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Development of an Information Website as a Publication Medium for the Malikussaleh Airport Organizing Unit in Lhokseumawe

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ABSTRACT
Malikussaleh Airport currently uses social media such as Instagram to share information, which results in limited information accessibility for visitors regarding news, profiles, and airport activities. This study aimed to develop a website-based information system to facilitate employees in disseminating information and ease public access to updated airport news. The system was built using PHP programming language, MySQL database, and designed through Data Flow Diagrams (DFD). The implementation produced an informative and accessible platform that allows the airport management to provide transparent news, flight updates, and activity galleries. The results showed that the website effectively improved the information distribution process compared to previous social media-only methods.

Keywords*: Website; Information; Malikussaleh Airport; Php; Mysql*

ABSTRAK
Unit Penyelenggara Bandar Udara (UPBU) Malikussaleh saat ini masih bergantung pada platform media sosial seperti Instagram untuk membagikan informasi, sehingga penyampaian berita terbaru, profil, dan aktivitas bandara menjadi terbatas bagi pengunjung. Penelitian ini bertujuan untuk merancang sebuah website informasi sebagai media yang mudah diakses guna membantu pegawai dalam menyebarkan informasi kegiatan kepada masyarakat luas. Sistem ini dibangun dengan memanfaatkan bahasa pemrograman PHP, basis data MySQL, dan dirancang menggunakan *Data Flow Diagram* (DFD). Hasil pengembangan menunjukkan bahwa website ini mampu menyediakan informasi yang lebih komprehensif dan mudah dijangkau oleh publik. Implementasi sistem ini diharapkan dapat memperluas publikasi kegiatan operasional bandara secara efektif dan profesional.

Kata Kunci: Website; Informasi; Upbu Malikussaleh; Php; Mysql

Introduction

The rapid advancement of internet technology has established it as a primary resource for the public to find information through websites that can be accessed online at any time. However, at Malikussaleh Airport in Lhokseumawe, the availability of information regarding flight schedules and daily activities remains limited due to the absence of an official website platform. This leads to difficulties for visitors seeking current news and complete profiles of the airport. These issues underscore the need for a structured, web-based information system.

The website is designed not only to display digital data such as text and images but also to serve as a two-way communication tool between management and visitors. By utilizing PHP and MySQL,

this system aims to automate the publication of news and documentation of operational activities at UPBU Malikussaleh.

Methods

This research was conducted over a period of two months at the Malikussaleh Airport Organizing Unit in Muara Batu, North Aceh. The system development approach was carried out through the following stages:

1. Data Collection: Utilizing direct observation of daily operational activities, interviews with airport staff to identify system requirements, and literature studies related to dynamic web design.
2. Analysis and Design: Including the creation of Context Diagrams to define system boundaries and Data Flow Diagrams (DFD) to illustrate internal data flows.
3. Implementation: Employing the PHP programming language, MySQL database, and Bootstrap framework for a responsive interface, with XAMPP used as the local server during the development process.

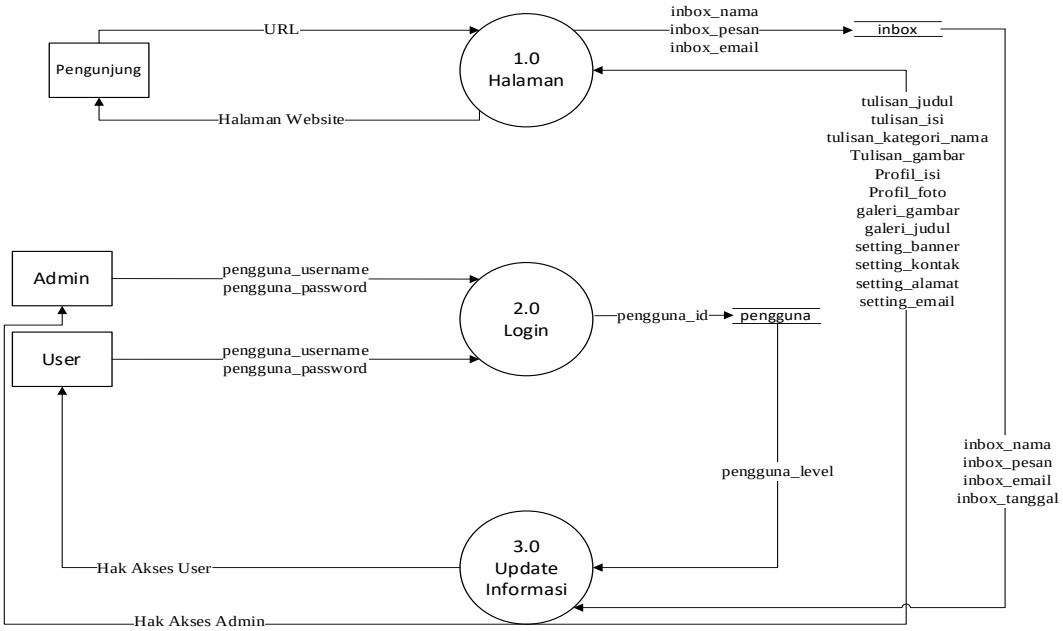
Results

The outcome of this research is a Content Management System (CMS) consisting of a public interface and an administrator interface. Visitors can access the homepage, historical profiles, activity photo galleries, and contact forms. The administrator interface allows employees to perform dynamic content updates via a secure login feature. The data structure of this system is supported by 10 main tables in the database.

