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Web Based Interest Payment Cashier Information System in Palembang City (Case Study: Latahazanflorisr Plaju Flower Shop)

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ABSTRACT

The exiled figure LaTahazan Florisr is a business located in Palal, the city of Palembang. This business is a business that is engaged in ordering flower bouquets, bouquets, flower boards, standing flowers and others. The manual sales system has many drawbacks which are mostly errors in record-keeping, and difficult data search because every time you search for the seller data you have to search in the ledger. To solve these problems, a web-based cashier system is needed. This study adopts an observation method, a literature study using the waterfall method in designing a web-based cashier information system. The system is built and designed to help store admins or cashiers in making sales reports and purchasing calculations easier. The results of this software design are expected to help the work process to be more efficient and can reduce the possibility of calculation errors, and speed up the creation of reports. The designed system describes how each component of the system will work optimally, from managing transaction data to creating ready-to-present sales reports.

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1. Introduction

The development of technology today will be in line with the development of computer technology which encourages the occurrence of enormous changes in various aspects of life, this change not only changes the way we communicate but also the way we work, learn, and interact with the world around us[1]. The beginning of the development of information technology was marked by the invention of computers and the internet. Computers, which were initially only used in industrial and academic environments, have now penetrated daily life. With the advent of the internet, information can be accessed quickly and easily, making it possible to exchange data globally in a matter of seconds.

The digital era is one of the eras or periods in life that is experiencing quite rapid progress and is moving towards a digital form. The development of the digital era will continue to run so fast and cannot be stopped by humans. This will have a variety of impacts, both positive and negative. However, the development of information technology also requires us to be more careful. Cybersecurity issues are becoming increasingly important, with increasing threats to personal data and sensitive information[2]. In

addition, it is very important for individuals and organizations to understand how to protect themselves in cyberspace. Overall, the development of information technology in the digital era has brought many benefits, but also the challenges that we need to face.

By continuously adapting and learning, we can harness the potential of this technology to create a better future. The development of information technology (IT) has changed almost all aspects of human life, from communication that is now instant and global, to education that is increasingly accessible through *E-learning* and interactive technology. From originally using conventional or manual information systems such as paper-based systems such as paper, magazines, now switching to digital-based information systems, namely websites. Websites are the most widely used service on the internet to display information quickly and easily accessible to someone who has internet access, therefore websites can be a medium to disseminate information, promotions, various ordering services to companies or people who have a business such as promoting products or information about a company to customers online[3].

Our daily lives are also getting easier with mobile apps and *Internet of Things*[4]. Technological developments in the field of trade have undergone very good changes in business and locally and globally. Rapid progress in *E-commerce* has transformed traditional trading that allows transactions to be done online through an easily accessible digital platform. Information and communication technology introduced electronic payment systems such as credit cards, and digital wallets. One of the businesses that is growing and in great demand by the people in the city of Palembang today is the service of making fresh flower bouquets, as evidenced by the increasing number of business actors engaged in this field.

This flower bouquet making business has enormous potential in the long run, considering that flowers have always been an important symbol in various moments of life. Many young people today use flowers as a way to express their feelings, whether it is to express joy, happiness, or sadness. In addition, flowers are also a very popular gift at the time of graduation ceremonies, where family, close friends, and loved ones will give a bouquet of flowers to those who are celebrating the achievement. Moments like this not only show how important interest is in conveying feelings, but it also creates business opportunities that the market will never lose. Giving flowers on important occasions such as birthdays, weddings, or the birth of children is also increasingly common.

Thus, the flower bouquet making business has a continuous demand and can grow over time. With the current technological developments, it is hoped that it can make it easier for people to get information about services or purchase flower bouquets. LaTahazanFlorisr is a business located in Palalaju city of Palembang, precisely on Jl. Jenderal Ahmad Yani No.24J, 9/10 Ulu, Seberang Ulu I District, Palembang City, South Sumatra 30252, Indonesia. This business is a business that is engaged in ordering flower bouquets, bouquets, flower boards, standing flowers and others. The manual sales system has many drawbacks which are mostly errors in record-keeping, and difficult data search because every time you search for the seller data you have to search in the ledger. There is no specific information that informs about the amount of stock, so it is not uncommon for new store owners to find out that the stock is out of stock when the transaction process occurs, thus making customers disappointed[5].

