

Web-Based home marketing information system at CV Abah Ipin using Php and Mysql

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ABSTRACT

CV Abah Ipin is a company engaged in the construction and marketing of houses in tegal district. In marketing activities, CV Abah Ipin still uses conventional methods, namely printing and distributing brochures. Conventional marketing techniques are inefficient because they are unable to reach a large enough number of potential customers. In addition, conventional marketing techniques are inefficient because they require a lot of money to produce promotional materials such as brochures. In order to build a web-based home marketing information system for CV Abah Ipin, the author examines these problems as a solution to the problems of traditional marketing that are deemed inefficient and unsuccessful. The technique employed in this design is Waterfall with UML tools, also using MYSQL functions as a database and the PHP programming language helps develop websites. The design of this house marketing information system will produce a web that is expected to be a way to increase the effectiveness and efficiency of CV Abah Ipin's property marketing.

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1. INTRODUCTION

The ongoing population growth and economic development, especially in the district. This deep tegal increases the demand for houses used as residences which are very important for the community. This gives rise to investors' desire to put their money into the housing and property sector by building different houses and different types of houses. Many businesses build various types of houses, of course taking into account market conditions or consumer desires (Nasution et al., 2021). Therefore, many companies build houses that definitely meet consumer desires from locations that consumers can access from any agency.

The need for houses is increasing because houses are used as residences, which is a very big need for society (Permana & Romadlon, 2019). However, in this modern era, there are various companies that have kept up with the times by purchasing or ordering houses online. The CV Abah Ipin company still does not use this technology.

A system is an internal information system of an organization that handles day-to-day event processing, facilitates operations, monitors strategic management and performance, and completes necessary reports to specific external stakeholders (Sherly Suci Bryan Putri, Yudha Dharma Naga Putra, 2023). Information system design is system analysis poured into a complete system with the aim of creating a better system, information system design is the complement (Nofri Yudi Arifin et al., 2022).

Based on the problems found, the author created a website design that can help provide information and facilitate the home marketing process with the title Web-Based Home Marketing Information System on CV Abah Ipin Using PHP and MySQL.

2. RESEARCH METHOD

Data Collection Method

Data collection methods are techniques or methods that can be used by researchers to collect data. The data collection method is a method that is independent of data analysis methods or even becomes the main tool for data analysis methods and techniques (Lailatul Mufidah, 2021).

The author uses literature reviews, interviews, and observations as data collection techniques. At the observation stage the author collected data both directly and indirectly on activities related to marketing information and house sales at CV Abah Ipin. Next, the author conducted interviews to collect the necessary data and information, such as asking direct questions to related people, especially those related to the research object. The author researches and collects data from books and journals and other sources related to current issues in order to collect supporting material.

Design Design Method

The design of a tool or product begins when there is a statement of the need for a particular function and benefit, without a need there will be no design (Wahyujati et al., 2022). The design approach chosen by the author in designing a home marketing information system at CV Abah Ipin is the Waterfall method using UML (Unified Modeling Language) tools. MYSQL functions as a database and the PHP programming language helps develop websites (Rahimi Fitri, 2020). The result of this method is a website that will be useful for marketing at CV Abah Ipin.

3. RESULTS AND DISCUSSIONS

Based on the problems found, data collection methods, and design models for designing a web-based home marketing information system website at CV Abah Ipin, the design stages are carried out as follows:

Software Requirements Analysis

Software Requirements Analysis is the initial step (stage) of the software development life cycle, this stage will produce specifications / needs / conditions that the software to be developed will have by considering all the needs of all stakeholders (Christian, 2020). The information system for marketing the author's house consists of two users, namely admin and customer. The home marketing information system at CV Abah Ipin has the following system requirements: a) Consumer Page: Register, log in and log out of your account, can view the product catalog, can calculate credit simulations, can place an order, can make payments, view order history, edit account. b) Admin Page: Login dan logout, can see the number of houses and consumer accounts, can view, add, change and delete house data, can view, add, change and delete product types, can view data, payment details, and delete order data, can view and download reports, can delete consumer accounts

Use Case Diagram

A use case is an explanation of system functionality from the perspective of a system user (Setiyani, 2021). Use cases define the data that will be processed by system components, utilizing scenarios - descriptions of steps or sequences that explain what the user does with the system and vice versa - the use case is implemented (RizalSteven, 2021). Use case identification of the system, user interaction with the system and connection between users and system functionality (Rahmadi Islam, 2020).

