DESIGN AND CONSTRUCTION OF A POINT OF SALE INFORMATION SYSTEM FOR AYAM BAKAR B-JO

Arga Agung Wiradika¹, Rikip Ginanjar²
Faculty of Computing
President University
Bekasi Indonesia
wiradika.den88@gmail.com

Abstract— Avam Bakar B-JO is a business that was just started in mid-August that requires system assistance to manage transaction data, recap transaction data, so that it can make sales reports with transaction details that can be done automatically by the system, so that the business owner can ease the work of the business owner. who must record transactions manually to perform manual calculations of profits. Therefore, a Point of Sale Information System was created for B-JO Grilled Chicken, to overcome the problems experienced by business owners. With the application of this point of sale information system, it is hoped that business owners can overcome these problems without human error or other things.

Keywords- Web-Based, Information System, Design and Construction

I. INTRODUCTION

The more technology develops, the more technology itself is needed to help in doing some things to make it more practical. Therefore, the use of technology, especially in the field of information systems, is very important and very influential at this time. The role of information systems is essential for progress in all areas intended for the ease of humans in doing an activity. With the rapid development of technology today, it is expected to be utilized by Ayam Bakar B-JO so that the work becomes more effective and efficient. Ayam Bakar B-JO is a business that was only pioneered in mid-August, which requires the help of the system to manage transaction data, recap transaction data, so that it can make sales reports with transaction details that can be done automatically by the system, so that the use of the Point of Sale Information System itself can relieve the work of

business owners who have to record transactions manually to calculate the profits obtained Manually. To solve the problems that are being experienced by business owners. Therefore, the construction of a Point of Sale Information System for Ayam Bakar B-JO where the features of this system are tailored to the needs of business owners. In the process of making it will use the Laravel framework as its programming library, MySQL as the database. Based on the background of the final task entitled "Design And Construction Of A Point Of Sale Information System For Ayam Bakar B-JO" there is a problem found, How to build a Point of sale Information System that can manage sales and purchase transactions, How to build an Information System that can display a recap of transaction data. How to build a Point of Sale Information System to process reports from sales transaction inputs, How to build an Information System that has different user access based on user level.

II. DESIGN AND IMPLEMENTATION SYSTEM

The method used to work on the final task project entitled "Design And Construction Of A Point Of Sale Information System For Ayam Bakar B-JO" is to use rapid application development research method. RAD itself has four stages in its implementation.

Rad method stages:

1. Needs Plan At this stage users and authors meet each other to research and solve problems that are happening, determine what is needed to create an application system, because this stage is the first step in successful

system creation and can avoid communication errors between users and authors.

2. User Design

Stage makes a design that will be proposed to fit the needs, run as planned and is expected to overcome the problem that is happening. In this study, the system design depicted using UML.

3. Construction

This stage is the stage of starting to create a system that has been planned. Start composing a program code or commonly called coding, to change the design of the system that has been made into an application that has been planned to be used.

4. Testing

This stage is the overall testing of the system that is built all components need to be thoroughly tested with Black Box Testing in order to reduce the risk of system defects. Black-Box Testing is a software testing technique that focuses on the functional specifications of the software.

A. System Design

1. Use Case Diagram

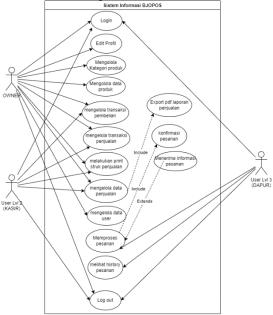


Figure 1 Use Case Diagram

The design of the use case will show how the user (Actor) uses the system or shows what the user (actor) can do in this system. The users (actors)

who act as users of this system are level 1 users (as store owners) and level 2 users (as store employees).

2. Database Table Relations Diagram



Figure 2 Database Table Relations Diagram

Database table relationship diagrams are used to show relationships between classes and to describe all the details of classes in a system design model. This diagram further describes each process between tables and includes some additional properties required as a work unit.

III. RESULTS AND DISCUSSIONS

At this stage will explain about the results of the B-JO Grilled Chicken POS information system, which will display screenshoots of several pages of the completed system.



When the user runs the system, the user will be directed to the login page first, to login and validate the user. In this system the user has 2 levels to distinguish access in the system, so level 1 is specifically used by the owner, and level 2 specifically for employee or cashier user.

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Figure 4 Dashboard User Level 1



Figure 5 Dashboard User Level 2



Figure 6 Dashboard User Level 3

After the system login, the user will enter the dashboard page according to the level level of the account used when logging in the system by the user. On the level 1 dashboard page users can access all the features on the system, while on the dashboard user level 2 users can only access new transaction and purchase features.



Picture 7 Product Site

Here the owner clicks the product menu button, the system will display the product page and the owner can manage product data, such as add, edit, and delete product data. But before adding product data, the owner is required to have finished adding product category data.



Picture 8 Purchasing Site

Here Owner clicks the purchase menu button, the system will display the Purchase and Owner page can manage purchasing data, such as added, edit, and delete purchasing data.

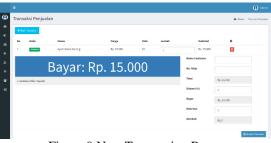


Figure 9 New Transaction Pages

Here the owner clicks the new transaction menu button, the system will display the new transaction page and the owner can manage transaction transaction data by clicking the Add Transaction button, then select the product to be transacted, if you want to delete the product from the transaction list click the Delete button on the Action column, Then fill in the discount input if there is a discount, and this is a change in input if the payment is not with the right money.

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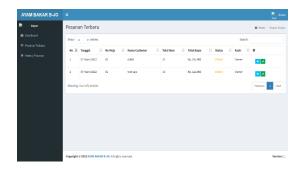


Figure 10 Lates Order

On the Latest Orders page, the kitchen section user will get the latest order information, after there is a new transaction made by the owner or cashier, here the kitchen section can see the customer's name and customer table number so that later they can notify restaurant waiters when they want to take orders and deliver orders which has been made to the customer. The kitchen user must also confirm the order that has been processed, so that the confirmed order list will automatically switch to the order history. In the information received by the kitchen, there is also an order status, which can notify the kitchen, if there is a change in the order. And to see the change in the order, it can be seen by clicking the detail button on the modified order information

IV. CONCLUSIONS AND SUGGESTIONS

A. Conclusion

Based on the results of the analysis, design, coding and testing of the system, it can be concluded that:

- 1. This Point of Sale Information System can manage product data and product stock.
- 2. The Point of Sale Information System can facilitate business owners in managing sales and purchase transaction data.
- 3. Business owners can view the transaction data recap to confirm whether there is an input error or not.
- 4. This system has two types of user levels that have different access.
- 5. With this system the owner or employee can print the sales transaction note after the transaction is complete.
- 6. This system can manage user data and store data.

B. Suggestions

After going through a long study, finally this system was created, but it still has various limitations. Thus suggestions and inputs are given and if possible can be a reference for the

development of research on this topic in the future. In the future, this application is expected to be developed into an application that can be realized in the future with sufficient capital. It is also hoped that this app will help other restaurants develop a similar system. In addition, these systems may need to be developed into mobile and portable applications that allow users to choose which system is more efficient to use.

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