Design of Housing Marketing Information System *KPR Putra Residence* Web-Based

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Abstract

The progress and development of information technology in this globalization era is growing rapidly, one of which is the internet. Internet can facilitate the public in getting information in various ways, one of which is information about housing promotion. Home is a primary need which must be fulfilled by every human being, family and even an organization. The purpose of this study is to design a website-based mortgage promotion information system (case study: PT. Mulia Indah Permatasari). The development model of this system is waterfall model. As for the workings of the system created, the components that support the making of this system is this system uses the XAMPP software as a local server, MySQL as the database and the programming language used is PHP.

Keywords: KPR Promotion, Information System, PHP, Waterfall

1. Introduction

In everyday life humans have basic needs or known as primary needs, as well as secondary and tertiary needs. Primary needs themselves are needs the most basic and must be fulfilled. Home as a basic need, is needed by everyone today. Each person does a search and selection every time to find a residence that suits their needs. Therefore, the formation of housing business opportunities established by PT. Mulia Indah Permatasari which is very strategically located on Jl. Malibela Km. 11.5 in the middle of Sorong City will catch many eyes if it use kinds of strategic opportunities to find customers. PT. Mulia Indah Permatasari is a service agency that is oriented towards business management activities that are professionally and modernly packaged. PT. Mulia Indah Permatasari provides around 200 housing units built on a land area of 10 x 8M2 consisting of types 35, 45 and 50.

There are many activities hold by PT. Mulia Indah Permatasari to introduce its product for instances started marketing in crowded places by distributing brochures, and guarding the stands. This method of marketing is not very effective and may not necessarily capture a lot of public interest. There are still some problems that arise with this marketing method, such as distributed brochures that have been lost, people who are outside the city are not aware of any housing promotions like this.

The progress and development of information technology in the era of globalization is growing rapidly, one of which is the internet. The internet is a social media that continues to grow and will always provide the latest information (up to date). With the existence of this internet can facilitate the public in obtaining information in various ways, one of which is information about housing marketing. Speed and accuracy acquisition of information is very important for searchers information.

This research offered an information system that is expected to be able to help to facilitate companies and consumers to obtain information about housing for sale and facilitate booking of homes. The tool for fulfilling all these needs is website. This website will offer all information that the consumers need. For instance in housing selection there
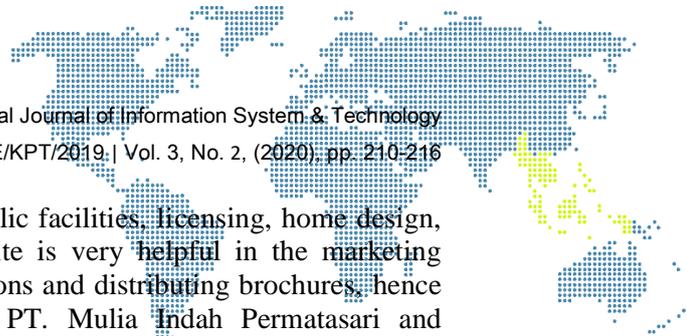
are several criteria used such as price, location, public facilities, licensing, home design, and developer credibility [1]. Promotion by website is very helpful in the marketing process which was previously only through exhibitions and distributing brochures, hence consumers can simply access the web page of PT. Mulia Indah Permatasari and consumers can see details of the houses offered, both land area, floor plan, house shape and price. Based on the problems, this study is entitled "Design of Housing Marketing Information System *KPR Putra Residence* Web-Based".

2. Research Methodology

2.1. Information System

System is a network of interrelated procedures, gathered together to carry out an activity or to complete a certain target [2]. The system consists of input and output which in its operation consists of hardware (hardware) and software (software).

a) Hardware

Hardware is the components that make up a computer system, so that it allows the computer to do its work.

b) Software

Software is a component in a computer system in the form of a program to regulate the relationship between hardware and brainware and oversee all activities in the CPU.

Information is data that has been organized so that it gives meaning and value to the recipient [3]. Thus, information system is a data collection organized along with the procedures for its use covers more than just presentation [4].

2.2. PHP

PHP (or The official PHP: Hypertext Preprocessor) is an artificial script server-side added to HTML [5].

2.3. MySQL

MySQL (My Structure Query Language) is a database management system software SQL Database Management System or DBMS from many DBMS such as Oracle, MS SQL, Postagre SQL and others". [6]. MySQL data types are data contained in a table in the form of fields that contain the value of the data. Value of the data in fields have their own type [7].

2.4. Website

The web is very popular in the internet, because of the ease it is given to internet users to search, browse, and search for information or know as surfing the internet [8]. The web is one application that contains multimedia documents (text, images, sound, animation, video) in it using the HTTP (hypertext transfer protocol) [9]. The internet is a computer network. Like a highway, the internet can be traversed by various means of transportation, such as buses, cars and motorcycles that have their respective uses [10].

