, where this illustrates a systematic and sequential approach to software development, starting with the specification of user needs and then continuing through the stages of planning (planning), modeling (construction), construction (construction), as well as the delivery of the system to the customer/user (deployment), which ends with support for the complete software produced [3].

2.3 Materials
The data used are primary data and secondary data. The main data in the form of items data and sales data and secondary data in the form of data collected from the internet such as rental prices and categories of items.

3. Literature Review
Inventory is a concept that reflects resources that can be used but not used. Understanding inventory can be interpreted in a number of different ways, among other stocks available at that time, a detailed list of available goods, the amount of stock of goods needed by an organization at a time. The main function of the inventory is to fulfill all customer requests with minimum requirements. However, we should not look at the profits obtained only by looking at the inventory side of the warehouse alone because inventory determines in all departments in the company [4].

4. Result and Discussion
This information system uses the mysql database to store data used as incoming items data, stock items data, and outgoing items. The php programming language is used to retrieve and input data into the website database. The database used is based on Entity Relationship Diagram (Figure 1) design.

![Figure 1. Entity Relationship Diagram](image-url)
4.1 Incoming Items Data

This information system application enters incoming items data based on user input. Data on incoming items is in the form of data on purchases, data on items, and quantity of items. Data of incoming items entered will be stored in the database. Data of stored incoming items that have been saved are shown in table 1.

| Kode Pembelian | Kode Barang | Kode Retur | Jumlah |
|----------------|-------------|------------|--------|
| PB00001        | BA00001     |            | 6      |
| PB00002        | BA00002     |            | 3      |
| PB00001        | BA00003     |            | 2      |
| PB00001        | BA00007     |            | 5      |
| PB00002        | BA00001     |            | 2      |
| PB00008        | BA00005     |            | 1      |
| PB00010        | BA00021     | RB00009    | 3      |

**Table 1.** Table of Input From Incoming Items.

4.2 Stock Items Data

This information system application displays data from data items that have been stored by the user. The data displayed is in the form of item data along with the amount of stock. The data is shown in table 2.

| Kode Barang | Nama Barang   | Harga  | Kategori       | Merk     | Ukuran | Satuan | Stok | Gudang |
|-------------|---------------|--------|----------------|----------|--------|--------|------|--------|
| BA00001     | BMB DA 2000 PRO | 2300000 | Karaoke Amplifier | BMB | 7.5mm | Meter | 6    | Jakarta |
| BA00003     | JS 818        | 185000 | Bracket         | JEFFERSOUND | 2000gr | Buah | 6    | Jakarta |
| BA00007     | MG 12 XU      | 400000 | Mixer           | YAMAHA   | 7.5kg | Buah | 3    | Jakarta |
| BA00020     | JBL RMA 330   | 1080000| Karaoke Amplifier | JBL | 2000gr | Buah | 3    | Jakarta |
| BA00021     | JBL RM 10     | 5500000| Aktif Speaker   | JBL      | 1000gr | Pair  | 2    | Jakarta |

**Table 2.** Table of Input From Stock Items.
4.3 Outgoing Items Data
This information system application enters data items that come out based on user input. The data of items that come out is data of sales, data of items, and quantity of items. Data items that come out will be stored in the database. Data of saved outgoing items that have been saved is shown in table 3.

| Kode Penjualan | Kode Barang | Kode Retur | Jumlah |
|----------------|-------------|------------|--------|
| SC00001        | BA00001     | RJ00005    | 1      |
| SC00001        | BA00002     | RJ00001    | 1      |
| SC00002        | BA00001     | RJ00005    | 3      |
| SC00002        | BA00002     | RJ00005    | 1      |
| SC00003        | BA00003     | RJ00005    | 3      |
| SC00005        | BA00002     | RJ00006    | 2      |
| SC00006        | BA00001     | RJ00006    | 1      |

Table 3. Table of Input From Outgoing Items.

5. Conclusion and Future Works
Web-Based Inventory Information System in Antariksa Stores is made and implemented in the form of a website so that users can easily access and system. The Web-Based Inventory Information System Website at the Antariksa Store is used to manage incoming goods, inventory items, and outgoing items at the Antariksa Store. The website can also report to the owner the amount of goods entering and leaving.

6. References
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