International Journal of Application on Sciences, Technology and Engineering
(IJASTE)
Volume 1, Issue 4, 2023. ISSN:2987-249

WEBSITE BASED MALIKI TOAST CASHIER SYSTEM DESIGN

Vito[1], Bagus Mulyawan[2], Darius Andana Haris[3]

[1]Information System Study Programs, Faculty of Information Technology, Tarumanagara University
Email: vito.825200081@stu.untar.ac.id
[2] Faculty of Information Technology, Tarumanagara University
Email: bagus@fti.untar.ac.id
[3]Faculty of *Information Technology, Tarumanagara University*
Email: dariush@fti.untar.ac.id

Submitted: 26-09-2023, Revised: 27-10-2023, Accepted: 08-12-2023

ABSTRACT

Many groups are opening businesses in the culinary business, for example Maliki Toast which is a brand from PT. Nuansa Culinary Indonesia, this business sells toasted bread which has various salty/sweet flavors, and cold/hot drinks. Maliki Toast received a positive response from customers who bought it. However, the cashier system owned by Maliki Toast is still combined with Bebek BKB, so sales management is not good because it does not have a different cashier system even though it is in a different category. Because of these problems, we want to create a separate cashier system for Maliki Toast to make it easier to manage sales. The creation of this cashier system will be done on a website basis using the PHP and SQL programming languages as a database for storing data on the Maliki Toast cashier system. In creating this cashier system, we will use the Visual Studio Code and XAMPP applications. The methodology used is the SDLC Waterfall method. Of course, designing a cashier system requires analysis originating from interviews and observations, so you can find out what is needed to create a cashier system. Followed by process design, database design, and interface creation so that the creation of a website-based cashier system can have a change in the cashier system for the better.

Keywords: *website; maliki toast; cashier system; sdlc waterfall*

1. PREFACE

Introduction

Technology systems develop rapidly from time to time. So in this modern era, the development of information technology is very fast so the development of information and technology has become very sophisticated [1]. Of course, in the development of information, many groups are opening companies/retail stores. So, a cashier system is something that is needed by groups that run companies/shops in the retail sector.

The use of the cashier system is to simplify and speed up the process of transactions, the cashier system is also a system that can provide information regarding sales reports for a certain period. And transaction data is safer than entering it manually, because there is online storage that can be accessed on a cloud server.

One of the companies operating in the retail sector is PT. Nuansa Kulinari Indonesia has several brands, one of which is Maliki Toast which is the newest brand from PT. Nuance of Indonesian Culinary, inside the Bebek BKB restaurant. Maliki Toast was just released in 2021, which sells food, namely toast with various flavors.

The cashier system at Maliki Toast does not have a special system, because it is in the same cashier system as Bebek BKB even though it is in a different category. So this can be detrimental

to selling different brands. The reason is that, with the help of the information system at the cashier, entrepreneurs can collect and analyze information quickly and easily [2]. So it's much better to do it separately. So, if the company wants to collect data on the brand, it can be much more efficient.

Until now, the withdrawal of cashier data is still taken jointly between the Maliki Toast brand and Bebek BKB. If you want to check the data collection for each brand, it will be done manually, so the cashier system used will be less efficient because of things like that.

Problem Formulation

Based on the existing problems, it can be concluded that the cashier system owned by Maliki Toast is still not easy because it is combined with Bebek BKB, so data collection cannot be separated. This resulted in collecting income data on Maliki Toast manually.

Purpose

The purpose of creating a website for this problem is to make it easier for workers to enter food and drink orders, and to be able to pull up sales report data that occurs. So this website will provide a cashier menu, sales reports, stock of goods so that this website will be useful for food and drink sales that take place at Maliki Toast.

2. RESEARCH METHOD

application design using the SDLC Waterfall method, the SDLC (System Development Life Cycle) method using the Waterfall model is used in designing cashier systems, this method is a software development process carried out sequentially from top to bottom, where the first stage is completed then it will be continued second stage then third and so on. Because of this method, making software will prioritize quality [3].

