



Financial Report Application Using the MVC Method at the Pampemi Shop Bag Store in Prabumulih City

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Abstract

The Pampemi Shop store was established on May 25, 2022, because it started when the owner saw one of the live broadcasts of someone offering his products through social media, plus the owner's interest in fashion. The Pampemi Shop is located on Jalan Tenggamus, Muara Dua Village, East Prabumulih City, Prabumulih City. The Pampemi Shop store still uses a manual system by using a ledger in financial reporting, therefore the Pampemi Shop in Prabumulih city needs an application fast and precise financial statements so that the management of financial statements can be easily used by employees. Therefore, the author wants to create a financial reporting application using PHP and MySQL programming. The result of this study is to make it easier for the components in the Pampemi Shop store to make financial reports.

Keywords: Pampemi Shop Kota Prabumulih, Financial Report Application, PHP and MySQL

1. Introduction

Until now, financial reports at the Pampemi Shop are still done conventionally by handwriting. This is a problem that must be corrected in the financial reporting system. This makes the financial management process less effective with the possibility of data errors being quite large and also this system has several weaknesses, namely the calculation process is slow, and the financial reports are not completed on time because employees have to recap the data by looking at the bags sold one by one every day. Therefore, it is necessary to improve the financial reporting system in order to simplify the financial reporting process and reduce both data errors, data loss and can also cause delays in preparing financial reports by creating a web-based programming language application using the MVC (Model View Controller) method. Technology generally refers to tools, machines, methods, processes, activities or ideas created to make human activities easier in everyday life [1]. Currently, the development of information technology has accelerated and expanded to various aspects of human life. This progress is driven by increasingly sophisticated software and hardware, designed to meet evolving human needs. Model View Controller (MVC) is a software architecture/design pattern that separates the key elements of an application. MVC helps in organizing and managing program code, as well as improving the structure and organization of code, making it easier to maintain and develop applications. Often, web frameworks adopt an MVC structure to facilitate the process. Research at the Pampemi Shop store is expected to make a significant contribution by developing a web-based financial reporting application. This aims to make it easier for financial managers to prepare financial reports and provide relevant information to management regarding financial conditions more efficiently. Based on the existing problems, the researcher wishes to design a "Financial Report Application Using the MVC Method at the Pampemi Shop Bag Store in Prabumulih City".

2. Theoretical Review

2.1. Understanding Application

Applications are a type of software that performs data processing through computing. The term "application" comes from the English "application," which can be interpreted as application, application, or use. In terminology, an application refers to a program that has been

prepared for use and is designed to perform certain functions for users of application services. Application can also refer to the use of other applications available to a particular target user [2].

2.2. Understanding Financial Statements

Financial reports are the final result of recording a company's financial transactions which reflect the company's financial condition in a certain accounting period and provide a comprehensive picture of the company's performance [3]. Financial reports are documents that present information about the financial condition of a business entity or organization during a certain period. Generally, this report prepared by a company or organization to provide an overview of their financial performance to various interested parties, such as owners, investors, employees, creditors and other related parties [4].

2.3. Understanding The Mvc (Model View Controller) Method

MVC (Model View Controller) This is an approach to developing applications by dividing them into three main parts: Model to manage access to the database, View to display the user interface, and Controller as a controller and input receiver that operates functions in the model [5].

2.4. Understanding Websites

A website is a communication forum that presents various information in the form of text, sound, images, video or animation. When connected to the internet, websites can be accessed publicly by anyone, anywhere and at any time [6].

2.5. Understanding MySQL

MySQL is a database that connects PHP scripts using query commands. The function of this page is to control the MySQL database so that MySQL users don't need to bother using SQL commands [7].

2.6. Understanding Xampp

XAMPP is free software that supports various operating systems and is a collection of several programs combined [8].

3. Research Method

Research methods are processes or approaches chosen specifically to solve problems faced in research [9]. The type of research carried out by this author is a qualitative method, namely research that produces findings that cannot be obtained through statistical procedures or other quantification methods [6]. The forms of data collection in this research are:

1. Observation
Collecting data by making direct observations of the research objects being studied.
2. Interview
Data collection is done by communicating and having a question and answer session directly with the Pampemi Shop.
3. Documentation
Documentation techniques used to find sources of information related to research in the form of documents and photos.
4. Literature Study
Data were collected by reading books and looking for journal references related to this research.

4. Use case diagram

A use case diagram is a diagram that describes the relationship between actors and the system. In the initial stage, this is done by first creating a Use Case Diagram which can be seen in Figure 1.

