

# DESIGN AND SYSEM OF A BOARDING HOUSE MAPPING LOCATION

Chandra John Edy Sihombing<sup>1</sup>, Sandi Darmo Winoto<sup>2</sup>  
Faculty of Computing  
President University  
Bekasi Indonesia  
chandrajohnedy@student.president.ac.id

**ABSTRACT**— Lack of facilities to obtain information about boarding houses is one of the problems often faced by immigrants. The majority who occupy the boarding house are students or workers who come from outside the area, so to determine the ideal boarding house, considerations about apart from facilities and price, the distance from the boarding house to the location is also one of the considerations for choosing a boarding house. Therefore, a web-based Info Boarding application was made using the google maps API. The process of making this web using the PHP programming language, using XAMPP (PHPMyAdmin) for database creation, using the google maps API to display google maps on the website as a base map. information about boarding features, booking features, and filter features to predetermined locations. With this website-based application, it is hoped that it will make it easier for people to find boarding houses according to user needs.

**Keywords-** Design System, Web-Based, Boarding House, Mapping Location

## I. INTRODUCTION

The sophistication of technology that is developing rapidly at this time increasingly encourages humans to continue to carry out various kinds of experiments and research for the development and discovery of new ways to provide more benefits to facilitate humans in carrying out their activities. In the city of Jakarta and in big cities, especially for students or employees, it is very difficult to get information on the availability of boarding houses and rents at low prices and not far from campus or work. One of the problems often faced by immigrants is finding a temporary place to live or known as a boarding house. Therefore, an information system for mapping the distribution of boarding houses based on a web using the google maps API was created. Based on this analysis, the authors are very interested in choosing a title for this thesis research,

namely "DESIGN AND SYSTEM OF A BOARDING HOUSE MAPPING LOCATION".

## II. LITERATURE REVIEW

This section will explain the theories that form the basis for writing and designing the *Kostku* system.

### 2.1 Understanding Information Systems

According to Mahatmyo, an information system is a set of formal procedures by which information is collected, processed and communicated to users. Meanwhile, according to Pratama, the information system explains that the Info process is a combination of four main parts. The four main sections include software, hardware, infrastructure and trained human resources (HR). Based on the above understanding, the authors conclude that the concept of an information system is a system that provides management information when making decisions about running a business, where the system is a combination of humans, information technology and organized procedures.

### 2.2 Google Maps API

Google Maps API is a service provided by Google to users to use Google Maps in developing applications.

## III. SYSTEM ANALYSIS AND DESIGN

In this section the authors focus on non-functional analysis describing system requirements that concentrate on the behavioral properties of the system, such as software, hardware, and user requirements.

### 3.1 Software Requirements Analysis

The required software requirements are as follows: Microsoft Windows 10 Operating System, Google Chrome, and XAMPP

### 3.2 Hardware Requirements Analysis

The minimum equipment needed to be able to run a computer or laptop system with detailed specifications as follows: Intel Core i3-3320, 4GB RAM Memory and 500 GB Hard Drive

The purpose of system design in general is to provide users with an overview of the new system. The system design stage is generally carried out after the system analysis stage has been completed and the results of the analysis

### 4.1 Database Design

The database design is a table that is used to create an information system for mapping the location of boarding houses and to store data.

### 4.2 System Interface Design

System interface design is a design that describes the input and output processes in my boarding application. The following is a system interface design for admin and user actors.

## IV. RESULT AND DISCUSSION

System implementation is an activity carried out after the analysis and design stages. Implementation describes the implementation tools, program configuration and interface development and coding.