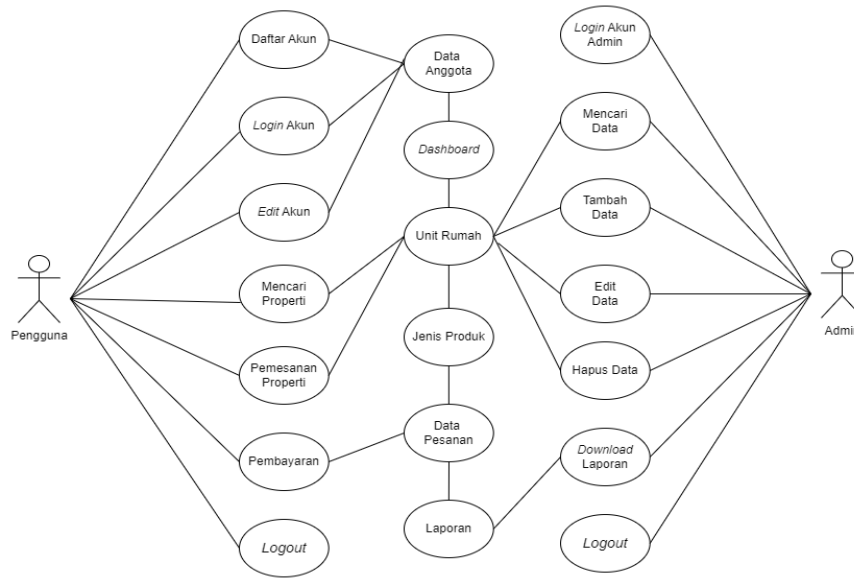


Figure 1. Use case design

Class Diagram

A class diagram is a class diagram, namely a parameter which, if implemented, will produce an object (Arianti et al., 2022). Class diagrams have 3 relations in their use, namely: Association, Generalization, Constraint (Herdiansah et al., 2020).

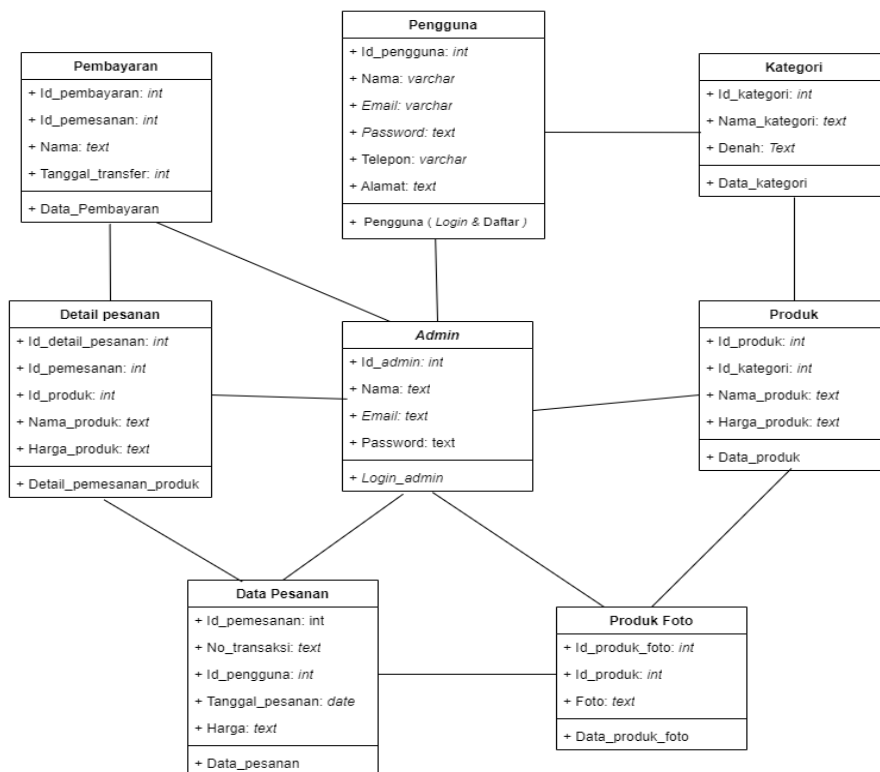


Figure 2. Class diagram design

Activity Diagram

Activity diagrams are used to show the main activities and interactions between activities in a process (Laoli & Kristiana, 2022). The following activity diagram provides an explanation of the system architecture and marketing information system program (Hadinata, 2020).

Registration Activity Diagram

Before ordering a house, customers need to create an account first to proceed to the next process.