The manual sales system used at LaTahazanFlorisr Florist currently has many drawbacks that can affect the smooth operation of the store. One of the main problems is that there are frequent transaction recording errors due to the reliance on the ledger that must be updated manually. This manual recording process also makes data search very difficult and time-consuming, as sellers have to physically check the records on the ledger to find the information needed. This not only reduces work efficiency, but also increases the potential for errors in the management of transaction and stock data. In addition, this manual system does not come with specific information regarding the amount of stock available. As a result, the store owner or cashier only realizes that the stock of interest runs out when the transaction has occurred, which of course causes inconvenience for customers and can reduce their trust in the store's services.

Implementation of a web-based Interest Payment Cashier Information System. The system is built and designed to help store admins or cashiers in making sales reports and purchasing calculations easier. The results of this software design are expected to help the work process to be more efficient and can reduce the possibility of calculation errors, and speed up the creation of reports. The designed system describes how each component of the system will work optimally, from managing transaction data to creating ready-to-present sales reports

2. Research Methods

2.1 Research Time and Place

The research was conducted for 3 (three) months starting in October and will last until the end of December. with the aim of obtaining accurate and in-depth data within the specified time frame, as well as providing sufficient time for analysis and preparation of research report results. The location of this research

was conducted at LaTahazanFloris Flower Shop which is located at Jl. Jenderal Ahmad Yani No.24J, 30252 Palembang, South Sumatra. This research is focused on the store because it is one of the businesses that has the potential and is feasible to be used as an object of research, as well as allowing the acquisition of in-depth data on operational activities, marketing, and other aspects related to florists in the area.

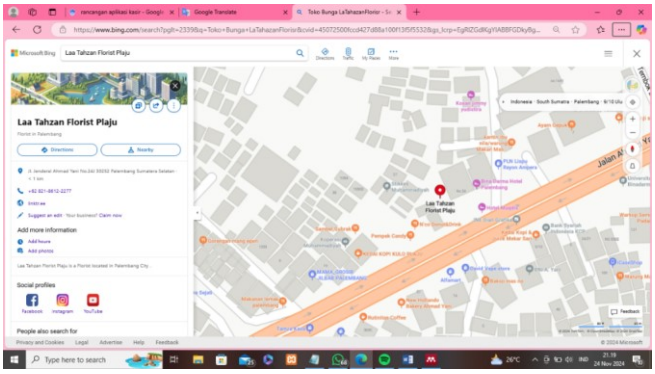

Figure 1. Research Place

2.2 Data Collection Methods

The data collection method is a method used to obtain information or data needed in research or analysis activities. Meanwhile, the system development method is a method used to design, build, and develop an information system or software or a step or stage in the manufacturing process that aims to produce a good system and in accordance with the needs of users.

There are several data collection techniques that will be explained in the discussion of this research methodology, namely:

a. Observation is a data collection technique that is carried out by the researcher conducting direct observations at the research site to observe the activities that are being carried out at the time of payment. Direct observation at LaTahazanFlorisr Plaju Florist Florist
b. Literature study is a data collection technique that is carried out by studying, observing and collecting information from sources such as books, journals and other sources on social media that are directly related to the discussion of this research.

2.3 System Development Methods

Development methods can be interpreted as a way used to design, build, and maintain a product properly. The development method can also be interpreted as renewal, the intended renewal of the old system to be renewable. For example, for example, the renewal of payments that used to use direct payments or *cash* is now renewed by using digital money or QRIS, this has been replaced because there are several things or problems.

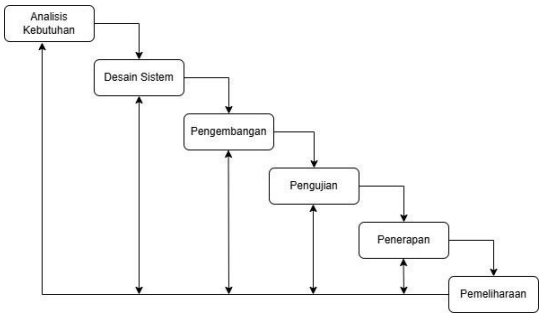

Figure 2. Waterfall Method

1. Needs Analysis
   At this stage, the researcher collects information from the LaTahazanFlorisr Flower Shop, the information obtained will be analyzed the needs and problems that occur in the system to be developed.
2. System Design
   System design is the process of designing a system after the system has been analyzed and the type of system to be made has been determined. Design can also be interpreted as the flow of a detailed software and algorithm.
3. Implementation

At this stage the pre-made design will be implemented into the program code. The results of the program must also be in accordance with the design that has been made beforehand.

