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Arloji Sales Information System on Web Based Resty Sarah Store

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Abstract—Technological developments, especially internet-based technology, are increasing, including sales information system technology or commonly called web shops that can be used to purchase products by simply logging into the web. In Indonesia, the development of sales information systems is very reasonable and will continue to increase rapidly with the spread of the internet to all corners of the area. This research is based on the background of the Resty Sarah Store, which records the sale and purchase transactions which are still done manually (recording by book). This is still considered ineffective and inefficient. The purpose of this research is to create a web-based sales information system at Sarah's Resty shop. The expected results of this research are the availability of information system applications that can solve existing problems and provide fast information in making decisions.

Keywords— Information Systems, Web, Arloji Sales

I. INTRODUCTION

Resty Sarah's shop is a shop that sells watches and various other women's accessories. In carrying out its activities, Resty Sarah's shop still uses a manual system, as seen from the spare parts inventory system and transaction notes are still recorded on sheets of paper using handwriting and stored in a ledger. This causes the processing of data into information needed by the cashier to not go well. There is an error in writing the types of customer complaints by customer service in the form of work orders that reach 35%, causing inaccuracy problems. The aforementioned problems are caused by the cashier system that is not well organized, requiring the repair shop to implement a cashier system that is capable of processing data quickly, accurately and automatically (computerized) capable of storing and displaying transaction data related to the cashier system so that information is generated faster accurate.

Seeing the conditions above, it is necessary to design a computerized cashier information system. This is to increase the competitive advantage of the store in providing the best service for customers not only in terms of service but also in terms of cashier services so that customers are more satisfied with the services provided by the store. With the help of this system, stock purchases, sales reports, purchases and gross profit are used here to show the amount of income remaining at the end of the period which can be used to cover operational costs (Admin, Sales, or Marketing Costs). And this is the amount of income after all COGS has been paid. Typically, gross profit is used in the Gross Profit Margin Financial Ratio Formulation (Gross Profit Margin) as well as other Financial Ratios. This allows Resty Sarah's Store to expand its marketing reach without having to spend a lot of time and money. So that potential customers need even better service. Through the use of this Website Information System, it is hoped that it will be able to increase the need for data and information for prospective watch customers at the Resty Sarah Store, where potential customers can exchange data and information to transactions about all the products available at Resty Sarah's Store. In this study, a Web-based Watch Sales Information System Design at Resty Sarah - Sungai Keledang Store will be made using the Laravel Framework and the database creation using MYSQL.

II. LITERATURE REVIEW

A. *Study of literature*

According to research conducted by (Khazaruni, 2015), with the title of his research entitled "Web-Based Watch Sales Information System at Ezha Shop". The purpose of this research is to implement the Information System for the sale of watches proposed at Ezha Shop. The research method used in implementing it by collecting data as material for reports. The data collection techniques used were observation and interviews which came from two data sources, namely primary data and secondary data.

According to research conducted by (Apriyanto, 2015), with the title of his research entitled "Web-Based Watch Sales Information System at CV. Sinar Terang Semarang ". The research objective is to produce a web-based sales information system on CV. Bright Light Semarang. The method used in this research is the methodology used in the development of the waterfall method information system with the stages of

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engineering, analysis, design, implementation, testing and maintenance(Anwar, S. et al., 2017)

According to research conducted by (Ramadita, 2017), with the title of his research entitled "Website-Based Tazmania Cell Smartphone Sales Information System as a Media for Promotion and Transactions". The purpose of this research is that it is hoped that this web-based sales information system can facilitate promotion and sales at Tazmania Cell maximally, and make it easier for customers to select the product they want to buy and also be able to choose the category of the product without having to come to the store directly. The research method used is the program development method using the waterfall method, which is the work of a system that is carried out linearly (Scientifically, P. et al, 2016).

According to research conducted by (Yuli, 2018), with the title of his research entitled "Information System for Watch Sales at Permata Indah Tigo Shop, Web-Based Indragiri Hilir Regency". The research objective is to support promotional media and information about the products to be marketed. With the web-based information system can help to ease the obstacles faced by the beautiful Tigo gem shop. With this web-based sales information system, customers can access information about products that are marketed anywhere and anytime. The research method used in the research process is a classic methodology used to develop, maintain, and use information systems, this methodology includes a number of phases or stages.

B. Information Systems

The information system is a system of a man-made system which generally consists of a set of computer-based and manual components designed to collect, store, manage data and provide output information to users. The information system is a system that is interrelated and integrated with one another and aims at supporting information, management and functions of providing decision making in an organization.

C. Sales

According to (Mulyadi, 2001). Sales are a company's main activity in generating revenue, for both large and small companies. Sales are the ultimate goal of marketing activities, because in this section there is a price fixing, negotiations and an agreement for the handover of goods, as well as an agreement on the method of payment agreed upon by both parties, so as to achieve a point of satisfaction.