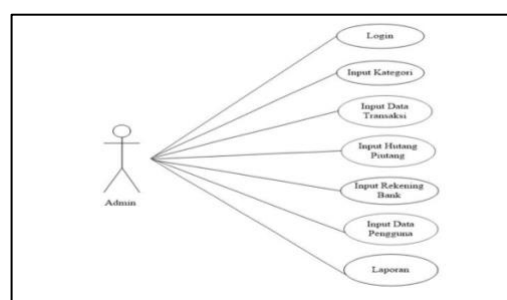


Fig. 1: Proposed Use Case

Figure 1 explains that there is one actor who can use the application, where the admin logs in, after which the admin performs input, including inputting transaction data, inputting accounts payable, inputting bank accounts and inputting user data.

5. System Implementation and Testing

5.1. Database Implementation (Database)

The software produced in the research was implemented for financial reporting applications at the Pampemi bag shop in Prabumulih city using a MySQL database, the resulting software consisted of several tables. The following is a view of the database:

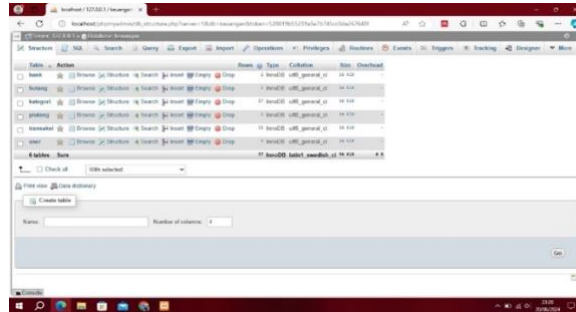


Fig. 2: Database View

5.2. Interface Implementation

Interface implementation is done by designing the interface on the form in this application. Each page created will be a PHP (Hypertext Preprocessor) file. These files will be accessed and function as a link between the admin and the application. In the interface implementation, the main page functions as a central link with other interfaces.

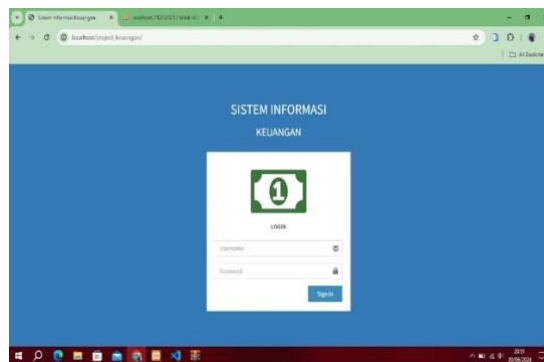


Fig. 3: Login Page Display

in figure 3 the admin login page is displayed, where the admin must log in first to access the admin page.

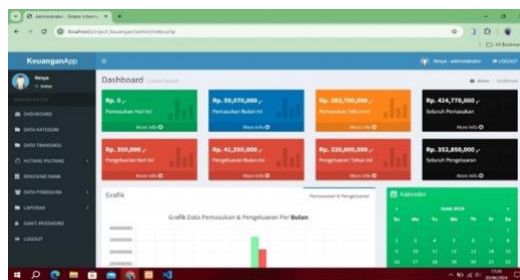


Fig. 4: Home Page Display

Figure 4 shows that after the admin logs in, the main page will appear containing menus such as the home page, category data, transaction data, accounts payable, bank accounts, user data, reports and logout.

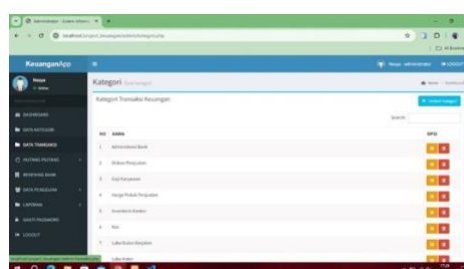


Fig. 5: Category Data Page View

In figure 5 where on the category data page the admin can view and add category data.

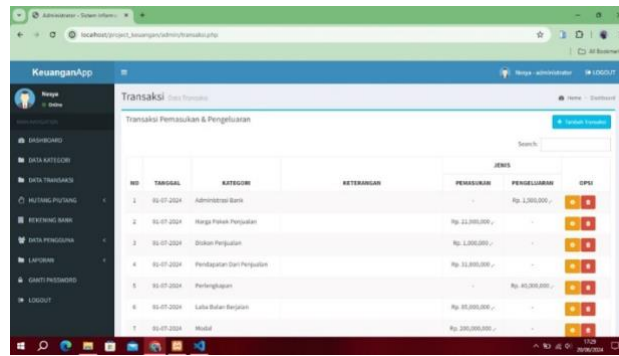


Fig. 6: Transaction Data Page Display

On the transaction data page, admins can view and add transaction data shown in Figure 6.