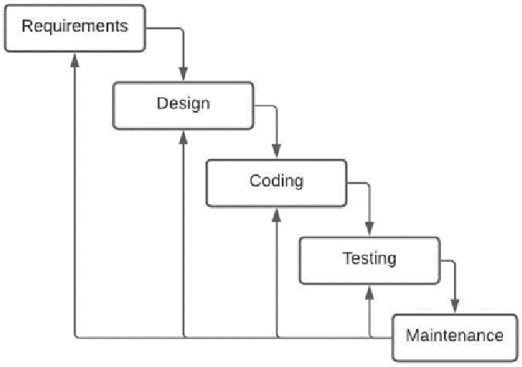

Figure 1. SDLC Waterfall
Image Source: Journal [3]

- **Requirement Gathering**

For the first/initial stage is to conduct interviews with managers at the outlet regarding what is needed, so that complete and detailed information is needed, such as what is needed for this business and what is prioritized. Therefore, the author can create a cashier system that is needed by users to run their business.

- **Design**

The second stage is the stage of making a design before making the cashier system that will be made, and to know the description needed and the things needed to make a cashier system. Of course, this process requires use cases, activity diagrams, sequence diagrams, and class diagrams, so that the system functions created can be designed well.

- **Coding**

The third stage is the stage of creating a cashier system which comes from system design and analysis of the system to be created, as well as creating a database for the cashier system and user interface (UI) display, which uses the PHP programming language with the Visual Studio Code application and the MySQL application as the database.

- **Testing**

The fourth stage is testing carried out by the creator. This test is useful for finding out whether there are errors in the system functions contained in the features of each button on a system and the connectivity between the system and the database, so that no problems occur during testing by the creator. user.

- **Maintenance**

The fifth/final stage is useful for maintaining the smooth running of the system, the things the system needs so that the system provided can run smoothly without any obstacles when the system is implemented which is used by users in food and beverage sales activities.

3. RESULT AND DISCUSSION

The design of a system is a group of elements that are closely related to achieving certain goals [4]. Therefore, system design is the main key in developing a system, because the success of a system depends on good design.

Requirement Gathering

Before creating a system, it is necessary to collect the necessary information, information obtained by conducting interviews with Maliki Toast managers. So this can make it easier to know what will be needed in creating a cashier system.

Design

The design stage is useful as an initial design before creating the system to be created. The following are several cashier system designs.

- **Use Case Diagram**

Use Case Diagram is a type of diagram that is useful in a system that describes interactions between actors and the system [5], the use cases in the system created are admin and cashier. So it can be seen for the Use Case of the Maliki Toast cashier system in figure 2.

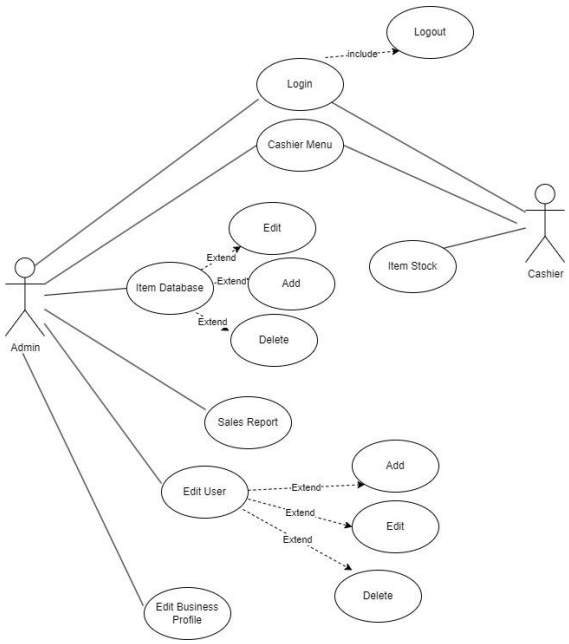

Figure 2. Use Case Diagram (Admin and Cashier)

Image Source: Personal Documentation

- **Class Diagram**

A Class Diagram is a type of diagram that is useful for describing the description of the classes of a system, the methods it has, its attributes, and the relationships between classes in detail [5]. So it can be seen for the Class Diagram of the Maliki Toast cashier system in figure 3.

