

Web-based clothing and fabric stock data processing information system at PT. Crevis Tex Jaya

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ABSTRACT

Technology in the era of globalization plays an important role in supporting daily life activities, both in the fields of education, business, entertainment, government, and others. Computers as a manifestation of technology facilitate human work with one of its tools, namely information systems commonly used for data processing, but many companies currently still use manual data processing which has the potential to cause data management errors. The proposed solution to the problem requires the provision of computer equipment and human resource training. PT Crevis Tex Jaya, famous for its clothing and fabric business, must have an information system to handle clothing and fabric inventory data that is computerized, MySQL is used as a database server to facilitate data query. The following study produces an apparel inventory data processing system that supports the implementation of data processing to minimize errors, improve work efficiency, and speed up reporting.

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1. INTRODUCTION

The industrial sector is one of the important sectors in the development of the economy in Indonesia. Various kinds of industries have developed quite rapidly. One of the growing industrial fields in Indonesia is the garment textile industry. Garment is one of the important commodities in human life, therefore the need for garment products is increasing. (Winarto et al., 2022)

Composed of the words System and Information which are described, namely in outline the system is a collection of components and elements that are integrated, organized components and work together in realizing a certain goal (Priyanti, 2018).

According to (Riswanda, D., & Priandika, 2021), say that "The system is a collection of elements in the form of data, a network of interconnected procedures, human resources, technology both hardware and software that interact with each other as a unit to achieve certain common goals or objectives". (Kristanto, 2018) argues that the system is a collection of elements that are interrelated and work together to process input aimed at the system and process the input to produce the desired output.

While the description of information, namely according to (Winarno, 2021) explains that information is a set of data that is organized or processed in a certain way so that it has meaning for the recipient. (Luih, J. R., Haryani, C. A., & Widjaja, 2022) suggests that information is data that can be processed, classified, interpreted and used for the decision-making process. Based on the above understanding, it can be concluded that the definition of information is data that is processed to be useful in making decisions for its users (Sutedi, A., Nursyaban, D., Mutiara, C., Sopiah, D., Salam, D. R., Rahayu, D. N., ... & Kurniadi, 2021).

Information can be said to be of quality, if it has eight criteria according to (Adisel, 2019), including relevance, data completeness, correctness, measurability, accuracy, clarity, flexibility, timeliness.

So from the above statement, the Information System means (Luih, J. R., Haryani, C. A., & Widjaja, 2022), "The information system is a system that contains a network of SPD (data processing systems), which is equipped with communication channels used in the data organization system. The process elements of the information system include collecting data (data gathering), processing stored data, and disseminating information".

Another point from (Winarno, 2021) "Information systems are an organized combination of people, hardware, software, communication networks and data resources that collect, transform and disseminate information in an organization".

According to (Putra, R. R., & Zefanya, 2022), "Inventories are generally the largest current asset of manufacturing companies. Trading companies always buy their merchandise in the form of goods ready for resale and manufacturing companies produce goods for sale to trading companies."

According to the Indonesian Institute of Accountants in Financial Accounting Standards (2018: 14:06), the term inventory itself is defined as assets that are owned and for sale in the ordinary course of business, in the production process for sale. In the form of materials or equipment (supplies) for use in the production process or provision of services (Irwansyah, 2018).

System design is a phase where design expertise is needed for computer elements that will use the system, namely the selection of equipment and computer programs for the new system (Afifah, 2018). Components included in system design are Data Flow Diagram (DFD), Flow diagram (Flow Map).

The database itself has a purpose in data processing to facilitate work that has a large amount and cannot be done manually due to the potential for errors and errors in data processing. Overall, the database is a very important aspect in information systems, the database is used as a warehouse to store data that will be processed further. A database is a collection of data that is systematically organized in a computer using software to produce information (Purba, M. M., & Rahmat, 2021).

According to (Lestari, 2020), a database is a container that stores data in a system. A database can also be understood as a collection of data. Databases are also often called formal and corporate. A database can also be interpreted as an integrated collection of data that can be quickly manipulated, retrieved, and searched (Rosa, 2018).

From the above definition, it can be concluded that a database is a collection of information stored in a computer in a systematic and organized manner so that the stored information can be accessed easily and quickly when needed (Saputra, 2018).

