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WEB-BASED MANAGEMENT INFORMATION SYSTEM WITH CODEIGNITER FRAMEWORK

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ABSTRACT

The need for shelter becomes very needed at this time, especially people from outside the city who want to work or continue their education to other cities. So that the need for boarding houses to increase and demand by many people. The system that is running on the full boarding house is still done manually where, there is no system that can help in managing his boarding house, where people who want boarding must come directly to see the facilities they have, room status and costs. And there is no system that can help the owner in managing boarding house payments. The development of this system uses the waterfall method. Web-based full boarding management information system can manage boarding payment data and tenant data management.

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1. INTRODUCTION

The rapid development of information technology has become the main support for obtaining information in an easy and fast way. Technological advances are certainly also in contact with computers. The need for a place to live is very much needed today, especially for people from outside the city who want to work or continue their education to other cities. So that the need for boarding houses is increasing and is in demand by many people. The system that is running at full moon boarding houses is still done manually where, there is no system that can assist in managing the boarding management, where the community/tenants who want to boarding must come directly to see whether the boarding room is still available or not, as well as the facilities it has, the status of the boarding house. room and cost. At full moon boarding houses, tenants can make boarding payments by transfer to the bank or directly to the boarding house owner.

Payment data will be recorded in the full moon boarding fee payment book. This is of course still not effective and efficient, because the use of books will be very wasteful, another thing that can happen is an error in recording payment data and searching for payment data that has made a payment or has not made a payment. As well as being able to manage tenant data, payment data, payment history and full moon boarding reports on a web-based basis. The development of this system uses the waterfall method, because the system development process is carried out sequentially, so that the next stage will not be carried out until the previous stage is completed so that it is more well structured and minimizes errors and bugs in the

system. structured waterfall modeling which starts from requirements analysis, system design, program code writing and program testing (Sukamto & Shalahuddin, 2014).

2. RESEARCH METHODE

2.1 Waterfall

System development or software research aims to describe the steps of the main stages in the system development process. For the process of developing this system. The system development method used is the waterfall. The author uses the waterfall method because the system development process is carried out sequentially starting from analysis, design, coding, testing, and maintenance in accordance with the development of the information system to be built (Rosa dan Shalahuddin, 2018).

1. In the first stage the author conducts an analysis for system requirements, the analysis stage is carried out by collecting data for system requirements, so that the system is easily understood and according to what is needed by the user. The data needed is data on the number of boarding houses, boarding facilities, boarding fees, boarding user data.
2. The next stage is design, the author focuses on the design of making system programs including database structures, system designs, interface designs or system interfaces, and coding procedures, at the design stage the authors use Visio software to make system designs or design system interface designs.
3. After the design process is complete, the next stage is coding, at this stage the system design and system interface will be made into a program. The result of this stage is a WEB-based full moon boarding information system, according to the design that has been made at the design stage, the program is made using the PHP programming language and mysql database. In the coding process the author uses Sublime Text Software which is used as an editor in making program code.
4. The next stage is testing focused on the system in terms of logic and functionality and ensuring that all parts have been tested. This is done to minimize errors or bugs and ensure the output produced is as desired.
5. The last stage is maintenance, it is possible for a system to experience changes when it has been sent to the user. Changes can occur due to errors that appear and are not detected during testing or the system must adapt to a new environment. The maintenance phase can repeat the development process starting from specification analysis for changes to existing systems, but not for new systems.

In making web applications, system design is carried out using UML. UML methods used in designing this web application include Use Case Diagrams, Sequence Diagrams, Activity Diagrams and Class Diagrams (Sukamto & Shalahuddin, 2016).

1. Use Case Diagrams

Use Case Diagram illustrates the functionality provided by the system. in system design. Use case diagrams are used to explain all the functions that the system must have which contains features that can be used by admins and tenants. The following is a system use case design.