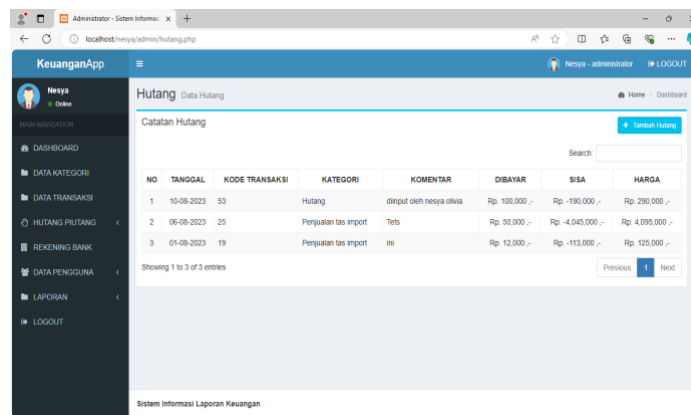


Fig. 7: Payable Notes View

Figure 7 shows the debt records data page where admins can view and add debt records.

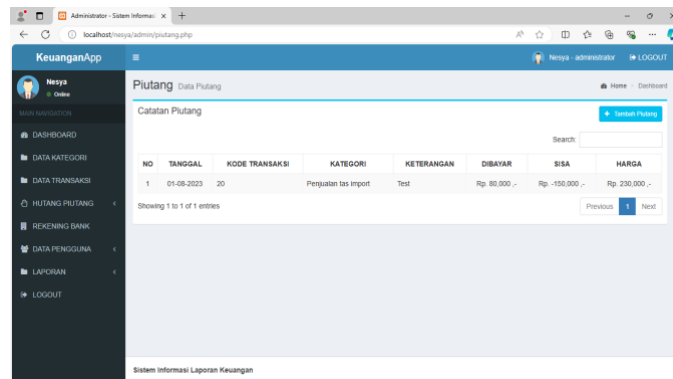


Fig. 8: Receivables Page View

Figure 8 shows the accounts receivable records data page where admins can view and add accounts receivable records.

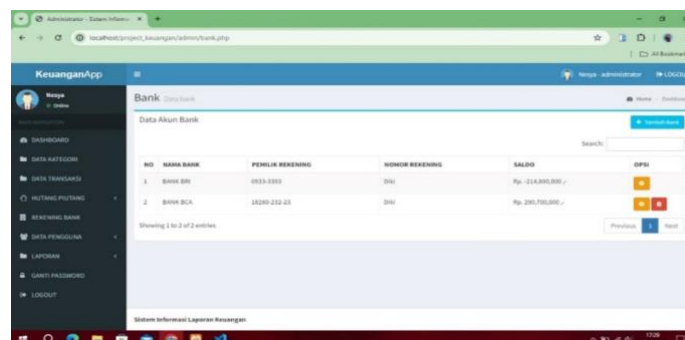


Fig. 9: Bank Account Page Display

In Figure 9, the bank account page shows that the admin can add bank account data.

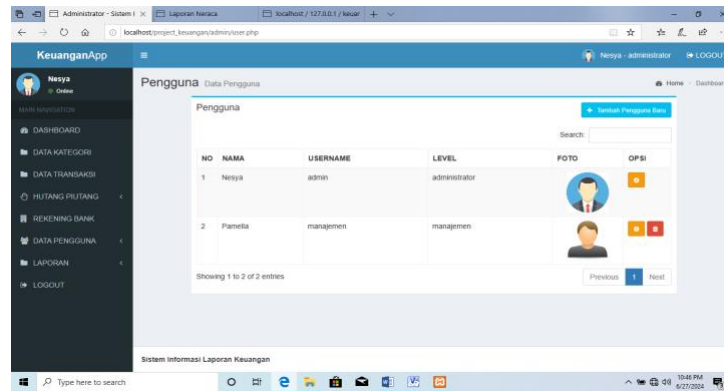


Fig. 10: Financial Balance Page View

In figure 10 you can see the financial balance report page, admin can print the financial balance report.

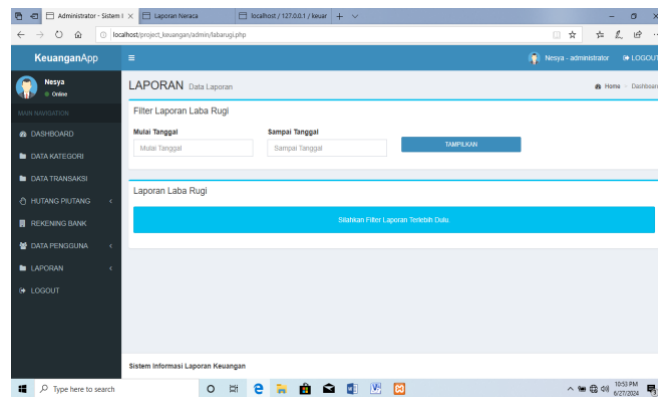


Fig. 11: Profit and Loss Page Views

Figure 11 shows the profit and loss report page where the admin can print the profit and loss report.