PT Crevis Tex Jaya is a company engaged in the export-oriented garment industry. Most of the products from PT Crevis Tex Jaya are exported to the United States, however, it is not uncommon for exports to be carried out to countries in Asia, Europe and other countries according to the demand of the buyer. Other countries according to the request of the buyer.

The exported products are of the highest quality. Good quality control is needed, therefore the Quality Control and Quality Assurance department will check and monitor the quality of garments during production to get products that are in accordance with predetermined quality standards (Syauki, W. R., & Amalia Avina, 2020).

It cannot be denied that quality is the main factor that is the basis for choosing a product by the majority of consumers. (Syauki & Amalia Avina, 2020). Quality is very vital in a product. Apart from the good quality that must be used for export purposes, any garment whose quality does not

meet the needs will be used as stock. In addition to garment stock, there is also a stock of raw materials from the remaining production. These stocks are not just thrown away but the stocks will be collected and sold. (Kosasih, 2020).

Thus, these stocks are something that must be managed properly according to needs. There are two kinds of stock in a company, namely stock that is no longer used and stock that can be used for the next production needs. (Purba & Rahmat, 2014).

As for the types of stock that exist at PT Crevis Tex Jaya, namely garment stock which is the rest (loss quantity) of production that will not be used for export, it can be said that garments that have become stock are garments whose quality is below standard or not suitable for export. Raw material stock which is the remaining raw material from production, usually this raw material stock is not immediately sold because it is possible that it will be needed during the next production process. (Humaidy, 2022).

The current data processing at PT Crevis Tex Jaya is currently done manually. The problem that often occurs is the mismatch of stock data, besides that searching for stock data cannot be done quickly.

2. RESEARCH METHOD

The descriptive method used by the author is that the observer describes or describes the data processing process on the incoming and outgoing stock reports that are evaluated and redesigned with a program through the following stages:

a) Identify problems that exist at PT Crevis Tex Jaya related to stock data processing, b) Provide alternative solutions and then draw conclusions, c) Design a web-based stock data processing system program (Sidik, 2018).

As for the The research method used is a descriptive method in which the author tries to describe or describe the data processing process in the incoming and outgoing stock reports that are evaluated and redesigned with a program through stages, namely the first to identify existing problems at PT Crevis Tex Jaya related to stock data processing. Next, provide alternative solutions to then make conclusions. And finally designing a web-based stock data processing system program.

Regarding Research Techniques

Interview Technique

The author asks directly to the Production Admin, Warehouse Admin and Export Section regarding the current stock data processing process at PT Crevis Tex Jaya to get direct information that is useful and related to report making.

Observation Technique

The author observed directly the production process starting from checking raw materials in the warehouse, the production process from cutting, sewing, finishing to packing. This observation is carried out by analyzing the system and other aspects that can affect the running of the system.

Literature Study

The literature study method is carried out to support the interview and observation methods that have been carried out. Collecting the information needed is done by looking for references related to the research conducted, references can be obtained from books or the internet.

3. RESULTS AND DISCUSSIONS

Analysis of the proposed system

The proposed system analysis is a preparation for implementation design that describes how a system is formed, it can be in the form of depicting planning and sketching or organizing several separate elements into a unified and functional whole. At the system design stage, the

depiction of system planning is described with a structured approach using Flowmap, Context Diagram, Data Flow Diagram, and Data Dictionary (Triandini, 2019).

Proposed Procedure Design

The stock data processing information system of PT Crevis Tex Jaya will be poured in the form of flowmap diagrams, context diagrams, and data flow diagrams (DFD). Followed by data dictionary design, database design, program menu structure, and display design up to program implementation.

Database Design

After designing the new system procedures, the author can design a database for this system, which will make it easier to create a database and program to be designed, through Entity Relationship Diagram (ERD) Design, Table Relations.