4. Testing
   Testing at this stage is carried out to see if the system that has been created is in accordance with the specifications that have been set at the needs analysis stage, find out the location of the error or error, ensure that the output output is in accordance with the desired output.
5. Application
   At this stage of implementation or implementation, we can ensure whether the system we create can be well accepted by the community or whether the community is satisfied with the system we build. At this stage of implementation, we can also find out the shortcomings in the system we build.
6. Maintenance
   After the system is implemented, the maintenance stage will be carried out. This stage is carried out to maintain, correct the deficiencies in the system and also make updates or *updates* to the system.

3. Results and Discussion

3.1 Flowchart of the running system

In figure 1 below, it explains the process of buying flowers, namely by the buyer coming directly to the store, then the buyer chooses the flower he wants to buy, the buyer goes to the cashier to calculate the interest he wants to buy, after that the cashier calculates manually, then the buyer makes the payment and is done. In the payment system for the calculation of the interest purchased is still calculated manually, this will make it difficult for the admin or cashier to make transaction reports or sales reports.

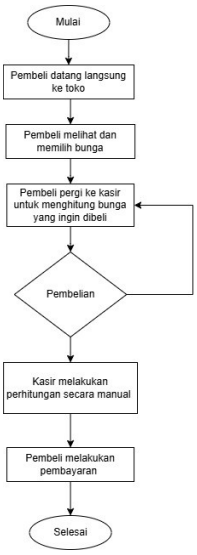

Figure 3. Flowchart of running systems

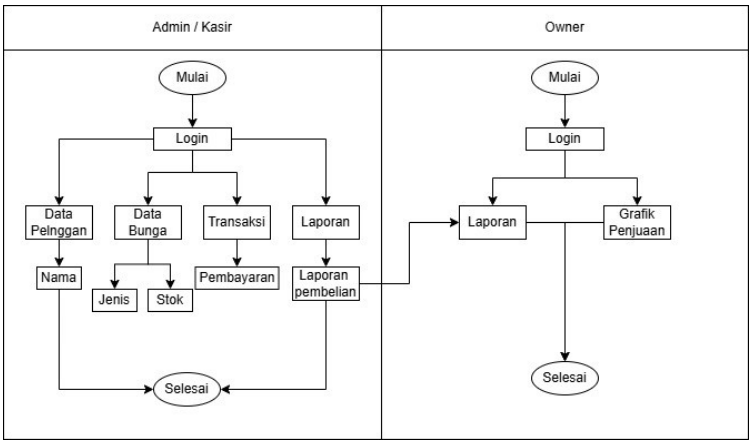

Figure 4. Submitted System Flowchart

3.2 Submitted System Flowchart

The proposed system is designed to make it easier for admins to create transaction reports and calculate the stock of flowers available in the store. With it, admins can monitor and manage sales easily. In addition, store owners can also see sales graphs, so it can make it easier for owners to think about the performance of admins or employees. The system also makes it easier for owners to check sales or transaction reports, minimizing the possibility of fraud, fraud, or corruption. With this, information disclosure and accountability in store management can be well maintained.

3.3 System Planning

Design is the process of creating something new to meet a need or building an object or system with the aim of achieving a desired result. While a system can be interpreted as a set of devices, activities, components, or organizations that are interrelated and work together to achieve a certain goal. It can be interpreted that system design is the process of developing new specifications based on the results of user needs analysis, or creating and improving the structure of the system to be built, to meet user needs and ensure that the system runs well.

3.3.1 Use Case Diagram

The use case diagram in figure 5 below explains the detailed use cases in the flower shop cashier information system that the author created. There are 2 actors who can access the created system:

1. Admin (Kaisr)
   Admins have access to login, manage purchase transactions, manage customer data, manage interest data and sales reports.
2. Owner

The store owner or owner has login access to view sales reports and sales charts.