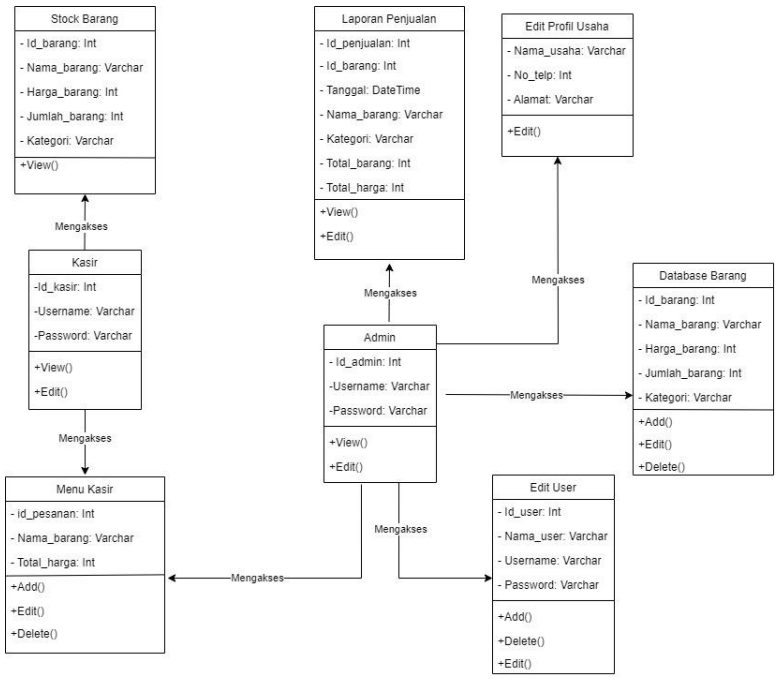

Figure 3. Class Diagram

Image Source: Personal Documentation

- **Logical Database Design**

Logical Database Design is based on the Conceptual Database model, but the difference is that Logical Database is more complete than Conceptual. So it can be seen for the Logical Database Design of the Maliki Toast cashier system in figure 4.