File specifications

In making software, a file specification is needed, this is intended to organize data search activities and report generation, making it easier to process and facilitate the computer work system. This file structure is used in designing the system, because it will determine the physical structure of the database which shows the structure of the elements that state the length of the data elements and the type of data. This file structure is a sequence of contents or data items listed on a record. The files used for the Clothing and Fabric Stock Data Processing Information System of PT Crevis Tex Jaya will be described in the following tables:

File Name	: Buyer Table
Storage Media	: Hardisk
Primary key	: *id_buyer
Foreign Key	: -
Number_field	: 8

Table 1. Table Buyer

Coloum	Type	Priceless	Description
id_buyer (Primary)	int(11)	No.	Primary key
Buyer	varchar(50)	No.	Buyer Name
Category	varchar(50)	No.	Category
Stock	int(11)	No.	Stock Quantity
date_created	Date	Yes	Date created
Style	varchar(50)	No.	Style
Color	varchar(50)	No.	Color
Fbrc	varchar(50)	No.	Fabric

Program Menu Structure

The menu structure is the main form of a program design that functions to facilitate running a program according to its needs. The following is the program menu structure of the design of the Clothing and Fabric Stock Data Processing Information System of PT Crevis Tex Jaya.

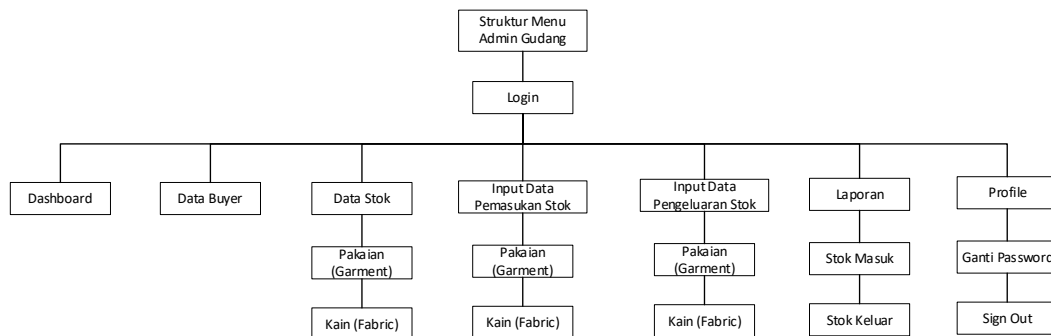


Figure 1. Menu Structure Warehouse Admin

Interface Design

In the design of the Clothing and Fabric Stock Data Processing Information System, it is displayed in the form of a page which has a variety of different output and input menus. The designs include:

1. Sign In Page Design

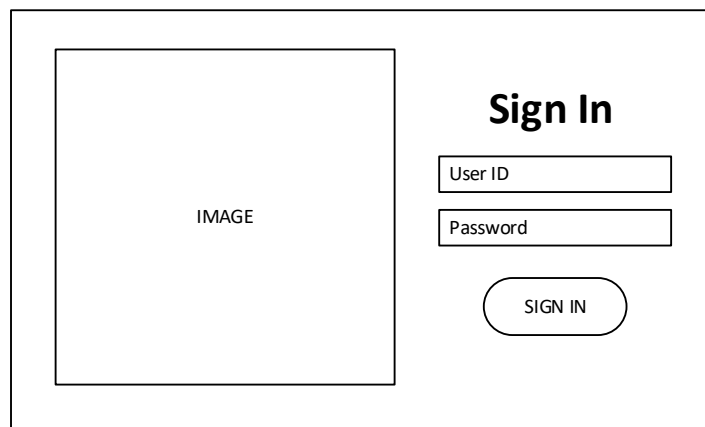


Figure 2. Sign In Page Design

2. Main Page Design



Figure 3. Main Page Design

Computer System Specifications

Computer system specifications are very important to note in order to improve the performance of software application systems and other supporting tools such as hardware and users who are prioritized in good and correct operation. The classification is as follows:

1. Server and Clients Specifications:

Table 3: Server and Client Specification Table

Software	Hardware
Sistem Operasi : Microsoft Windows XP, 8, 10	Processor: Intel Pentium 4 2,00 GHz Cache 512K, 400MHz FSB
Browser: Chrome, Mozilla Fire Fox, Internet Explorer	RAM: 2GB
Web Server: Apache	Monitor: 14" VGA/Color
Stock	Keyboard, Mouse, Printer: Standar

Interface Implementation

Application implementation is the realization of the design and design that has been done before. This application is built using PHP as the programming language and MySQL as the database storage. By utilizing this technology, this application can be run on a web browser. The following is the implementation of the interface of the PT, Crevis Tex Jaya srok data processing information system:

