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Web-based Design of Financial Apps: Case of Kosan 54

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Web-based Design of Financial Apps: Case of Kosan 54

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Abstract. Financial Management is the process of financial planning in budgeting, auditing, management, control, deposit funds that are held for effective and efficient financial decisions.. As the existing financial management processes in boarding house number 54 (Kosan 54) is still manual, it is prone to mistakes during the recording and making their own bills and financial statements, along with the process of bill payment by the boarding members. Therefore, a system that can perform data processing in an integrated and well computerized system using a WEB-based system is urgently needed. The designed system is a WEB-based Financial Management Application. To build the application, a software such as MySQL database is needed, as well as using the PHP programming language. This finance management application then will be of great help in the planning of appropriate financial income and expenses incurred.

1. Introduction

Along with advances and developments in technology, the human need for technology becomes a very useful and common need. The use of technology is almost required in all aspects, including education, health, economy, and even in social, and culture. Currently, KOSAN 54, which consists of 10 members, is still using a bookkeeping system and manual calculations in terms of managing their finances, which includes their monthly income, expenses, and many others. Because of this, errors constantly occur in terms of calculations, bookkeeping, as well as their own financial reports.

Financial management is an activity that must be emphasized and considered by every organization, especially those which will help them achieve their goals or their desires in the future. For this reason, a website was created that could solve this problem. This website will make it easy for the board of Kosan 54, where they can access this site to manage their finances much easily so that they can be managed properly and without the need to use pens, calculators, paper, or other manual tools as they have been integrated and well computerized in the form of a website.

Based on the background of the problems that have been stated above, it can be identified that: one of the difficulties of the boarding house managers is knowing and informing the due date of bill payments to their boarding members. The financial recording is still carried out using a handwritten method so that it is less than optimal and effective

The purpose of making this application is to help the boarding house managers in reminding the payment due to boarding house members. Based on the above background, the discussion of this study is limited as follows: 1. Information from the web is only used to display billing information for Kosan 54 members. 2. The system only serves financial records by the boarding house managers.

2. Theoretical Basis

An information system is a system within an organization that meets the processing needs of daily transactions, supports operations, is managerial, with strategic activities of an organization and provides certain outsiders with the necessary reports [1].

While money is an object that can be exchanged for other objects, can be used to value other objects, and something we can save. Furthermore, money can also be used to pay debts in the future. In other words, money is an object that can basically function as: (1) a medium of exchange, (2) a store of value, (3) a unit of account, and (4) the measure of the deferred payment (standard for deferred payment) [2] All company activities related to the effort of obtaining company funds at low costs and the effort to use and allocate these funds efficiently [3].

A website or site can be interpreted as a collection of pages that display information on text data, still or motion image data, animation data, sound, video, or a combination of all of them. This includes both static and dynamic data which forms a series of interrelated buildings where each is linked by network pages (hyperlinks) [4] The definition of the internet is a series or network of a number of interconnected computers. The Internet comes from the word interconnected-networking. The Internet is a global network that connects a network with other networks around the world. The media that connects the network can be in a form of a cable, satellite channel, or radio frequency [5].

2.1. PHP (hypertext preprocessor)

It is According to the official PHP documents, PHP stands for Hypertext Preprocessor. It is a language in the form of scripts that are placed and processed on the server. The results will then be sent to the client, where the user uses the browser. [6] A database is a collection of information which is systematically stored in a computer. This allows it to be checked by a computer program to obtain information from the database. The software used to manage and call database queries is called a database management system (DBMS). [7] A flowmap is a picture in the form of a flow chart of an application program which states a direction or flow of the program [8] The analysis and the system design is the first step in system development. This is done to determine needs, problems that can be solved with the system that is being built, and what kind of system is going to be built [9].

3. Analysis

Analysis of the financial condition of boarding house 54 which starts from the payment process to the recording process of observations and analyzes that have been carried out, the current business flow or flowmap in financial management at Kosan 54 is as follows:



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3.1. Design

A context diagram is a simple diagram that describes the relationship between the external entities, input, and output from the system. A context diagram is represented by a single circle that represents the whole system.



4. Implementation Environment

After analyzing and designing the system that is going to be built,, the system is then ready to be implemented.