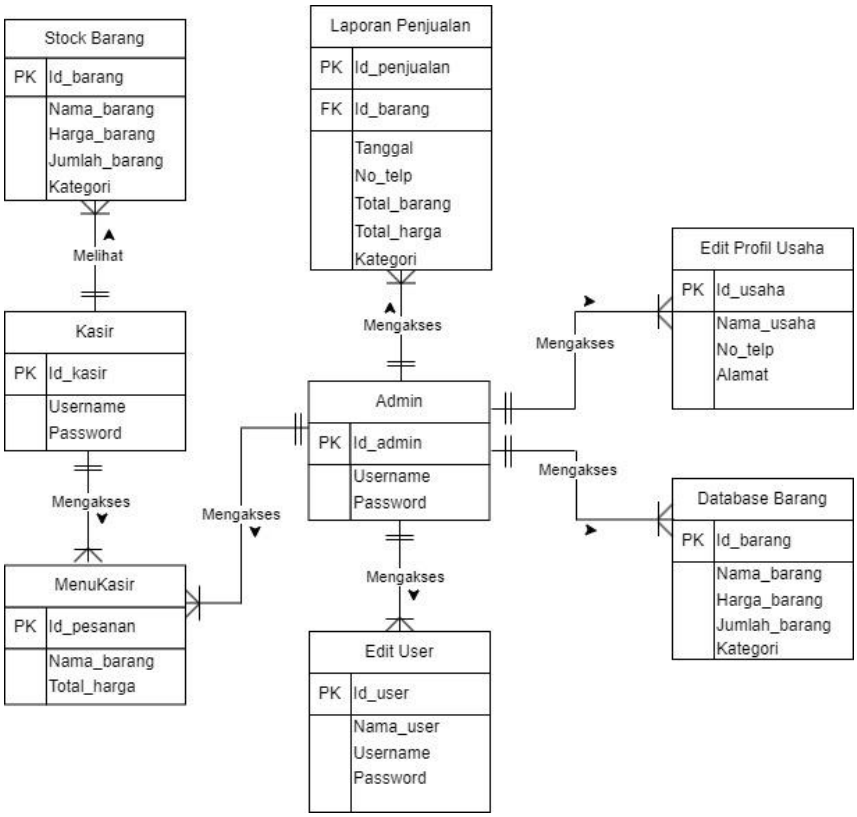

Figure 3. Logical Database Design

Image Source: Personal Documentation

Coding

After the design has been carried out, it will continue to the stage of creating the cashier system. Where this cashier system is made using the PHP and MySQL programming language as a database, so that this cashier system is made website-based.

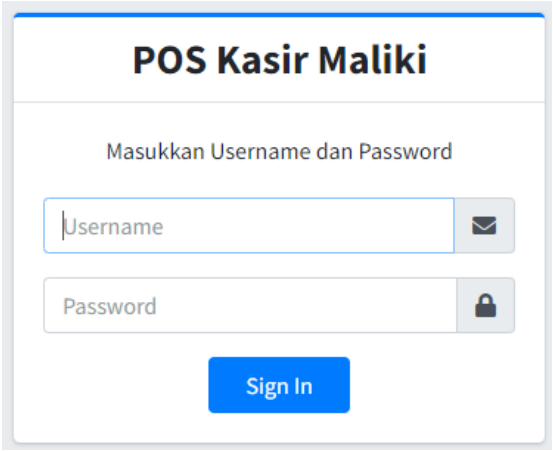

Figure 4. Login Display

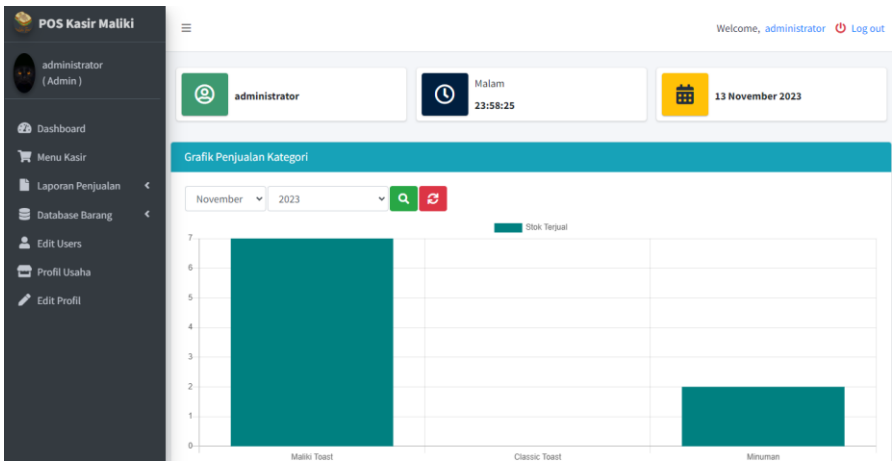

Figure 5. Dashboard Display

After logging in, you will switch to the main display, namely the dashboard page, where the admin can see the sales graph, but the cashier cannot see the sales graph. can be seen in figure 5 for the admin dashboard display

