IMPLEMENTATION OF THE RAD METHOD FOR THE GOODS SALES INFORMATION SYSTEM IN THE BINA MULIA COOPERATIVE

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Abstract: In order to remain competitive, the Bina Mulia Cooperative Shop, which sells office supplies, is now working to maintain its sales turnover and boost sales. According to the findings of the observations made at this shop, there are a number of barriers to the sales business process, including the level of marketing used, which is still less effective, where product marketing in this shop is only focused on location and depends on customer arrival, and sales recording, which is still done manually using books.

Based on these issues, research was conducted with the goal of developing an electronic sales system using the RAD technique and the Unifed Modeling Language (UML) as the system design. A software development methodology that focuses process development cycles quickly is called Rapid Application Development (RAD). The waterfall paradigm served as the foundation for the RAD model. The researchers discovered after testing that the sales application was powered by a computer system.

Keyword: Product marketing, order, RAD, developmen system.

INTRODUCTION

The choice and application of analysis and design methodologies and the development of software systems with good performance are inseparable. Selecting an efficient strategy for system construction offers several advantages and is practical. The strategy stresses software principles and functionalities together with database usage and programming language usage. When the procedure is applied appropriately, real results are obtained. Implementing the Rapid Application Development (RAD) Method is better suited for systems with high dynamics, limited development time and cost availability, the need for information that is quickly updated, and the requirement for customized interaction that closely resembles the user's characteristics.

This system's development strives to advance technology, which is evolving quickly and becoming crucial to business. The advent of the internet had a profound effect on society since it made it quicker and easier to conduct information searches, engage in communication, and even transact business with people around the globe, this incites all parties involved, notably retailers, to build large websites. Branding is one particular trend to keep an eye out for since some companies may genuinely give consumers emotional value, which subsequently inspires happy sensations when they shop. Price also plays an important role and is a concern for consumers in making purchasing decisions that are affordable and appropriate to consumer income. Consumers select affordable goods based on their needs. Of course, everyone wants to make good selections that are effective. Because of this, a lot of businesses rely on media as business intelligence to guide their decisions.

As a result, effective planning is required, which of course also entails data analysis, data on previous or recent sales transactions can be gathered, and the sales graph can then be examined. The relationship between the variety of products sold, the number of products sold, the sales time, and market segmentation related to product distribution, including the status of customers enjoying the sold products, are only a few of the elements related to sales. Stores need to gather a lot of quantitative and qualitative data in order to do analysis. The findings of analysis will be to better the more and better information have. However, a data mining to function that analyzes data with the objective of acquiring accurate information then information about relevant to decision-making and problem-solving is required in order to produce good and accurate analysis findings.

This study is divided into three phases. The first phase is the planning phase; during this phase, data on the needs and preferences for this research are gathered. The system development phase is the second stage. In this stage, known as development stage, researchers start to create the system in accordance with user requirements. The testing phase is the third stage. This stage involves testing the reliability of the system and ensuring that all application features operate as intended.

METHODOLOGY

Rapid Application Development (RAD) is the research methodology used in this study, and it has the advantage of prioritizing the process development cycle by speeding up application and process processing so that can use the device system quickly and correctly right away. Model The RAD places a high value on user input during the analysis and design phases in order to effectively address user needs and greatly raise overall system user satisfaction, phases of research including

1. Planning Stage

A design process is to be completed at this level. This procedure comprises creating the system's design. An admin interface and a customer or user interface. The architectural design of an application's use can be used to visualize the design stage. Starting with the administrator, processing the goods data, supplier data, and sales data after logging into the program and proceeding directly to the main menu
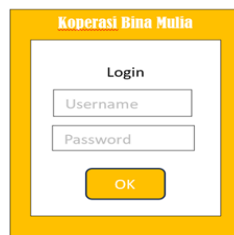