D. Sales Information System

The Sales Information System is defined as making a sales statement, activities will be explained through procedures which include the sequence of activities from the moment the order is received from the buyer, checking whether the goods are there or not and followed by delivery of goods accompanied by invoicing and recording the applicable sales .

E. Watch

Wristwatch or timepiece is a timepiece that is worn on the human wrist. Watches were first introduced in the 16th century. At that time all watches and other timepieces used manual mechanical drives (hand-winding). The oldest known watch is the watch of British Queen Elizabeth I, made by Robert Dudley in 1571. From the 16th to the early 20th century, watches were only used by women, while men wore pocket watches (Solichin, A. and Luhur, UB. 2014). The dominance of mechanical-engine watches for centuries with all its beauty, complexity, and luxury, was finally a little disturbed by the presence of electric-engine watches that were first introduced in 1957 in Lancaster, Pennsylvania, United States, by the Hamilton Watch Company.

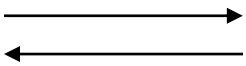
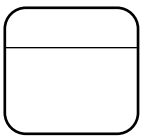
F. Database

A database is an arrangement of complete operational data records of an organization or company, which are organized and stored in an integrated manner using certain methods so as to be able to meet the optimal information needed by users (Santoso, 2017).

G. Context Diagram

Table 1 shows, context diagram is a diagram that consists of a process and describes the scope of a system. Context diagram is the highest level of DFD which describes all the input to the system or the output of the system. He will give an overview of the whole system. Principle system by boundary (represented by dotted line). In the context diagram there is only one process, there should be no store in the context diagram (Hesti Rian, 2014).

Table 1. Context Diagram

Symbol	meaning
	Entity involved in the system
	Data flow direction
	Process that occurs in the system

III. LITERATURE REVIEW

A. Place and Time

The location that is the object of this thesis is the Resty Sarah Shop which is located in Sungai Keledang, Samarinda Seberang, Samarinda City, East Kalimantan. When the research was carried out in the even semester of the 2019 - 2020 school, it was carried out for a period

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of approximately 6 months, starting from October 2019 - March 2020 which consists of data collection (Journal, I. 2015).

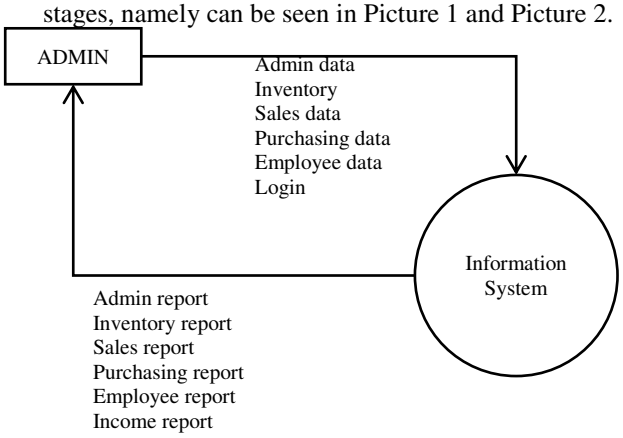
B. Tools and Materials

The tools used in the research of Web-Based Watch Sales Information Systems at Resty Sarah Sungai Keledang Stores are as follows:
Laptop Acer (Ram 4GB DDR3 L Memory, IntelCore i5, 500GB HDD, 14.0 HD LCD)

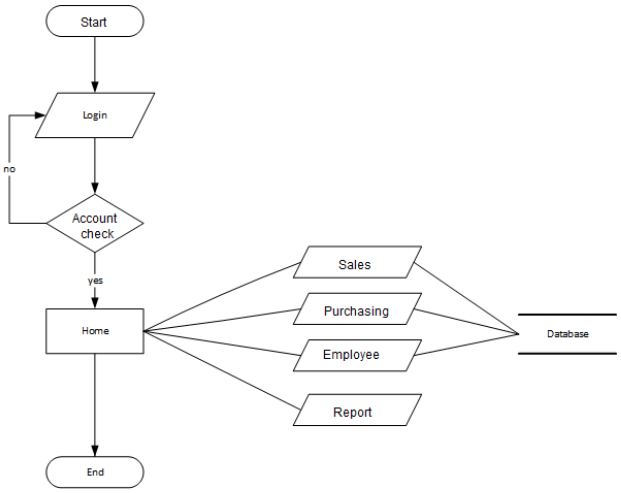
a. Internet access
Software (Software)
b. Xampp
c. MySQL database
d. Sublime Text
e. Google / Mozilla browser
f. Laravel 5.4
g. MySQL Work Bench
h. Visio2013
i. Balsamiq Mockups.