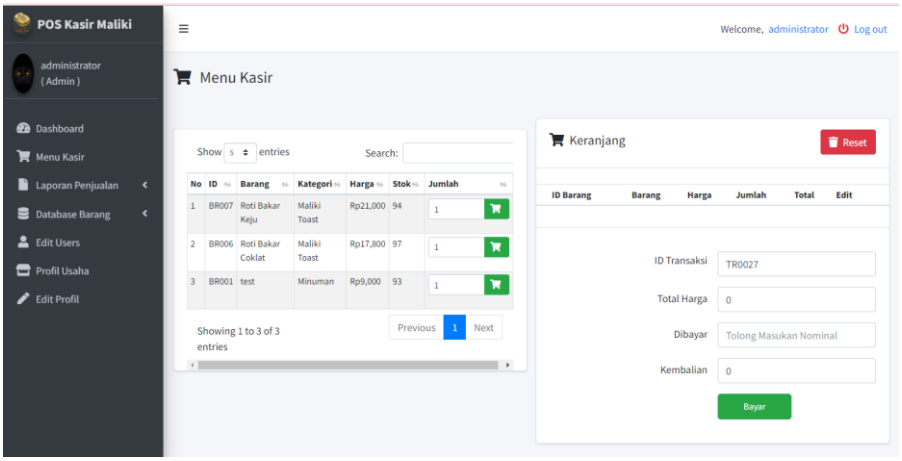

Figure 6. Cashier Menu Display

Figure 6 is the Cashier menu display which can be accessed by the admin and cashier, useful for recording food and drink orders from a customer, so that it can show the price of a product and the total price..

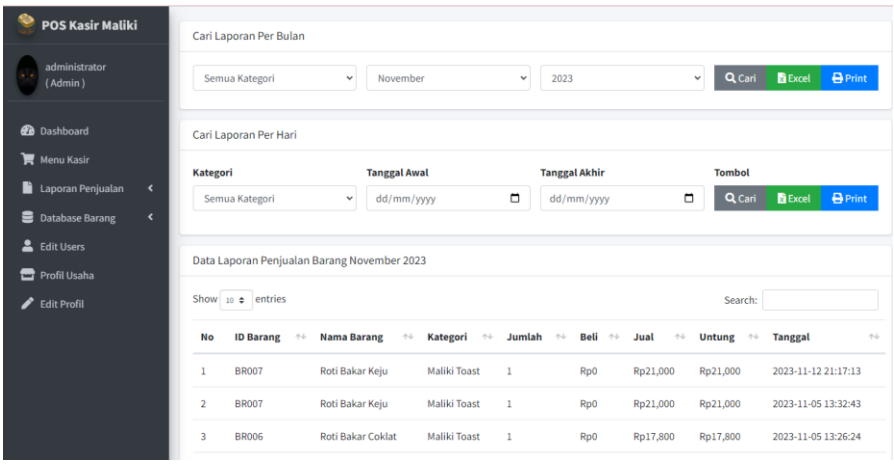

Figure 7. Sales Report Display

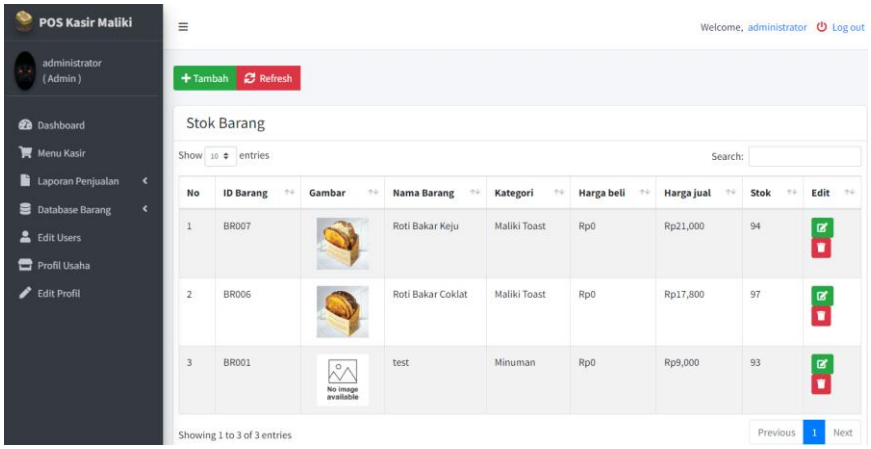

Figure 8. Item Stock Display

Figure 7 is useful for checking sales data that has occurred. It can be seen in the sales report which can only be accessed by the admin. But for figure 8, which is a stock item, of course admin and cashier access rights are different, where the admin can add, edit and delete an item, but the cashier can only see the stock item.

