

PAPER • OPEN ACCESS

Web-Based Inventory Information System in Antariksa Stores

To cite this article: Devan Ariesta *et al* 2020 *IOP Conf. Ser.: Mater. Sci. Eng.* **1007** 012115

View the [article online](#) for updates and enhancements.



240th ECS Meeting ORLANDO, FL

Orange County Convention Center Oct 10-14, 2021



Abstract submission due: April 9

SUBMIT NOW

Web-Based Inventory Information System in Antariksa Stores.

Devan Ariesta*, Zyad Rusdi, Tri Sutrisno

Information Systems Department, Faculty of Information Technology

Universitas Tarumanagara

*devan.825160014@stu.untar.ac.id

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.

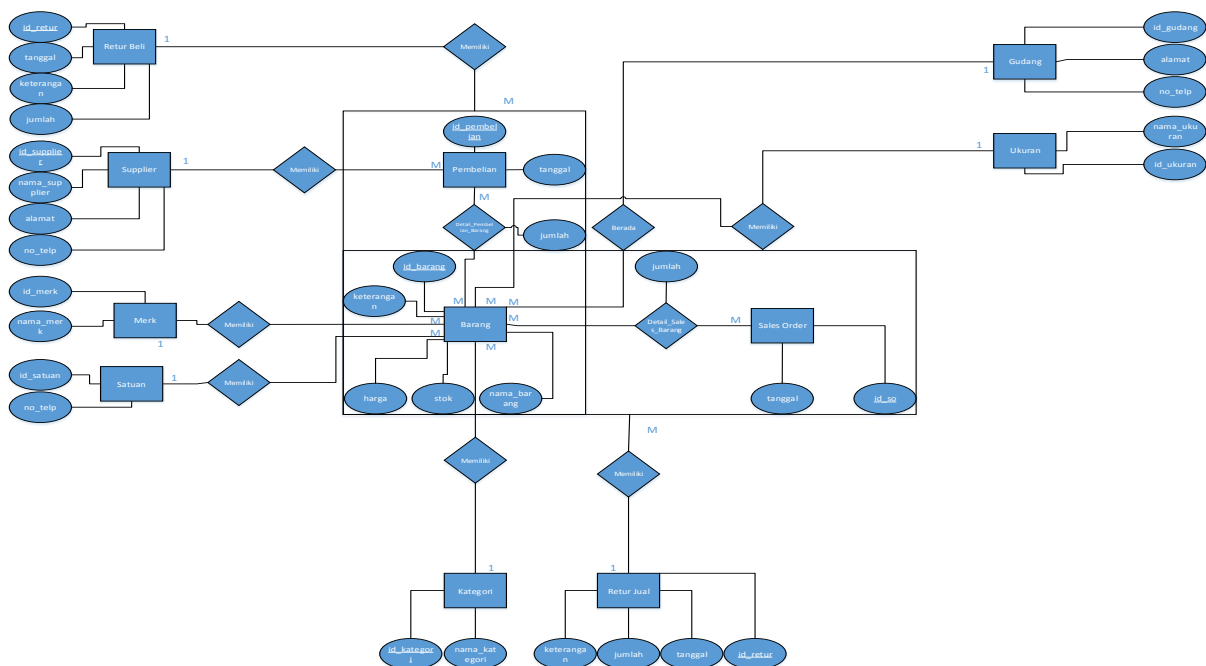


Figure 1. Entity Relationship Diagram

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	RB00001	6	 Edit	 Hapus
PB00001	BA00002		3	 Edit	 Hapus
PB00001	BA00003		2	 Edit	 Hapus
PB00001	BA00007		5	 Edit	 Hapus
PB00002	BA00001		2	 Edit	 Hapus
PB00008	BA00005		1	 Edit	 Hapus
PB00010	BA00021	RB00009	3	 Edit	 Hapus

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	 Edit	 Hapus
BA00003	JS 818	185000	Bracket	JEFFERSOUND	2000gr	Buah	6	Jakarta	 Edit	 Hapus
BA00007	MG 12 XU	4000000	Mixer	YAMAHA	7.5kg	Buah	3	Jakarta	 Edit	 Hapus
BA00020	JBL RMA 330	10800000	Karaoke Amplifier	JBL	2000gr	Buah	3	Jakarta	 Edit	 Hapus
BA00021	JBL RM 10	5500000	Aktif Speaker	JBL	1000gr	Pair	2	Jakarta	 Edit	 Hapus

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		
SO00001	BA00001	RJ00005	1	 Edit	 Hapus
SO00001	BA00002	RJ00001	1	 Edit	 Hapus
SO00002	BA00001		3	 Edit	 Hapus
SO00002	BA00002		1	 Edit	 Hapus
SO00003	BA00003	RJ00005	3	 Edit	 Hapus
SO00005	BA00020		2	 Edit	 Hapus
SO00006	BA00021	RJ00006	1	 Edit	 Hapus

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

- [1] Mulyadi. (2014). Accounting System. Yogyakarta: Salemba Empat.
- [2] Downs. (1992). Structured Systems Analysis And Design Method.
- [3] Pressman, Roger S. (2012). Rekayasa Perangkat Lunak – Buku Satu, Pendekatan Praktisi (Edisi 7).
- [4] F. Rahmanand, T. H. Bagio. (2016). “Sistem Informasi Inventory Dengan Menggunakan Metode First in Sistem Informasi Inventory Dengan Menggunakan Metode First in First Out (FIFO)”.