C. Research Procedures

1. System Design (Design)
   In the system design stage, several models will be made including process modeling, database modeling, and interface modeling.
2. Process Modeling
   Process modeling is intended to describe how the system works and all its activities. With the process model, it is hoped that it can make it easier to describe and understand the process that is passed. In the process of designing this system, there are several stages, namely can be seen in Picture 1 and Picture 2.



Picture 1. DFD Level 0

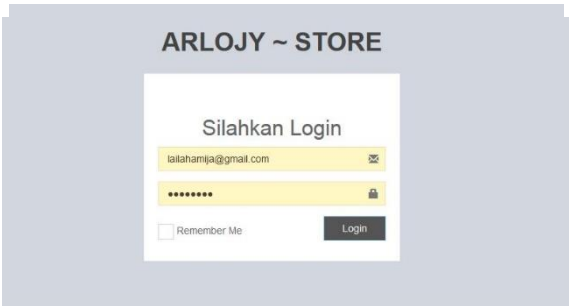


Picture 2. Flowchart

IV. RESULTS AND DISCUSSION

The results of the development of the Arloji sales information system at the Web-based Resty Sarah Store using the LaraveL framework has 7 (seven) menus for admin, namely:

1. Login page
   This is the first step page if you want to access an information system application that is required to first fill out a user data form as can be seen in Picture 3.



Picture 3. Admin Login Page

2 Home page
On the home page there is a menu button that contains all the menus in the Web-Based Watch Sales information system application, which can be seen in Picture 4.

Picture 4 . Home Page

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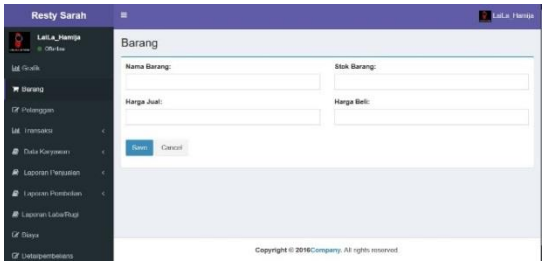
3. Item Input page
   The item data input page displays several forms that can be used by the admin to add item data which can be seen in Picture 5

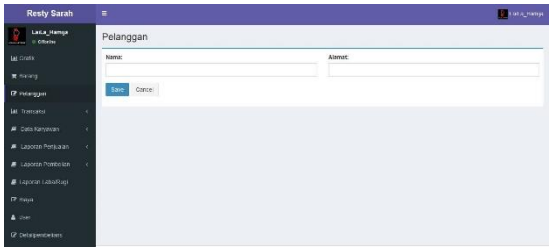


Picture 5. Item Input Page

4. Item Output page
   The item data page displays data on the name, type, stock, unit and price of the perfume which can be seen in Picture 6.

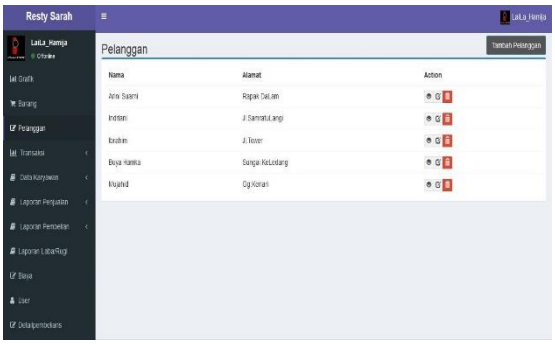
Picture 6 . Item Output page

5. Customer Input Page
   The customer data input page displays several forms that can be used by the admin to add customer data, which can be seen in Picture 7.



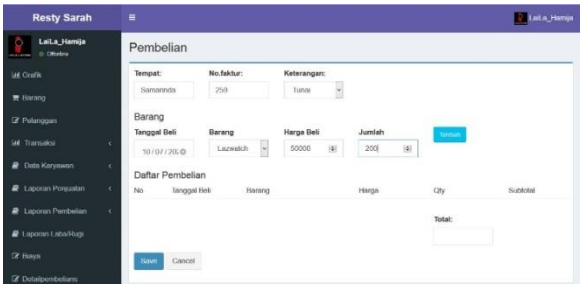
Picture 7. Costumer Input page

6. Costumer Output page
   The customer page displays the name and address data from the customer which can be seen in Picture 8.



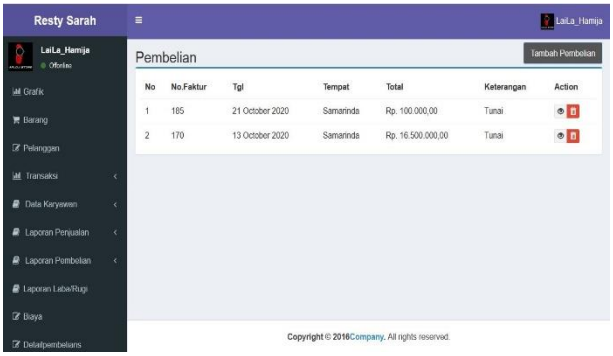
Picture 8. Costumer Output page

7. Supervision Input Page
   The purchase data input page displays several forms that the admin can fill in to add purchase data, these forms can be seen in Picture 9.