2.5. System Development Model

In this study the waterfall method is used because researchers want to use a systematic and sequential approach to the development of this software. The waterfall model is a classic model systematic, sequential in building software. The waterfall method is a software development method in general conducted by system researchers, through several stages of research, namely:
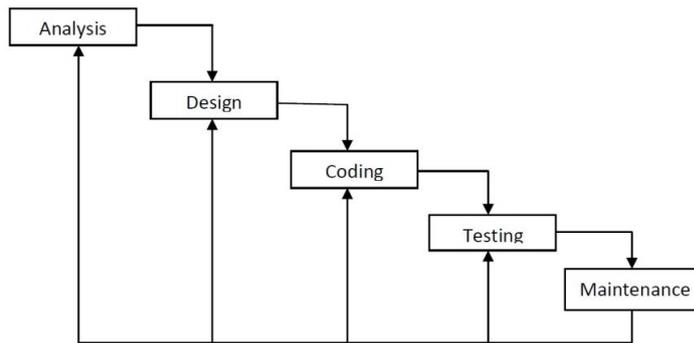
Figure 1. The Waterfall Method (Saputra and Agustin, 2012)[12]

2.6. Data Collection Methods
2.6.1. Observation
   The authors make direct observations directly to the office of KPR Putera Residence, to see in the first hand the work process and data collection that is running.

2.6.2. Interview
   The author used this method is to find out the existing complex problems that are running until now.

2.6.3. Literature Study
   The method is by collecting various sources of references in the form of books, journals and other sources as a reference in this housing sales system.

2.7. Design Methods
   At this stage, the design process will be carried out using a structured design method through the stages of making UML, creating a database and making a program that is tailored based on administrative needs. The programming language used is MySQL, while the supporting software used is Adobe Dreamweaver CS6.

3. Result and Discussion
3.1. System Planning
   The design of the system process made consists of several stages, as follows:
a) Flowchart
   Flowchart is a chart that explains the stages in inputting material data to promote the house. This is the flowchart from inputting admin user:
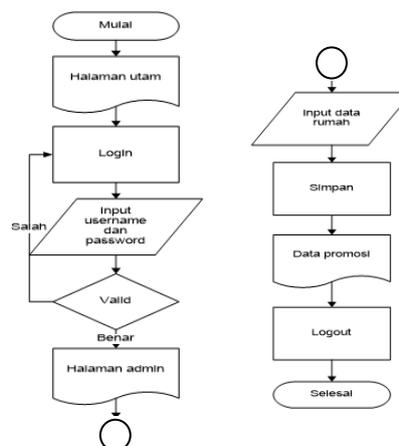
Figure 2. Admin Flowchart
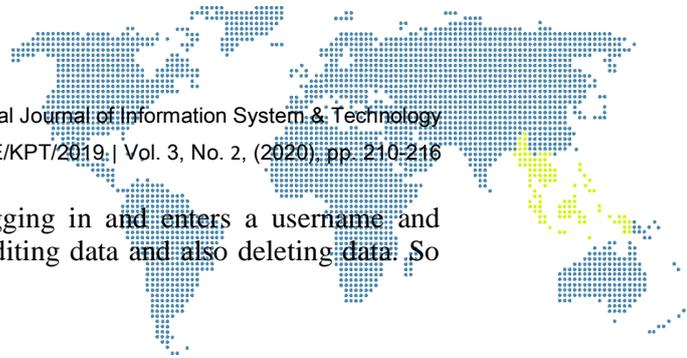
The user enters the main page, the user starts logging in and enters a username and password, after that the user starts inputting data, editing data and also deleting data. So users can store data in the database.

b) Unified Modelling Language (UML)

UML is a visual modeling method for object-oriented system design tools, now it has become a standard language in writing research. These are the UML of this system:

1) Use case diagram
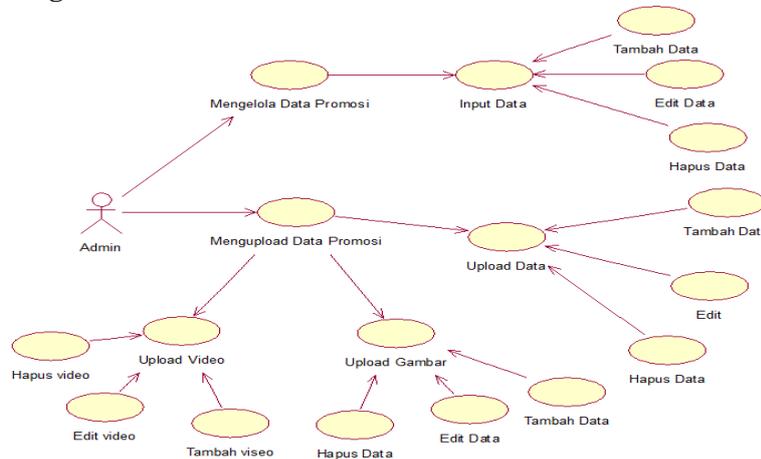
Figure 3. Use-Case Admin Diagram

In this use case picture shown the admin role. Admin can process the system, namely managing marketing data, uploading promotional data. Admin manages data to upload data, add data, edit data and delete data.