Figure 1. Login menu

2. Process Modeling Phase.

After analyzing the needs, a design was created using UML

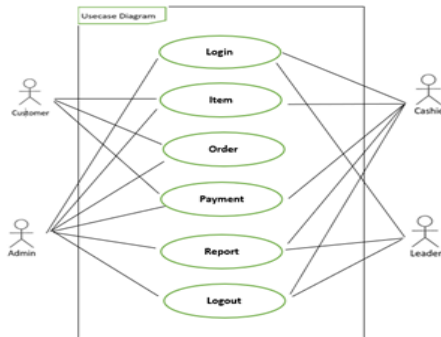1. Use case diagram

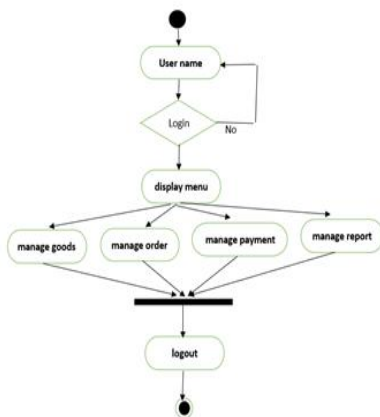Figure 2. Use case diagram

2. Activity diagram
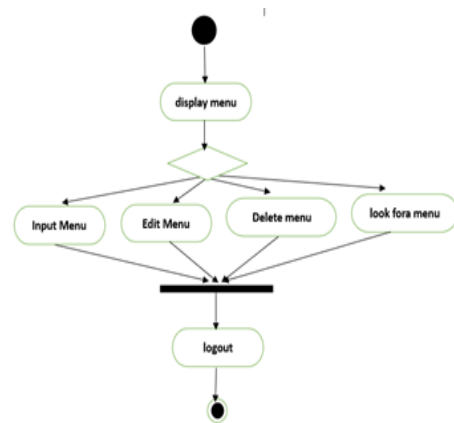

Figure 3. Login Activity Diagram   Figure 4. Activity Menu Diagram

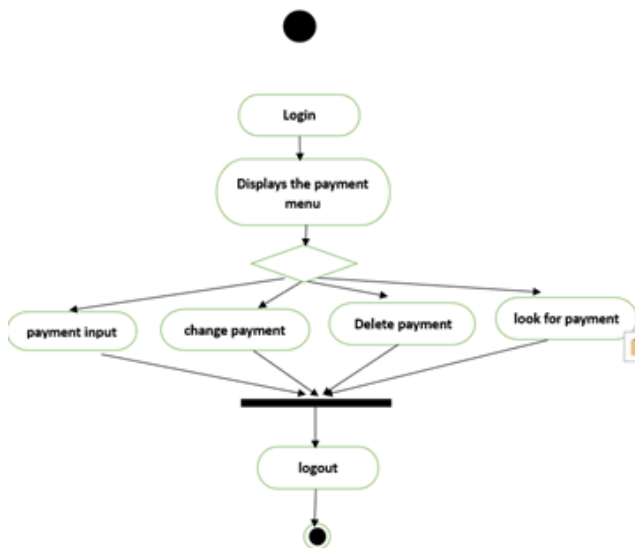*M. Khaerudin, Andy A. Hendharsetiawan*
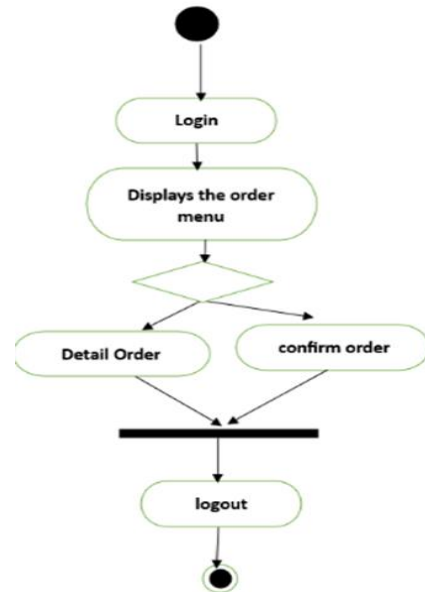
Figure 5. Payment Activity Diagram

Figure 6. Activity Order Diagram

RESULTS AND DISCUSSION

Using the RAD approach, this sales information system was created. The RAD process seeks to accelerate the period between system design and implementation while streamlining the development of this system. The researcher developed the procedures utilized in accordance with the RAD technique for designing sales applications in order to obtain the best results possible for this study. The following procedures were developed by the researcher in accordance with the RAD technique for designing sales apps in order to achieve the best results possible for this study:

Requirements System

To produce this information system, several planned requirements can be described as follows:
1. Software Requirements
    1) Sistem operasi windows 10.
    2) Microsoft Office Word, Visio, Access, Excel 2013.
    3) Netbeans IDE 8.2. 4) Database Mysql, Xampp
2. Input Requirements
    1).Information about goods
    2).Supplier Data
    3) Sales Data
3. Information Needs
    1). Item data report
    2). Damaged goods data report
    3) Sales report

Requirements Interface

The keyboard and mouse are used as the user interface to control the retail sales information system The user interface is physically a menu screen that shows administrator options for entries and reports pertaining to the processed data, specifically sales data, supplier data, and commodities data.