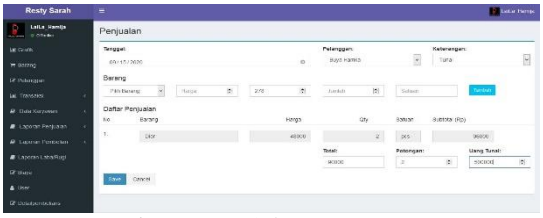
Picture 9. Supervision Input page

8. Supervision Output page
   The purchase page is the page after the admin inputs purchase data, this page displays data that the admin has previously inputted. This page has several actions such as adding data, deleting data, editing data and viewing the data which can be seen in Picture 10



Picture 20. Supervision Output page.

9. Sales Input page
   The sales data input page displays several forms that the admin can fill in to add sales data, these forms can be seen in Picture 11.



Picture 11. Sales Input page

10. Sales Output page
    This page displays data that admin has previously input. The sales page has several actions such as adding new data, deleting data, editing data and seeing the data which can be seen in Picture 12.

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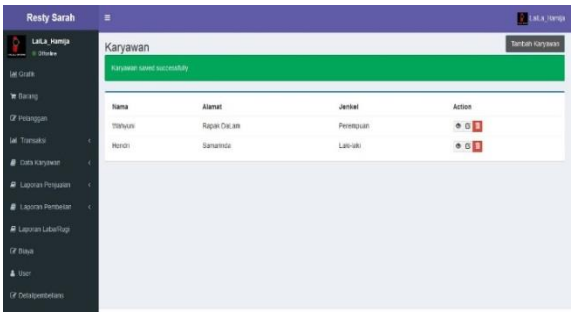
Picture 12. Sales Output page.

11. Employee Page

The employee page is a list page of employees who work at Resty Sarah. The employee data page has several actions such as adding new data, deleting, editing data and seeing the data which can be seen in Picture 13.



Picture 13. Employee page.

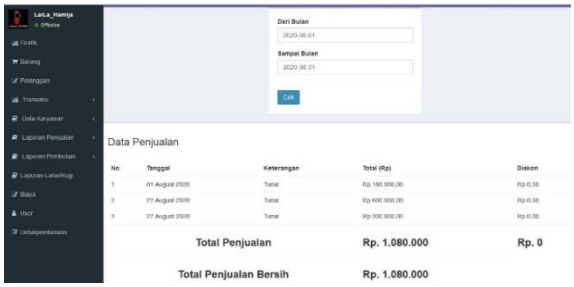
12. Employee Salary page

Employee salary page is a page that displays data from employee salaries. The employee salary data page has several actions such as adding new data, deleting data, editing data and viewing the data which can be seen in Picture 14.

Picture 14. Employee Salary page.

13. Monthly Sales Report Page

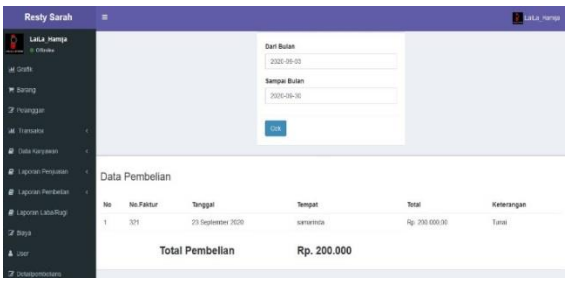
The monthly sales report page displays sales data per month which can be seen in Picture 15.



Picture 15. Monthly Sales Report Page

14. Monthly Supervision Report page

The monthly purchase report page displays the purchase data per month which can be seen in Picture 16.



Picture 16. Monthly Supervision Report Page

15. Income Statement page

The profit / loss statement page displays profit in sales data which can be seen in Picture 17.

Picture 17. Income Statement Page.

V. CONCLUSIONS

This information system built can overcome errors in the calculation of sales, purchase transactions and can overcome data collection on types of goods at the Resty Sarah Store

With the Information System at the Resty Sarah Store, it can assist in making daily and monthly reports as well as searching for data more quickly and accurately when needed by employees and shop owners.

To maximize the use of the information system created, training can be used to be socialized for employees to be more familiar with the system that has been created.

It should be noted and carried out periodic evaluations of the system for further improvements in accordance with the changes and developments of the system that has been made.

There needs to be additional features that can backup data in the database or data from systems that are made regularly, this is very important if there is an error or error on the computer or due to a complete power failure, then with the data backup feature the data will not be lost.

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