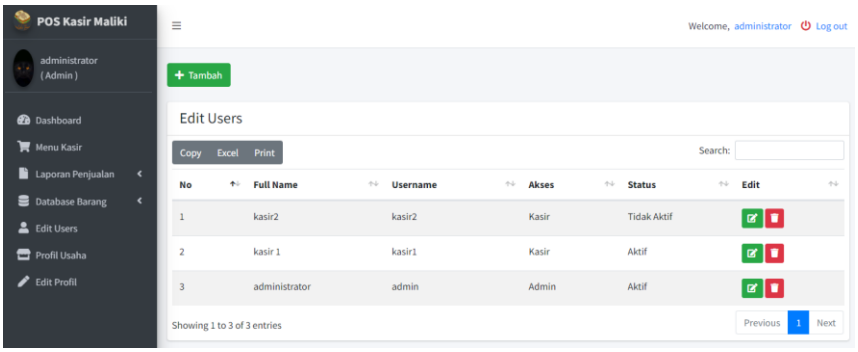

Figure 9. Edit User Display

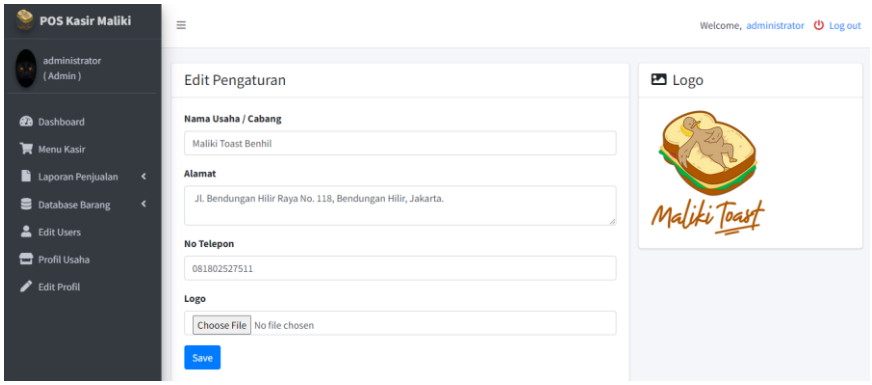

Figure 10. Edit Business Profile Display

Admin has access to edit users, which is useful for adding, editing, deleting access rights to enter the cashier system as shown in figure 9. And figure 10 is editing the business profile which is useful for information on business name, address and telephone number on a sales receipt.

Testing

The cashier system that is created must of course be tested to avoid errors occurring. If there is an error, it must be corrected so that when it is implemented for users it can run smoothly. So there are several things that are done in the test which can be seen in table 1.

Table 1. Cashier System Test

No	Test Button Function	Success	Error
1	Admin and cashier access rights are different in a login	v	
2	The add, edit, delete button works smoothly	v	
3	The payment button works smoothly	v	
4	Sales report search by date can be run	v	
5	Sales graph work based on recording sales that occur	v	
6	Print sales reports into excel files without errors	v	
7	Logout button works	v	

Maintenance

This stage is useful for checking the software and hardware needed so that this cashier system can work at Maliki Toast, so that the cashier system that has been created can be used by users to carry out sales transactions to customers without any interruption.

4. CONCLUSIONS AND RECOMMENDATIONS

The conclusion obtained from designing the cashier system is that the cashier system is based on a website which is useful for assisting in withdrawing sales reports, and collecting transaction data for Maliki Toast without being integrated with other brands' cashier systems. So it is hoped that this design can help Maliki Toast make sales easier and make transaction withdrawals easier. This research is still not perfect and needs to be improved, with this we need suggestions to the author to improve and improve the design of the website-based cashier system so that it is better.

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