

HOTEL RESERVATION SYSTEM USING WEBSITE BASED RAPID APPLICATION DEVELOPMENT (RAD) METHOD

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Abstract

In the era of all-digital as it is today the importance and need a website to make it easier to make hotel reservations online without having to come directly. Hotel is a company that erects a building intended to provide lodging services. The Hotel has a high occupancy rate is on the edge of the highway. There are problems that need to be discussed, namely the difficulty of hotel customers to make room reservations, the difficulty of customers knowing the type and price of rooms. Customer data archiving is still manual book. The design of Hotel Booking Information System with Rapid Application Development (RAD) method based on the Website here with a view to software development is done in a gradual manner. The black box testing method here is used to test the system. The purpose of this study is to make it easier for customers to search for rooms, and booking hotel rooms online directly without having to come first to the hotel and the purpose for the owner or hotel manager is to process customer data from the beginning of reservation, check in, ordering food or breakfast to check out and can facilitate process of making reports.

Keywords: Information Systems, reservations, Rapid Application Development, Website.

Introduction

Designing a Hotel Reservation Information System Using the Website-Based Rapid Application Development (RAD) Method is a way to help companies streamline their business processes in a more focused, more structured way in reporting results. To help hotel customers make hotel reservations in advance without having to come in person, a website-based system is really needed. There are several journal references such as: [1] With the title Designing a Website (Web) Based Hotel Room Reservation Information System Using Data Flow Diagrams (Dfd) from the title above, the conclusion is that it makes it easier for customers to find out hotel information and the room booking system at the Kartika Hotel. [2] With the title Designing a room reservation application at hotel xyz in Indramayu from the title above, the conclusion is that it can influence the quality of service on a consumer's decision in choosing lodging that suits their wishes. [3] With the title Web-Based Hospitality Information System (Case Study of Deli Indah Hotel) from the title above, the conclusion is that with this Web-Based Hotel Information System, it is hoped that customers can freely choose the hotel facilities they want and the hotel reservation process is expected to be better.

good and fast so that it can increase hotel bookings.[4] The sales information system is to facilitate the performance of officers in increasing sales of bicycle products to consumers while making it easier for officers to manage product data and simplify the process of computerized recording of goods. [5] The system designed is a Front Office Information System for hotel room reservations specifically at the reception. This system can provide several advantages, namely being efficient and effective in processing customer information, rooms and transaction data. [6] System able to provide information and data quickly, accurately and precisely so that it can help the hotel in providing information and make decisions for guests. This system is very easy to apply because its appearance is user friendly. From several journals found, the author wants to design a Hotel Reservation Information System Using the Website-Based Rapid Application Development (RAD) Method to help hotel managers and customers and by integrating the RAD Method in developing a website-based hotel reservation information system here, companies can increase efficiency, reducing development costs, and ensuring that the resulting system meets customer needs quickly and effectively.

Research Methodology

Rapid Application Development Method

The Rapid Application Development (RAD) method is a software development approach that emphasizes rapid and iterative development, and actively involves end users in the design and development process. The RAD method is suitable for projects that require rapid development and where user requirements may change or not be completely defined from the start. This makes RAD very popular in business application development, where speed to market and the ability to adapt to changing business needs are key.

Hotel

A hotel is a building or complex that provides accommodation or lodging for tourists or guests for a short period of time. Hotels generally provide various facilities and services such as bedrooms, restaurants, room service, swimming pools, fitness centers, meeting rooms, and various other services for guest comfort and needs.

Results and Discussion

Research Design

Research design is the method used to analyze data to determine an element which will be the topic of research.

Use Case Diagram

Use case can describe the type of interaction between the system user and the system. A case diagram is a type of diagram used in the Unified Modeling Language (UML) to describe interactions between users (actors) and systems to achieve certain goals. These diagrams help in visualization of system functions from the user's perspective. Use case diagrams describe the system's key features and expected behavior without going into technical implementation details.

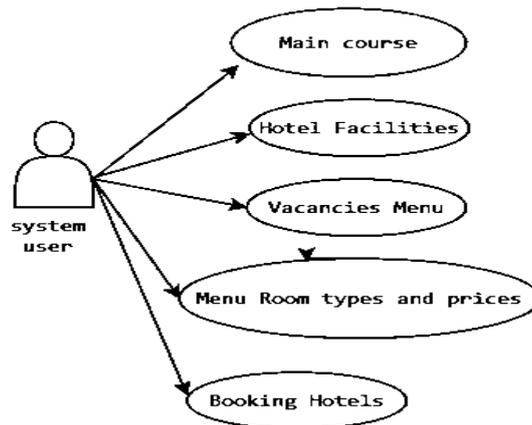


Figure 1. Usecase Diagram

System users can access the main menu, hotel search menu, hotel facilities menu, room type and room price menu, job vacancy menu, gallery menu and hotel room booking menu.

Application Results

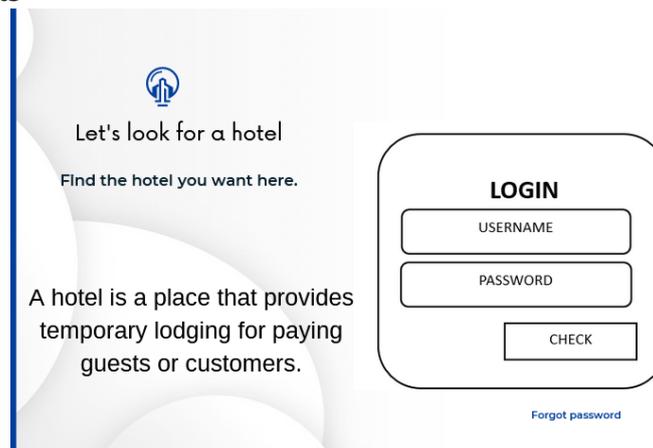


Figure 2 Initial Menu Display

From Figure 2 above, there is a display of the initial menu of the website-based application, where users who wish to use can register first. After registering, the user enters the application by filling in the username and password that was registered at the beginning. After logging in, the main menu of the website-based application will

appear, where a welcome message will appear to find the best hotel. There is a hotel search column where we enter the name of the hotel we want, there are the latest hotel promos and hotel recommendations.

Method Rapid Application Development

The Rapid Application Development Method or RAD for short is a software development process that emphasizes short development cycles, or a method that uses an object-oriented approach for system development which includes device and software development [7].



Figure 3 Method Rapid Application Development

The following are the stages of the RAD Method in this system, namely:

1. Planning
The initial stage of problem identification and data collection obtained from the involvement of users and programmers is very important in identifying needs for developing a system.
2. System Design
The stages of the design process are carried out repeatedly. If there are design discrepancies, they will be updated.
3. Development Process
At this stage, the programmer or system builder must continue to carry out development and integration activities with other parts
4. Implementation
Before the system is implemented, a testing process is carried out on the program to detect errors in the system being developed [7].

Conclusion

This research proves that designing a system for hotel reservations aims to design an information system that will facilitate the process of searching for hotels through to booking hotels. This shows a focus on developing software or applications that can help users to book hotel rooms efficiently. The use of the RAD method shows that the software development approach chosen is a method that focuses on fast and iterative development. This indicates that this project may prioritize fast development times and active involvement of stakeholders. Thus, the conclusion of this project is to build a hotel search to book information system that uses the (RAD) method and can be accessed via the website, with a focus on user comfort and efficiency in the hotel room booking process.

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