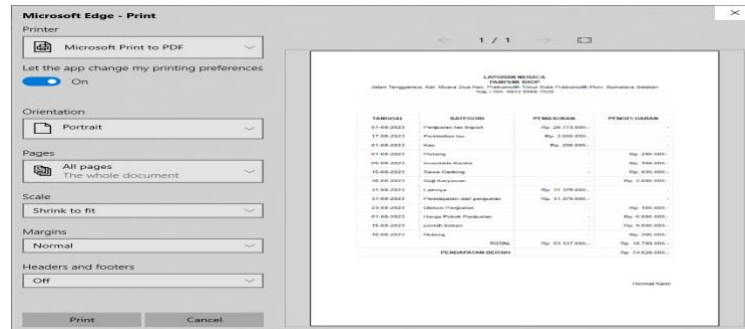


Fig. 12: Display of Financial Balance Report

Figure 12 shows the financial balance report.

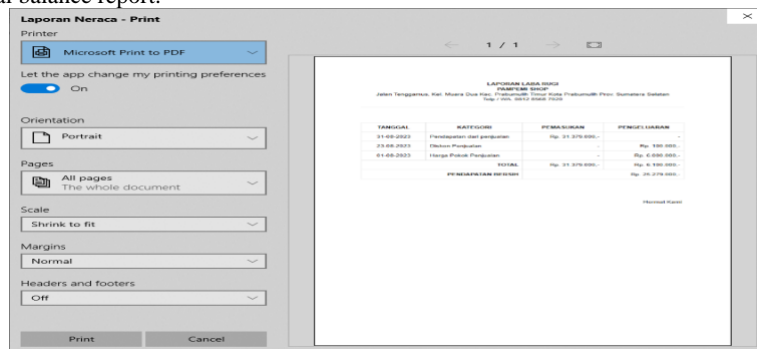


Fig. 13: Income Statement View

Figure 13 shows the results of the income statement

5.3. System Test Design

In testing this software, the black box testing method is used to functionally check whether the designed application meets the expected results. This method is used to ensure that the software functions correctly. The aspects that will be tested through this testing technique are as follows:

Table 1: Test Design

Nu	Requirement	Tester Type
1	Login Display	Black Box
2	Admin Dashboard Page	Black Box
3	Category Data Page	Black Box
4	Transaction Data Page	Black Box
5	Accounts Payable Data Page	Black Box
6	Bank Account Page	Black Box
7	User Data page	Black Box
8	Report Page	Black Box

5.4. Test Result

The following is an explanation of the test results carried out using testing techniques according to the predetermined plan.

Table 2: Test Plan and Results

Requirement	Nu	Test Scenario	Expected Results	Test Results
	1	Click Category Data	The category data page appears, add categories, update and delete.	Valid
	2	Click Transaction Data	The transaction data page appears, add transactions, updates and deletes	Valid
Main Menu user/admin	3	Click Accounts Payable, Accounts Payable Notes	The accounts receivable records page appears, add receivables, update and delete	Valid
	4	Click Accounts Payable, Accounts Receivable Notes	The accounts receivable records page appears, add receivables, update and delete	Valid
	5	Click Bank Account	The bank account page appears, add bank, update and delete	Valid
	6	Click User Data	The user data page appears, add new users, update and delete	Valid
Administrator Menu	7	Click Report, Profit and Loss	Display the profit and loss page, and print	Valid
	8	Click Reports, Financial Balance	Display the financial balance page, and print	Valid

Based on the results of tests carried out in all categories it is declared valid. This is in line with research conducted by [10] Judging from the results of the application trials from the previous chapter, recording. With the WEB-based financial application program at CV Soetrisna Putra, transaction recording can be done easily and quickly. Judging from the analysis of manual transaction recording procedures on CV. Soetrisna, which was discussed in the previous chapter, can be concluded that manual recording makes it difficult for employees and owners when adding up and carries the risk of totaling errors. It can be seen from the results of the application trials in the previous chapter that the reports presented by this application are comprehensive starting from information on debts, receivables, incoming goods, outgoing goods, money traffic, profit information, and also analysis of each product.

6. Conclusion

Based on the overall explanation and discussion in the thesis entitled "Financial Report Application Using the MVC Method at the Pampemi Bag Shop, Prabumulih City", the author draws the following conclusions:

1. This application is designed using the PHP (Hypertext Preprocessor) programming language and MySQL database.
2. The financial reports produced are profit and loss statements and financial balance sheets. This report can help owners control and make decisions.
3. The financial condition of the Pampemi Shop store can be known easily because there are financial reports that can be viewed according to the desired period.
4. This financial report application can make it easier for users to record and manage financial reports
6. The application created is offline, so that when running this Application the user no longer needs an internet connection.
7. This financial report application is a simple application that only includes financial reports at the Pampemi Shop store
8. Management and storage of financial data is more accurate and secure

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