2) Statechart Diagram
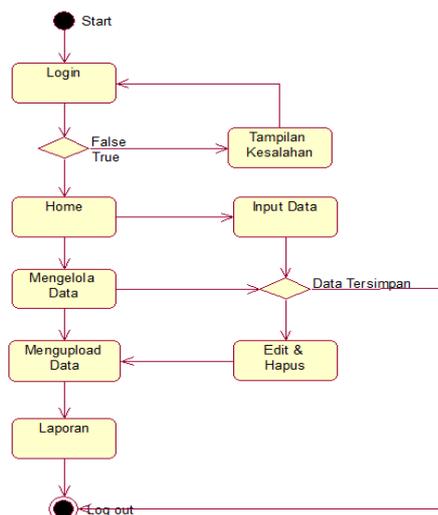
Figure 4. State-Chart Admin Diagram

In the diagram above the admin state-chart diagram to login, after logging in if the username and password entered is valid then the system displays the home page. But if something goes wrong the system will refuse to enter the home page and will ask to re-enter the correct username and password. After logging in, the admin can input data that will be stored in the database and can see the report. When an error occurs the admin can edit or delete and save it. Then the admin can log out of the system.
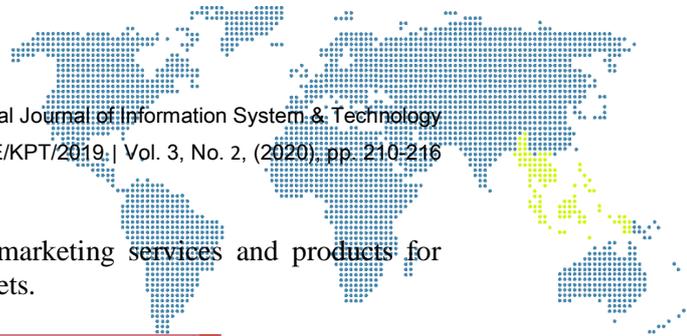
3.2. Implementation

Designing websites as promotional media and marketing services and products for housing marketing in order to expand marketing targets.
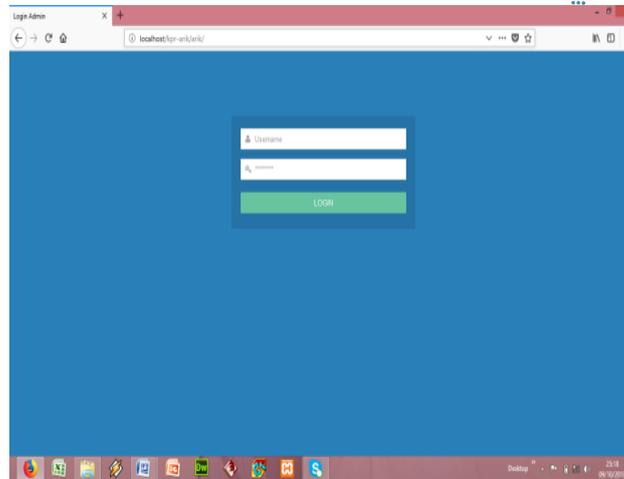
Figure 5. Admin Login Page
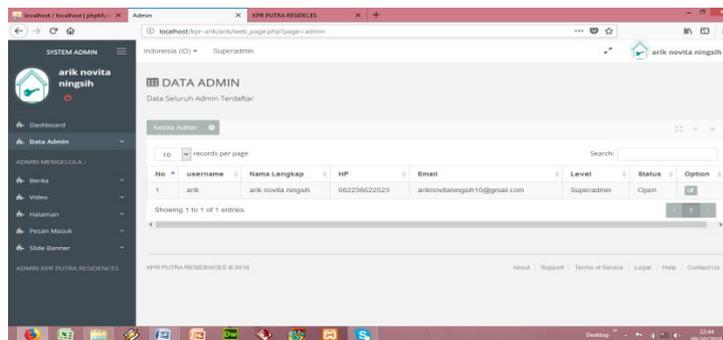
Figure 6. Admin Control Page
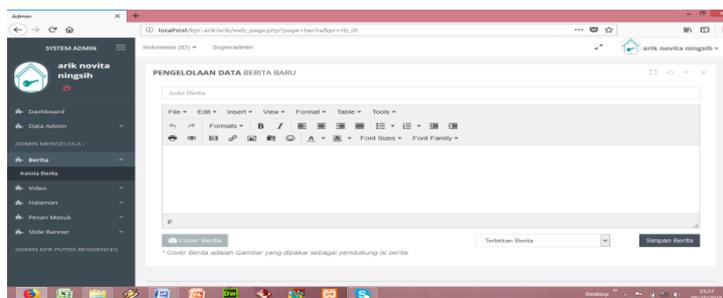
Figure 7. Manage News Page
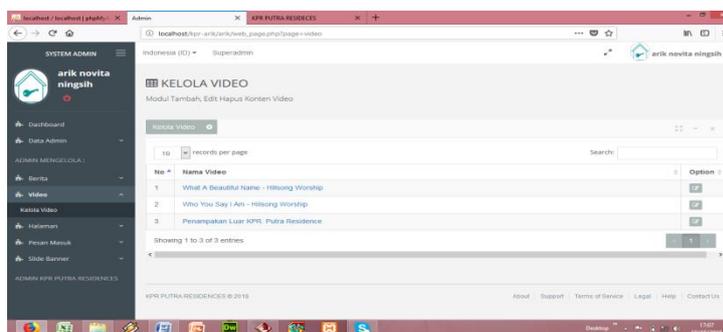
Figure 8. Manage Video Page