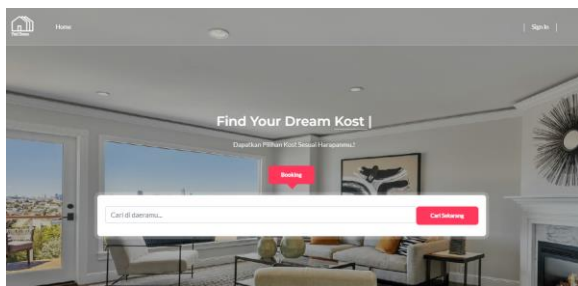


Figure 1. *KostKu* Application Main Page

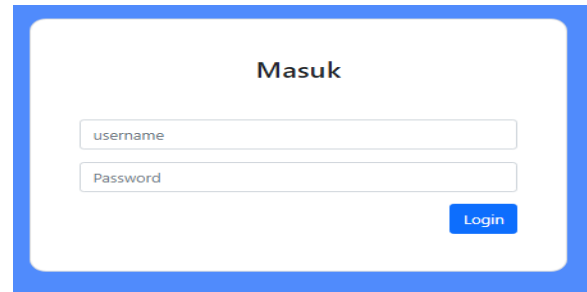


Figure 2. Admin Login Page

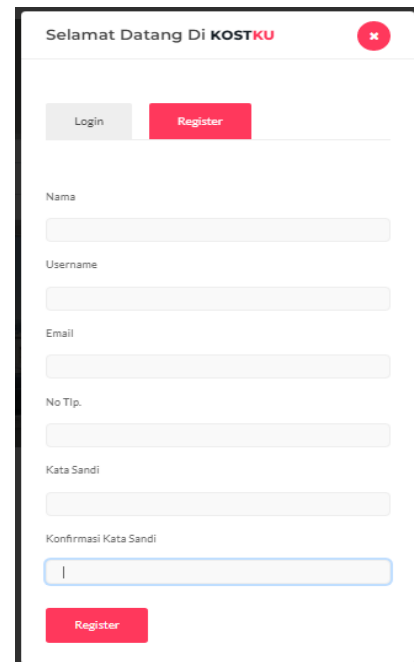


Figure 3. User Login & Register Page

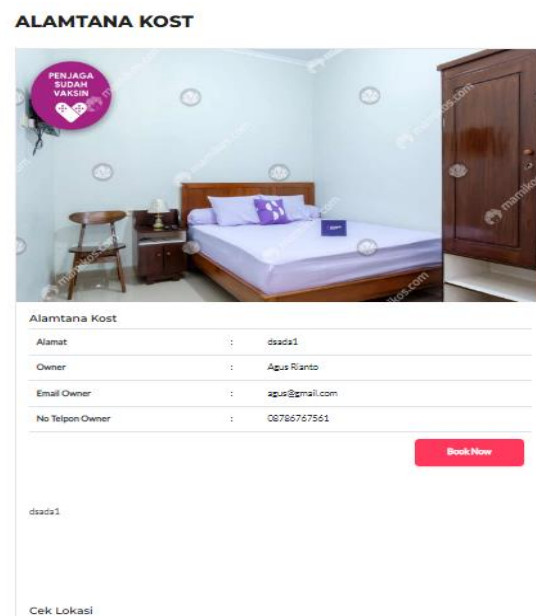


Figure 4. Costing Details

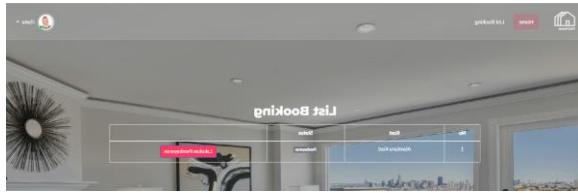


Figure 5. Booking List

System testing in building software is very important because to ensure whether the system is running well or not. The purpose of system testing on the design of the boarding location mapping information system is to find out whether there are errors in the system or not and ensure the system can run according to the wishes of the user.

The test is carried out based on the activities of the existing actors, namely cadres, admins and users. The tests are carried out according to the actors who enter the system. The test here is divided into two scenarios, namely Positive Test and Negative Test. The Positive Test is done by entering the correct data while the Negative Test is done by entering the wrong data. Tests are carried out using positive and negative tests.

## V. CONCLUSIONS AND SUGGESTIONS

### A. Conclusion

Based on the results of the needs analysis, system design and system implementation and system testing has been carried out, the following conclusions can be drawn:

1. To create an application that can make it easier for users to find boarding houses based on appropriate locations and facilities.
2. To implement the Laravel and Google Maps framework in the application by configuring the boarding house from the latitude and longitude values.

### B. Suggestions

The following are suggestions that are useful for further research, including:

1. It is hoped that further research can add actors who own the boarding house so that they can find out information on boarding boarding and monthly booking reports.
2. It is expected that the actor user / boarding application user in the form of android.

## REFERENCES

- [1] A. Mahatmyo, An Introduction to Accounting Information Systems, Deepublish, 2014.
- [2] I. P. A. E. Pratama, Information Systems and Its Implementation, BI Obses, 2014.
- [3] A. Sumaryadi, Go Online!: Starting to Build a Special Website, Azzahra Publishing, 2014.
- [4] T. Ganjar, Secrets of Building an Online Store Website Earning Millions of Rupiah., Iffahmedia, 2014.
- [5] F. Mahdia and F. Noviyanto, "Utilization of the Google Maps API for the development of a mobile web-based post-natural disaster logistics assistance management information system (case study: Yogyakarta City Regional Disaster Management Agency)," Ahmad Dahlan University, 2013.
- [6] A. A. a. K. Kardono, "Geographic Information System (Sig) Mapping Pipeline Networks and Customer Property Points at Pt Aetra Air Tangerang," J. Ilm. FIFO, 2017.
- [7] A. Nugroho, Software Engineering Using UML & Java, Andi Offset, 2015.
- [8] A.S, Rosa and Salahuddin, M., Structured and Object-Oriented Software Engineering, 2013.
- [9] A. B. D. Wisdom, How to Quickly Build a Website From Scratch, Andi Offset, 2015.
- [10] J. K. K. Shahida. Priyanto, Web Programming, informatics, 2015.
- [11] A. Rahmenda, "DEVELOPMENT OF A WEBGIS-BASED APPLICATION OF COSTING LOCATIONS USING GOOGLE MAP API (Case Study: Diponegoro University Campus Area)," Journal of Geodesy Undip, 6., 2107.
- [12] A. A. a. K. Kardono, "Geographic Information System (Sig) Mapping Pipeline Networks and Customer Property Points at Pt Aetra Air Tangerang," J. Ilm. FIFO, 2017.