Figure 5. Use Case

3.3.2 Activity Diagram

The following is an explanation of the Activity Diagram on the flower shop cashier information system that the author created using the waterfall method:

a) Activity Diagram Admin

In figure 4, it is explained that the first thing that must be done by the admin is to access the website and log in by entering the username and password that has been registered. After successfully logging in, the admin will get access to manage various data, such as customer data, interest type data, and the addition of available flower stocks. In addition, the admin also has access to manage transactions made by customers, including updating status or information related to the transaction. Admins can also check and create detailed sales reports.

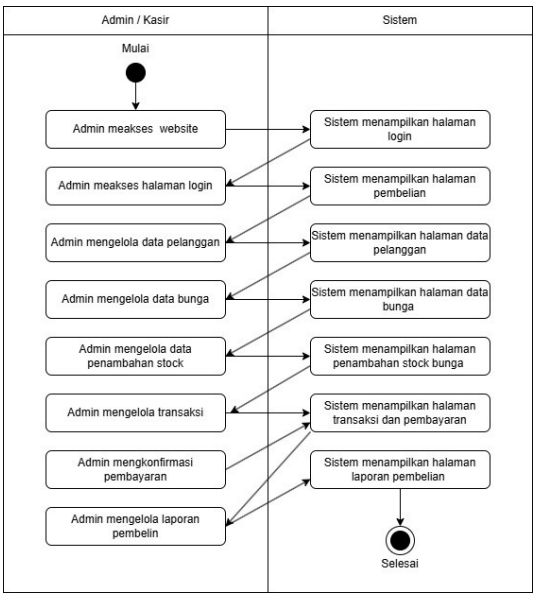

Figure 6. Activity Diagram Admin

b) Activity Diagram Owner

In the owner's activity diagram image below, it explains the flow that can be accessed by the owner. First, the owner accesses the website and then logs in. After successfully logging in, the admin enters the main page which is the sales chart, the admin can access weekly, monthly and yearly sales reports. After accessing sales reports, admins can also access transaction reports or sales reports, just like graphs can access weekly, monthly, and yearly sales reports.

3.3.3 Class Diagram

The image below explains the Class Diagram which describes the structure of the website-based Interest Payment Cashier Information System. The class diagram above shows the classes in the system along with the attributes that are interconnected to run the overall functionality of the system

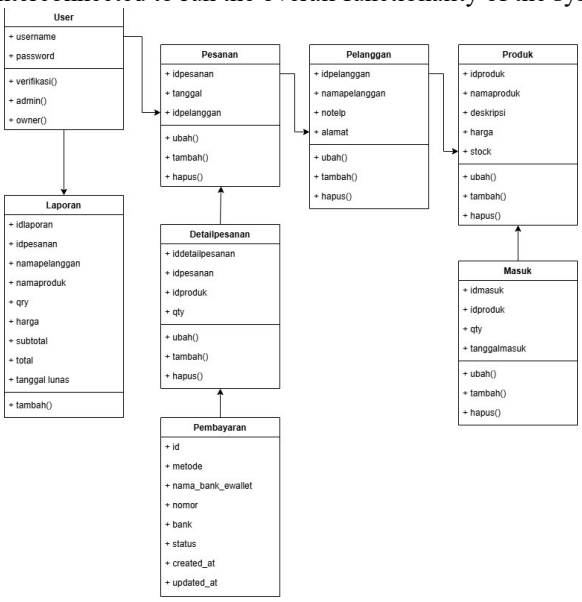

Figure 7. Class Diagram

3.3.4 Home Interface Design

This stage describes the implementation process of the web-based Interest Payment Cashier Information System. The system is built and designed to help store admins or cashiers in making sales reports and purchasing calculations easier. The results of this software design are expected to help the work process to be more efficient and can reduce the possibility of calculation errors, and speed up the creation of reports. The designed system describes how each component of the system will work

optimally, from managing transaction data to creating sales reports that are ready to be presented. This process will run following the planned steps and will then be described in the following system flow

a) Copyright © 2019 Copyright © 2019

The admin login page serves as a login form input to log in to manage transactions, manage customer data, interest data, and create sales reports. In addition, on this page you can also see the store's address and Instagram account of the store.