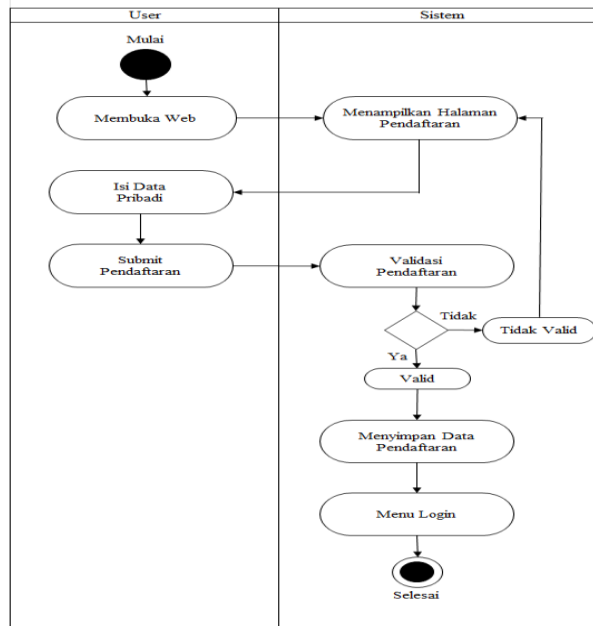


Figure 3. Registration activity diagram

Login Activity Diagram

If the consumer already has an account, just log in directly, but if not, you can register an account first.

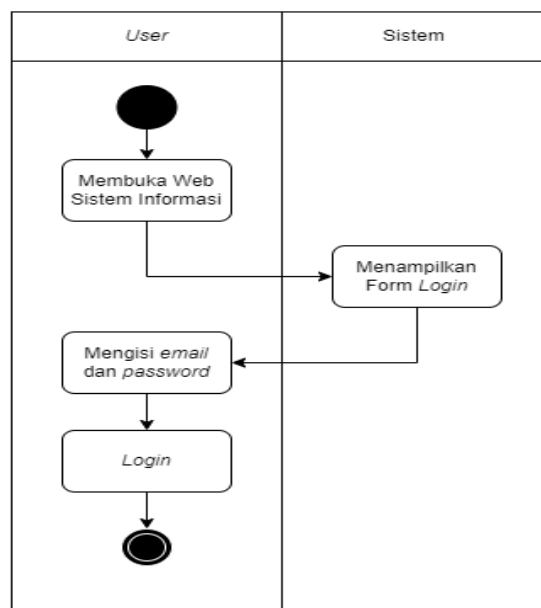


Figure 4. Login activity diagram

Order Activity Diagram

In the ordering activity diagram, there will be steps that are a little more complicated because ordering requires personal data from the consumer himself.

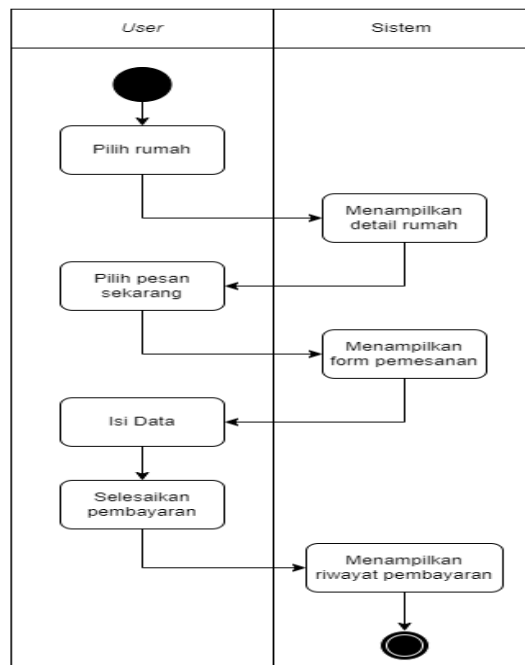


Figure 5. Activity diagram order

Activity Diagram Download Admin Report

In the admin report activity diagram, the admin has management regarding order data from the home marketing information system which is already running starting from successful and failed order data reports in the sales process.