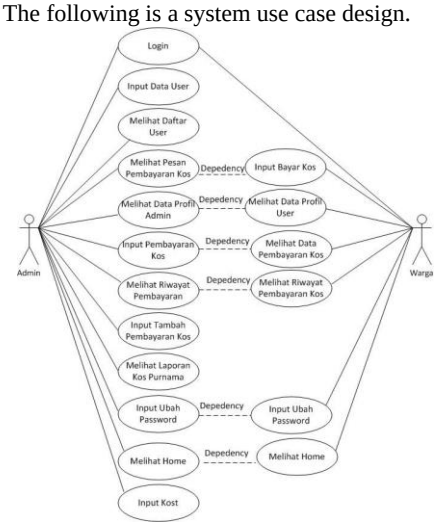

Figure 1 Use Case

3. RESULT AND ANALYSIS

Full moon boarding information system web-based using the PHP programming language and MySQL database. Based on its users, this full moon boarding management information system consists of two users, namely admin and user. The features that can be used in this system consist of the home page, login, profile menu, user list menu, tenant data menu, boarding payment menu, boarding payment added menu, boarding payment history menu, boarding payment message menu, boarding menu, view boarding house, full moon boarding report and change password.

1. Home Page Interface

The Home page is the initial display when system users access the WEB of the full moon boarding management information system, where on this page system users can view room data, descriptions and facilities available at full moon boarding houses.

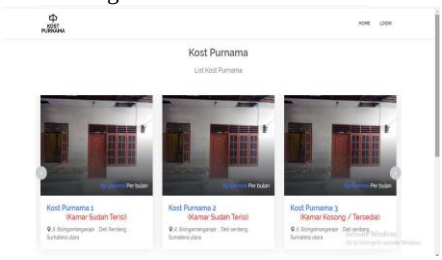

Figure 2 Home Page Interface

2. Login Page Interface

The login page is the initial display when the full moon boarding boarding information system is run, serves to connect users, namely admins and users/tenants with the system to the main page.

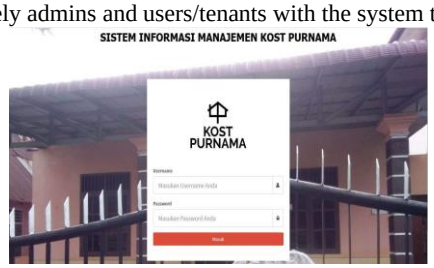

Figure 3 Login Page Interface

3. Profile Menu Interface

The following page is the initial view when the admin opens the profile page, where the admin can see personal data on the system.

Figure 4 Profile Menu Interface (Admin)

The following page is the initial view when the admin opens the profile page, where the admin can see personal data on the system.

Figure 5 Profile Menu Interface (User)

4. User List Menu Interface

The following page is the initial view when the admin opens the user list page, where the admin can manage the user list menu on the system.

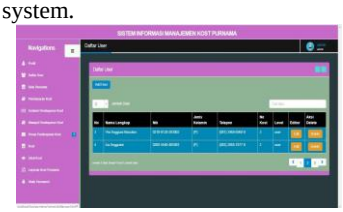

Figure 6 User List Menu Interface (Admin)

5. Tenant Data Menu Interface

The following page is the initial view when the admin opens the tenant data page, where the admin can manage tenant data on the system.

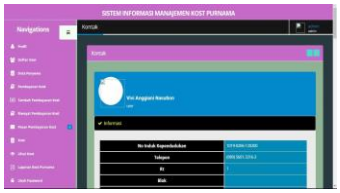

Figure 7 Tenant Data Menu Interface

6. Boarding Payment Menu Interface

The following page is the initial view when the admin opens the boarding payment menu page, on this menu the admin can manage boarding payment data on the system

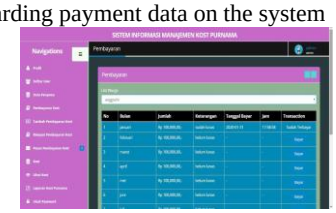

Figure 8 Boarding Payment Menu Interface

7. Menu Interface Add Boarding Payment

The following page is the initial view when the admin opens the menu for adding boarding payments, in this menu the admin can input or manage data on payment fees made by boarding tenants.