Tabel 1.Summary of primary table structures in the information system

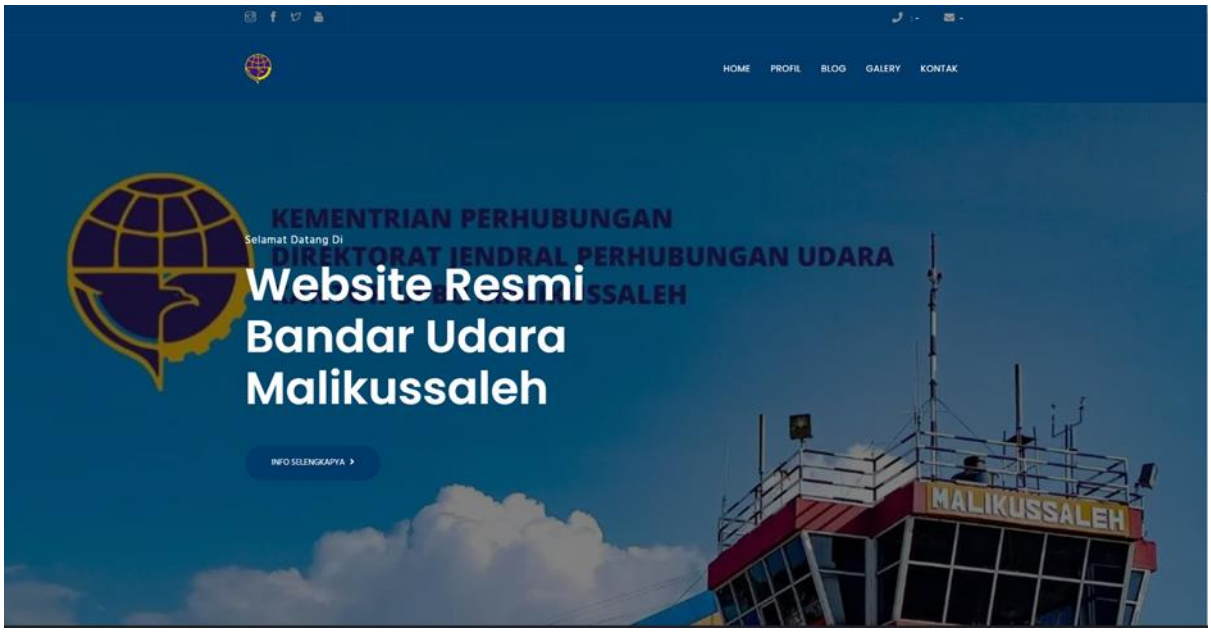
Table Name	Primary Function
Users	Stores login authentication data for admins and users
Posts	Contains news content and flight schedules
Gallery	Stores references for activity documentation photos
Inbox	Holds messages, criticisms, and suggestions from visitors
Profile	Stores historical information and airport identity

The system distinguishes access rights between an administrator, who has full control over all website settings, and a user, who has limited access focused on managing news and galleries. The system interface has been tailored to be informative and user-friendly for the general public.



Gambar 1. *DFD* Level 0

In the visitor page process, the visitor performs a URL search, and the website page is displayed to the visitor. Within this page process, messages can be sent to the information update system. The information update process provides various pieces of information to be uploaded into the page process. Admins and users can log in using their username and password to access the information update process according to their respective access rights.



Gambar 2. *Homepage Website*

Discussion

The developed information website provides a significant improvement in information distribution compared to relying solely on social media. The use of a website allows data to be stored permanently and organized systematically, so visitors do not need to scroll through long timelines to find profiles or historical data. Interpretations of the design results indicate efficient data integration, where every news item published by employees automatically updates the content on the homepage.

The messaging feature adds value to the transparency of public services, allowing management to receive direct input from the community. This proves that the website is effective in expanding the information reach of UPBU Malikussaleh. The advantage of using DFD in the design ensures that every data flow, from administrator inputs to URL searches by visitors, operates according to the planned system logic.

Conclusion

The development of the information website for UPBU Malikussaleh has been successfully completed and serves as an effective publication medium for airport operations. This system facilitates employees in managing news updates, schedules, and activity documentation more structurally. The website serves as a solution to previous information accessibility limitations and makes it easier for the public to obtain accurate data regarding the airport's profile and services. For future development, it is recommended that the system be hosted on a public server to reach a wider audience, and employees are expected to update content regularly in line with operational developments.

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