System Implementation

Testing the information system on the newly developed process will be reveal this level. Images of the system's results can be used to demonstrate testing this system
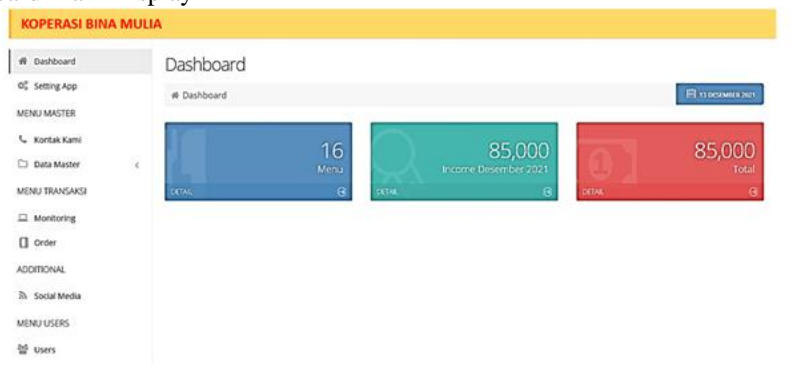1. Login display

Figure 7. Login Page

2. Dashboard Main Display

Figure 8. Dashboard Display

3. App Settings display
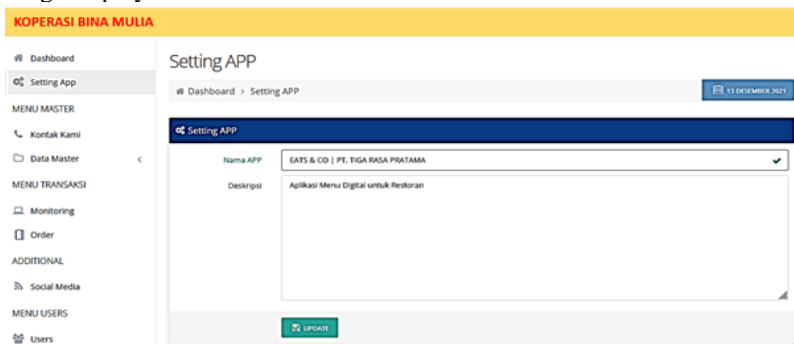

Figure 9. App Setting Display
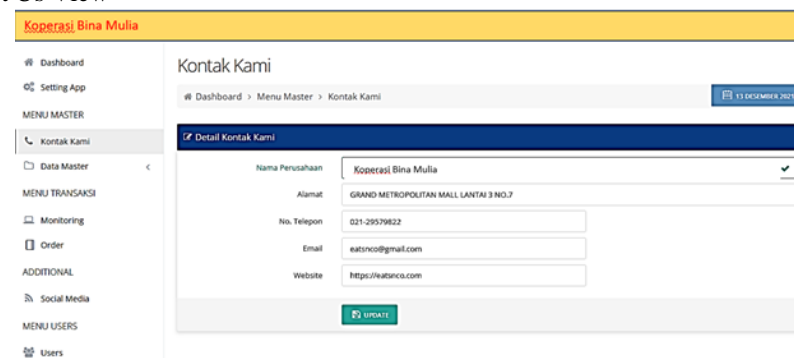
4. Contact Us View

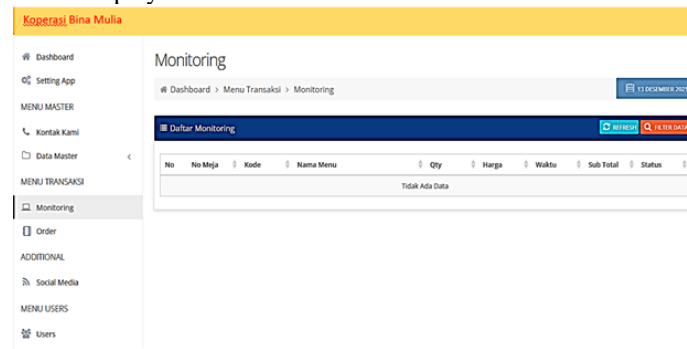Figure 10. Contact us View

5. Transaction Menu Display

Figure 11. Transaction Menu Page
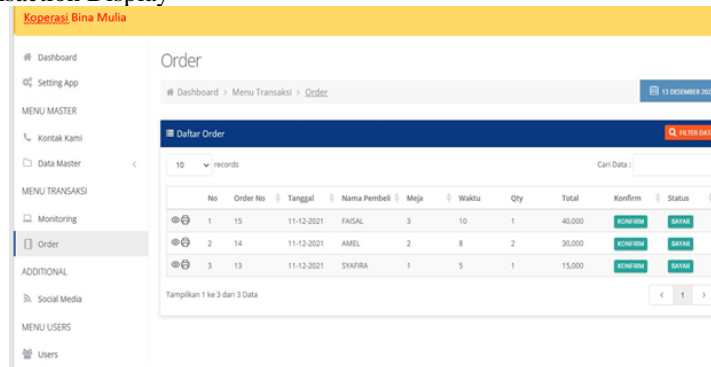
6. Order Transaction Display