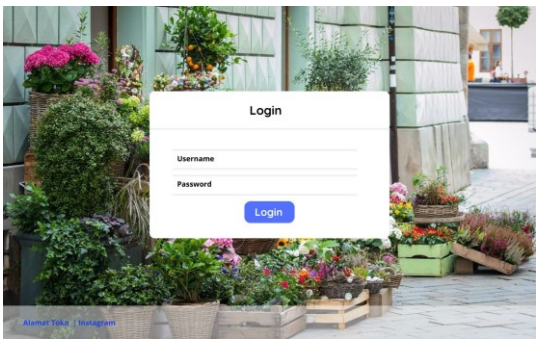

Figure 8. Admin Login Page

b) Order Data Page

Order data page, this page displays sales data that has been purchased in the store and there are 3 buttons that each have its own function. If the button is pressed, it will display the customer's order details.

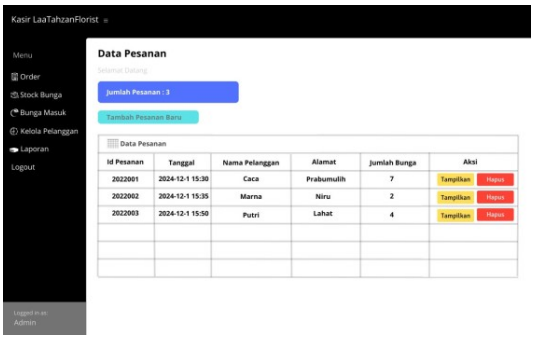

Figure 9. Order Data Page

c) Add New Order Page

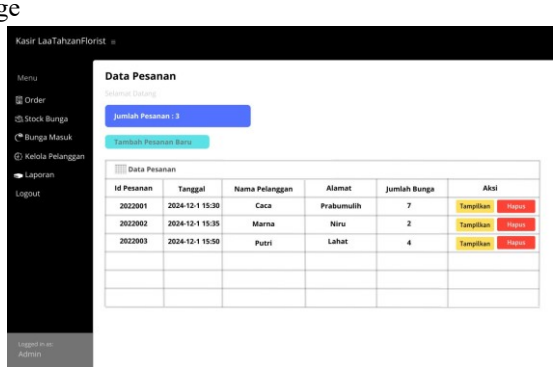

Figure 10. Order Data Page

d) Order Details Pay Page

Figure 11 shows the pay page on the order details, on this pay button there is payment in case and qris.

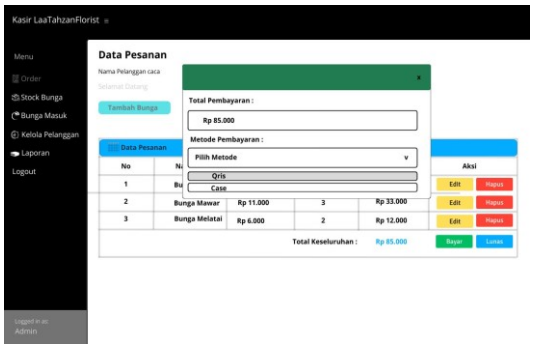

Figure 11. Order Details Pay Page

e) Order Details Paid Page

This page displays the payment confirmation page on the order details.

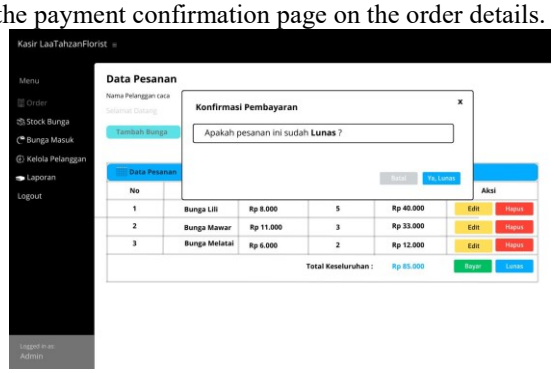

Figure 12. Order Details Paid Page

f) Interest Data Page

This page displays the flower data which has 3 button buttons that each have its own function.