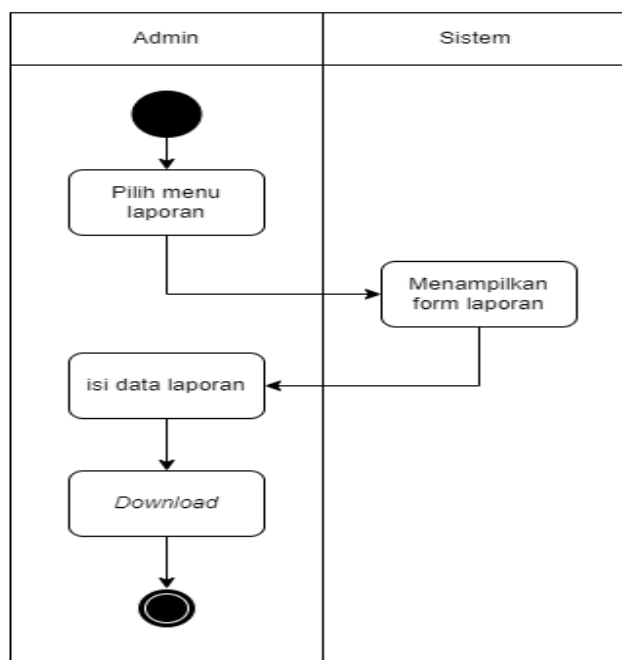


Figure 6. Activity diagram download admin report

The Final Result

The User Interface (UI) exists in the system and users can interact with each other through commands such as using content and entering data (Hartawan, 2022).

a. Dashboard User Interface (consumer)

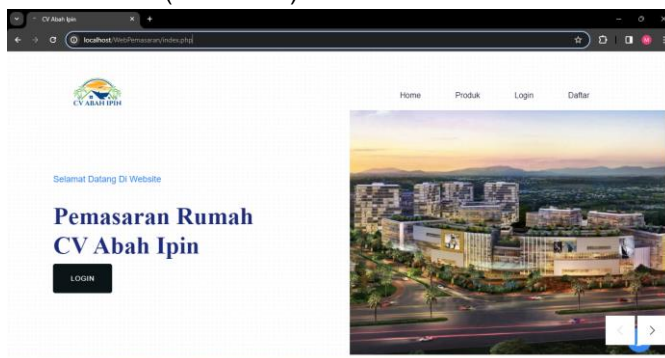


Figure 7. Dashboard user interface

b. Product Catalog User Interface (consumer)

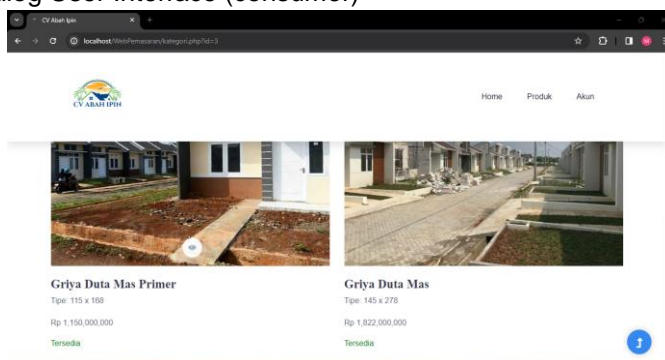


Figure 8. Product catalog user interface

c. Ordering User Interface (consumer)



Figure 9. Ordering user interface

d. Payment User Interface (consumer)

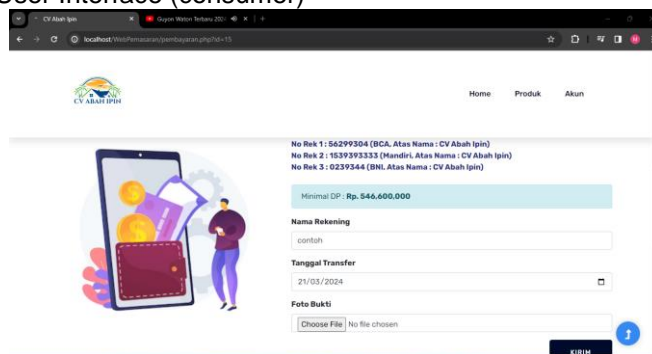


Figure 10. Payment user interface

e. Main Dashboard User Interface (admin)

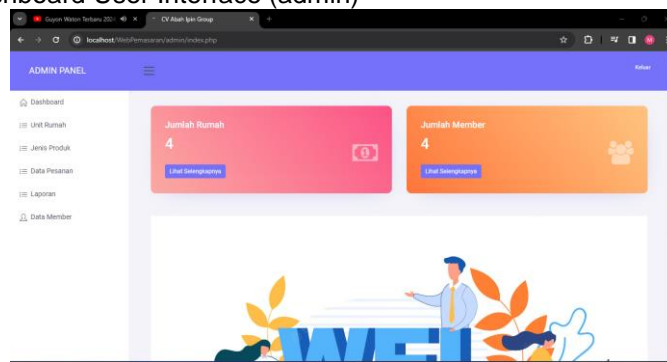


Figure 11. Main dashboard user interface

f. Home Product Data User Interface (admin)