This stage is where the system is being placed so that it can be operated in accordance with the analysis that has been made. The programming and adjustments to the designs that have been done before are also carried out in this stage.

4.1. Administrator Login Page



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Instructions for use:

- 1. Displays a page that contains a form so that managers can enter the main page and operate the system.
- 2. Click the desired menu to open the page.

4.2. Main Admin Page

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	Fig	ure 4. Main Admin Page	
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Instructions for use:

- 1. Enter the website address.
- 2. Click the desired menu to open the page.

4.3. Member Login Menu



Instructions of or use:

1. Enter the website address.

2. Click the desired menu to open the page.

4.4. Registration Page



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Instructions for use:

- 1. Displays a page that contains a form for registration to log into the system.
- 2. Click main registration menu to open registration or the link "register" under login menu.

4.5. Member Home Page



Instructions for use:

- 1. Displays a page that contains bills that must be paid by the boarding house members after logging in.
- 2. Click the billing info menu bar to open the page.

4.6. Payment Page



Instructions for use:

- 1. Displays a page that contains a form to confirm payment;
- 2. Click the 'pay' menu button.
- 3. Fill in the payment details.
- 4. Click the Submit button to confirm.

5. Conclusion

After analyzing and designing the system that is going to be built,, the system is then ready to be implemented. This stage is where the system is being placed so that it can be operated in accordance with the analysis that has been made. The programming and adjustments to the designs that have been done before are also carried out in this stage The application built has made it easier to confirm the payment of bills by boarding house members of Kosan 54. The application that was built will also facilitate the control process in managing computerized information and finance. From the conclusions above, there are some suggestions that are expected to help and overcome the shortcomings of this application. The suggestions is that the update of this application should develop new features that can make the application easier to use, namely: Adding new features such as a more complete payment system which includes an annual booking option and booking payments. Also payment for electricity, water, Wi-Fi, and the process of extending or choosing to stop renting the boarding rooms. This application is not yet able to display the data of which rooms that have not been ordered. It also does

not include the types of rooms. These shortcomings can be considered in the development process of the application to the next stage.

References

- [1] Pradana, M., & Novitasari, F. (2017). Gap analysis of Zalora online application: Indonesian users' perspectives. International Journal of Learning and Change, 9(4), 334-347.
- [2] Saraswati, T. G., & Basri, M. H. (2016). Simulation model for evaluating intensive care unit capacity. Актуальні проблеми економіки, (3), 414-420.
- [3] Saragih, R., Fakhri, M., Pradana, M., Gilang, A., & Vidjashesa, G. A. (2018). Ethical Leadership's Effect on Employee Discipline: Case of An Indonesian Telecommunication Company. In Proceedings of the International Conference on Industrial Engineering and Operations Management.
- [4] Silvianita, A., Tan, C.-L. (2017). A model linking the knowledge management (KM) enabler, KM capability and operational performance in indonesian automobile industry. Advanced Science Letters, 23(1), pp. 640-642
- [5] Pradana, M., Wahyuddin, S., Syarifuddin, S., & Putra, A. Gap Analysis of Indonesian State-Owned Bank Internet Banking Website.
- [6] Hidayat, R., & Hidayat, A. M. (2017). Contribution of Environment Online Store for Purchase Decision (A Case Study Online Store Hypermart—Bandung). Advanced Science Letters, 23(1), 292-294.
- [7] Hafifah, D. K., Witarsyah, D., Saputra, M., Azizah, A. H., & Saputri, M. E. (2019, September). The Evaluation of Finance Module Implementation of Enterprise Resource Planning (ERP) for Employee Performance. In 2019 2nd International Conference on Applied Information Technology and Innovation (ICAITI) (pp. 140-145). IEEE.
- [8] Pradana, M., & Wijaksana, T. I. (2017). Managing work productivity through management of information system (Study on Telkom Indonesia Online Portal). Advanced Science Letters, 23(1), 64-66.
- [9] Priharti, W., Sumaryo, S., Saraswati, T., & Nurfadilah, M. R. (2020). IoT Based Logistics Vehicle Security Monitoring System. MS&E, 771(1), 012012.

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Reviewer 1,

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