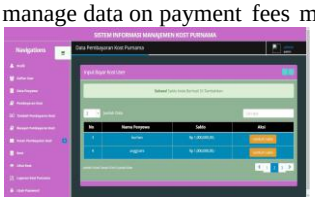

Figure 9 Menu Interface Add Boarding Payment (Admin)

8. Boarding Payment History Menu Interface

The following page is the initial view when the admin opens the boarding payment history menu, in this menu the admin can view the boarding payment history that has been made by the user/tenant by viewing it on the system.

Figure 10 Boarding Payment History Menu Interface (Admin)

The following page is the initial screen when the user/tenant opens the boarding payment history menu, in this menu the user/tenant can view the boarding payment history through the system.

Figure 11 Boarding Payment History Menu Interface (User/Tenant)

9. Boarding Payment Message Menu Interface

The following page is the initial view when the admin opens the boarding payment message menu, on this menu the admin can see payment messages that enter the system

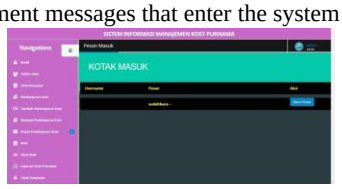

Figure 12 Boarding Payment Message Menu Interface (Administrator)

10. Boarding Pay Menu Interface

The following page is the initial view when the admin opens the boarding payment message menu, on this menu the admin can see payment messages that enter the system

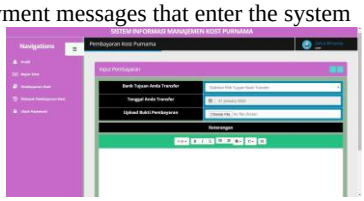

Figure 13 Boarding Pay (User) Menu Interface

11. Boarding Menu Interface

The following page is the initial view when the admin opens the boarding menu, in this menu the admin can input or manage boarding data on the system.

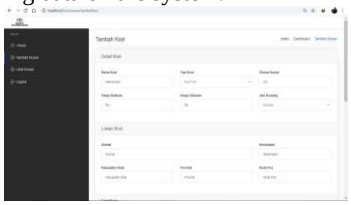

Figure 14 Boarding Menu Interface (Admin)

12. Menu Interface View Boarding House

The following page displays a boarding view menu, where in this menu the admin can view room data, boarding facilities on the system.

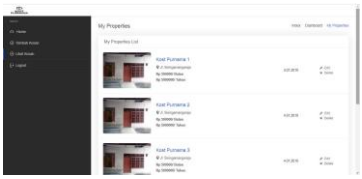

Figure 15 Menu Interface View Boarding (Admin)

13. Full Moon Boarding Report Menu Interface

On the following page is the initial view when the admin opens the full moon boarding report menu, where the admin can see a recap of the full moon boarding payment report on the system.

Figure 16 Full Purnama Boarding Report Menu Interface (Admin)

14. Change Password Menu Interface

On the following page is the initial screen when the admin opens the change password menu, where the admin can change the password on the system.

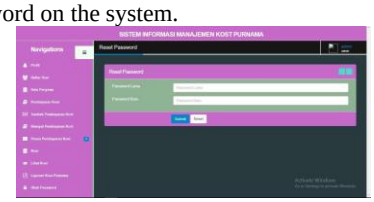

Figure 17 Change Password (Admin) Menu Interface

On the following page is the initial screen when the user/tenant opens the change password menu, where the user/tenant can change the password on the system.

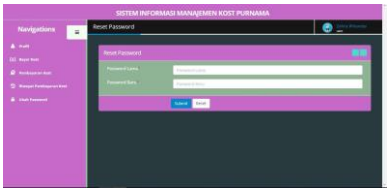

Figure 18 Change Password (User) Menu Interface

4. CONCLUSION

Based on the research conducted by the author, through the analysis carried out in the previous chapters, it can be concluded several things as follows:

1. The full moon boarding management information system has been successfully developed, to assist the boarding house in web-based boarding management management.
2. This boarding management information system can display tenant data, payment data, payment history and cost payment reports in real time.
3. The boarding management information system can help users or boarding house seekers in seeing the full moon boarding house rental price on the system.

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