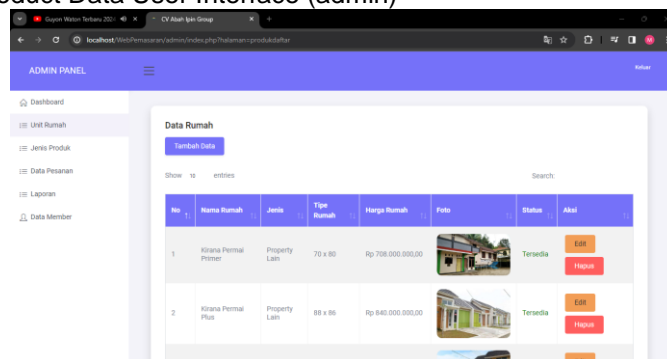


Figure 12. Home product data user interface

g. Product Type User Interface (admin)

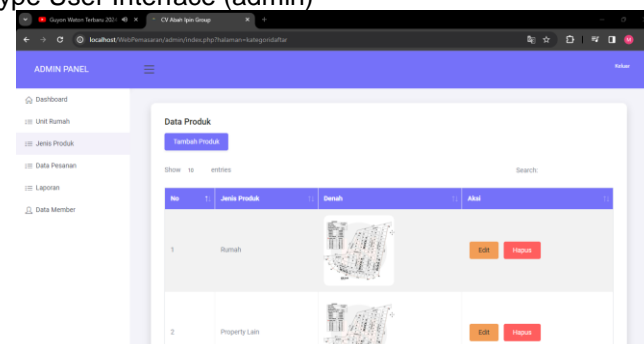


Figure 13. Product type user interface

h. User Interface for Order Data (admin)

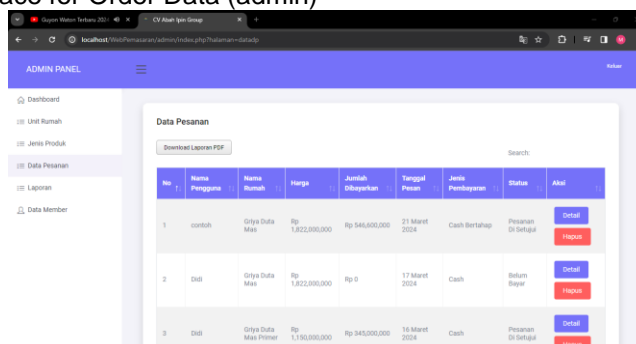


Figure 14. User Interface for order data

i. Report User Interface (admin)

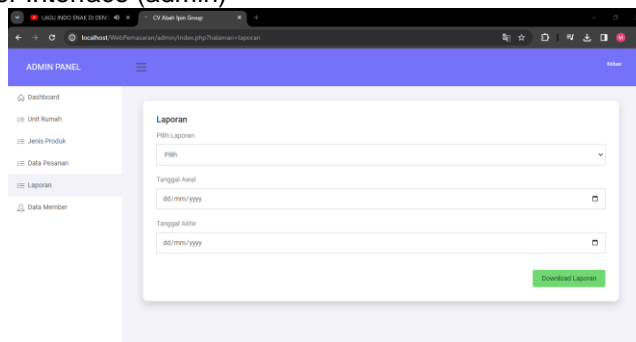


Figure 15. Report user interface

j. Member Data User Interface (admin)

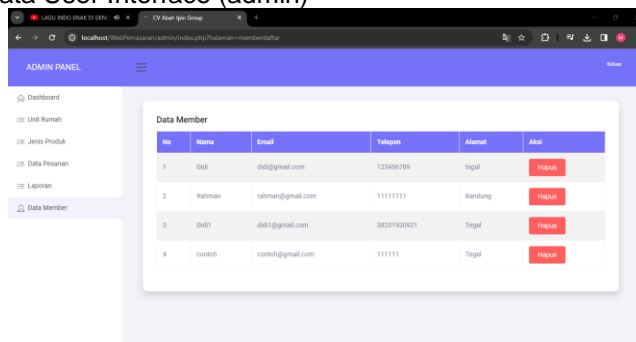


Figure 16. Member data user interface

4. CONCLUSION

This research has produced a web information system web-based home marketing according to demand and needs user. Researchers draw several conclusions related to this research includes: Conventional marketing models that do not utilize technology information, requires quite large operational costs with results less effective marketing. Therefore companies must invest funds in the IT sector so that the marketing process is more effective and efficient. With the existence of an online home marketing information system at CV Abah Ipin, then the Company can be known more widely and can increase customers. With the existence of a home marketing information system at CV Abah Ipin, Companies can carry out more effective sales management.

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