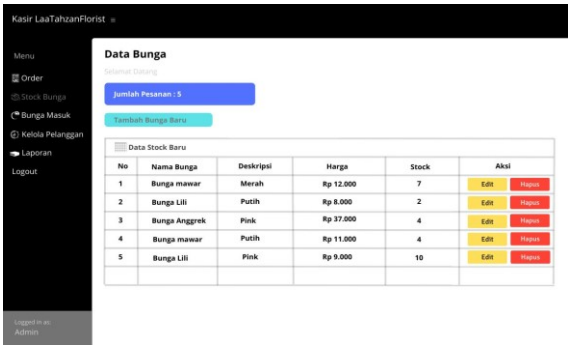

Figure 13. Flower data page

g) Incoming Flower Page

This page displays data on incoming interest or additional flower stock, on this page there are 3 buttons that have their own functions.

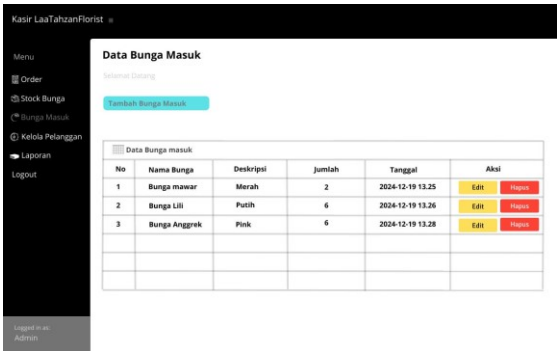

Figure 14. Incoming Flower Page

h) Customer Data Page

This page displays a customer data page that has 3 buttons that each have its own function.

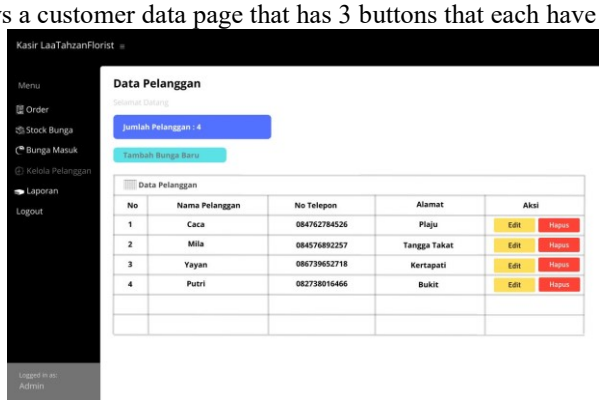

Figure 15. Customer Data Page

i) Admin Report Page

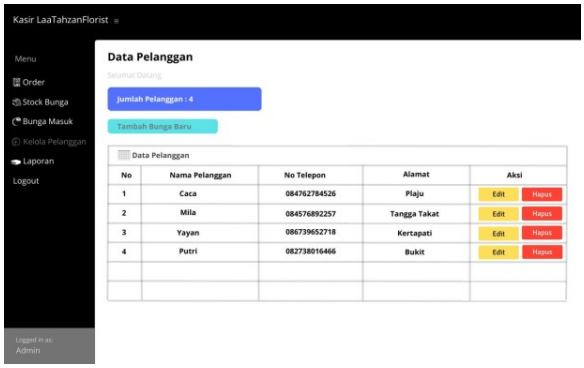

Figure 16. Admin Report Page

4. Conclusion

Based on the results of the research and discussions that have been carried out in the previous chapters, several conclusions can be drawn as follows:

a) The implementation of a web-based cashier information system at LaTahazanFlorisr Flower Shop can simplify the transaction process, manage flower stock, and make sales reports.

b) This system reduces transaction recording errors that often occur in manual systems and improves accuracy in data management.

c) Store owners can easily monitor admin performance and access sales reports through clear and structured graphs.

d) With this system, the work process becomes more efficient, transparent, and can increase customer satisfaction through better management.

Suggestion

Based on the above conclusions, the author gives some suggestions as follows:

a) Before entering data into the system, make sure the input data is verified so that the information generated is more accurate and appropriate.

b) It is necessary to prepare hardware and software support that has sufficient specifications to support the smooth running of the system that has been built.

c) Perform periodic data backups to anticipate unwanted data loss, while maintaining the continuity of system operations.

d) This system is not only limited to one place, but can be implemented in various flower shops or other similar businesses, so that it can increase efficiency and save time in managing transactions.

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