1. Sign In Page

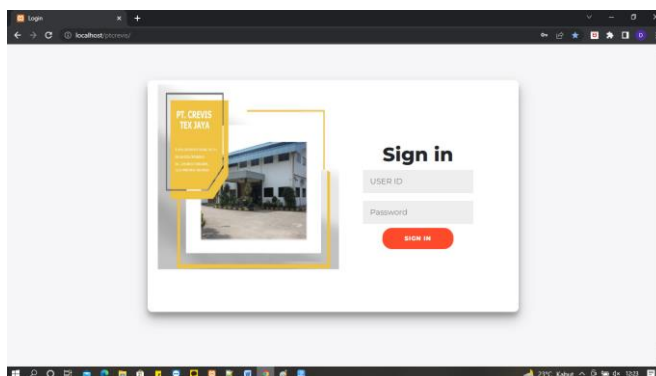


Figure 4. Sign In Page

2. Home Page

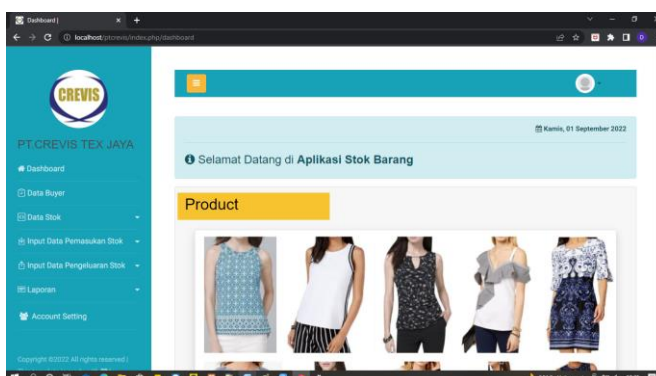


Figure 5. Main Page

3. Buyer Data Page

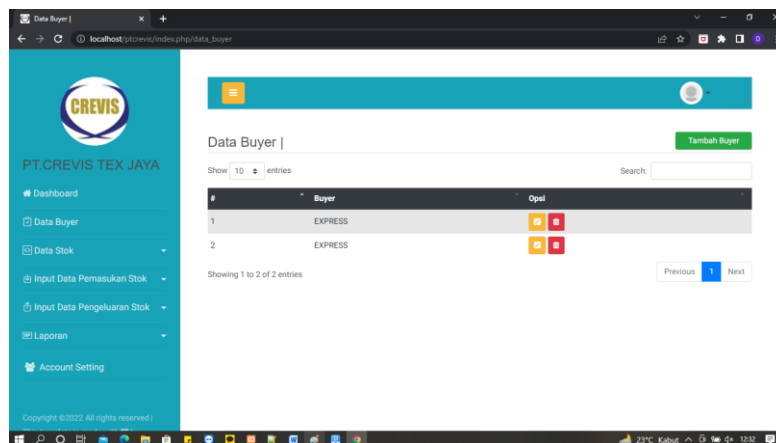


Figure 6. Buyer Data Page

4. CONCLUSION

In the final part of this study, the researcher will put forward several conclusions and suggestions based on the findings of the research results and the description in the previous chapters regarding the problem under study, namely the information system for processing stock data on clothing and fabrics at PT Crevis Tex Jaya is A data processing process needs computerized recording.

This can speed up the presentation of information, facilitate the calculation of stock data and speed up the preparation of reports. This system design is made using XAMPP software, while data storage uses MySQL as a database server that makes it easy to disburse data. From these two software, a system can be built that can be run easily, especially in carrying out the data processing process, namely: a) This research produces a clothing and fabric stock data processing system that supports the implementation of the stock data processing system at PT Crevis Tex Jaya to be computerized, so that it is expected to improve the data collection process to be more efficient and minimize errors. b) The data processing process for both incoming and outgoing stock data is now updated by implementing a modern data collection system, namely by utilizing a web-based system to make it easier to find the required stock data quickly and accurately. c). Can make it easier for all interested parties to check the stock that is still available in the company, as well as the stock that has been exported. d). With the proposed data processing system, reports can be made quickly and periodically according to existing data. e). Can increase work efficiency in employees, for example, being able to update data quickly when needed.

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