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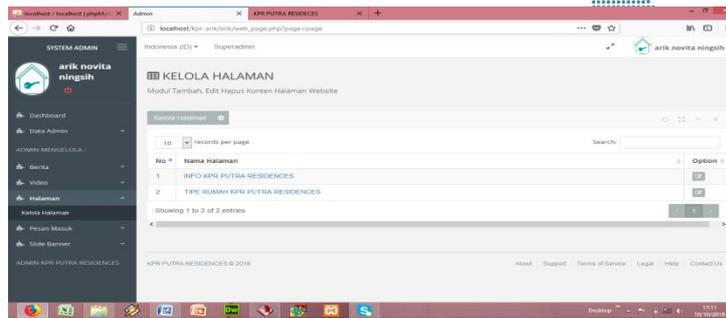
Figure 9. Manage Pages
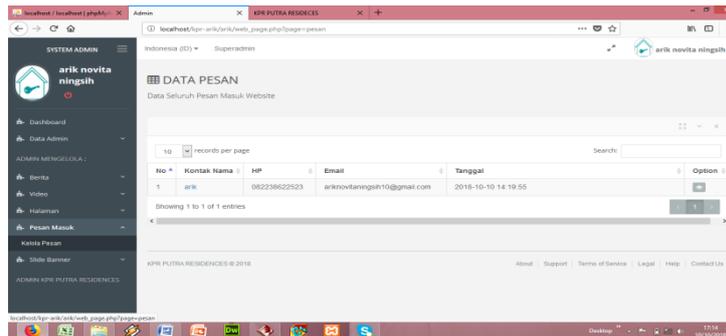
Figure 10. Manage Messages
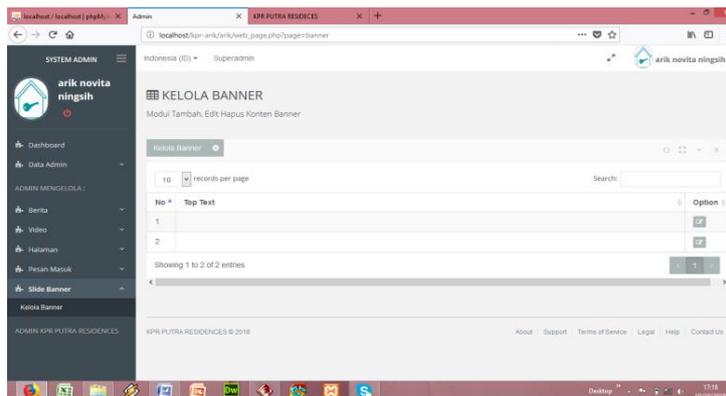
Figure 11. Manage Slide Banner

4. Conclusion

The conclusions obtained after the implementation of the system, is that the system created can be used as a tool for the PT. Mulia Indah Permatasari to promote KPR Putra Residence. This system will be able to simplify the process of inputting promotions. The availability of this system will increase the ease of obtaining good and cheap housing for the community and increase company profits. For future development, this system must be developed to be able to handle home payments online, so that accessibility is higher and guaranteed.

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