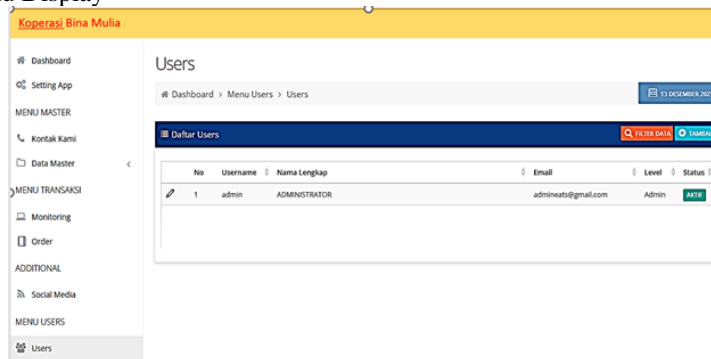Figure 12. Order Transaction Display

7. Users Menu Display

Figure 13. User Menu Page

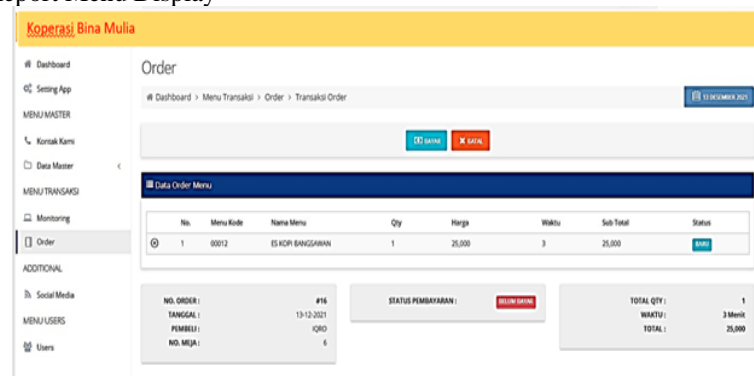8. Payment Report Menu Display

Figure 14. Payment Report Display

Operation and maintenance

1. Open the phpMyAdmin Application, then click the Database menu
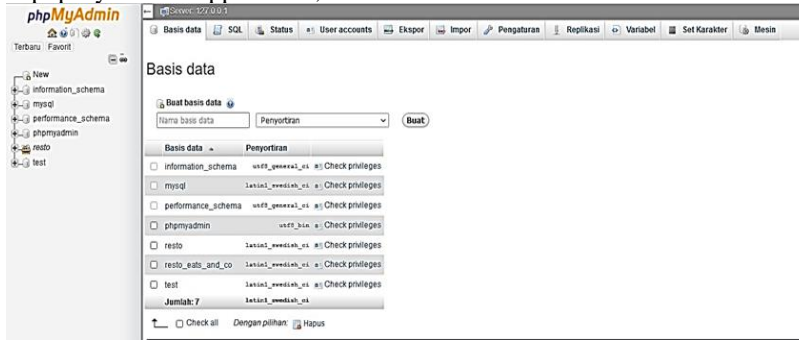

Figure 15. phpMyAdmin Application,

2. Click the name of the database you want to backup, then click export

Figure 16. Database Backup

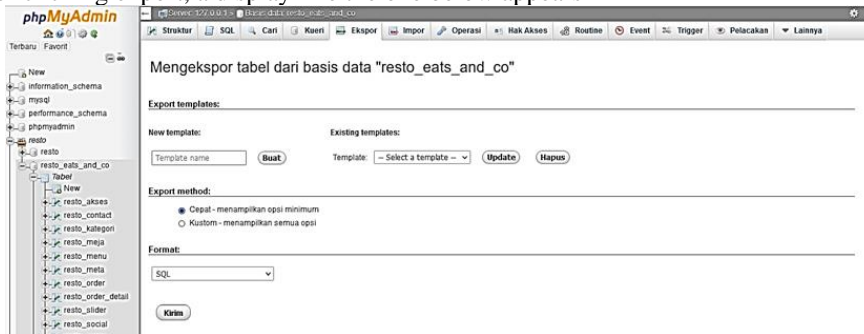3. After clicking export, a display like the one below appears

Figure 17. Export Menu

4. Fill in the new database name, then click send

Figure 18. New Database Name

CONCLUSION

Customers can benefit from convenience, and at the same time, can create a system by recording sales reports by creating a sales system. The next stage after creating a sales system is to install and maintain it, which involves giving it all the necessary infrastructure and users.

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