
WEB-BASED TOURISM INFORMATION SYSTEM IN BUNGUS TELUK KABUNG SUB-DISTRICT OFFICE

Rahul Vandra¹, Harry Setya Hadi²,

vandrarah@gmail.com¹, xmoensen@gmail.com²

^{1,2}Information Management, Ekasakti University Padang

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Abstract

This system design aims to develop a web-based tourism information system for Bungus Teluk Kabung sub-district office and create applications that can be implemented in this sub-district office.

This system research method is built on a website platform and runs online. The research method uses the system development life cycle (SDLC) with the waterfall model approach, which consists of 5 phases, namely: a) Analysis b) Design c) Implementation d) Maintenance e) Planning. The programming language used is (PHP), and the database application uses a data processor (MySql) as the database (RDBMS). The system design tools use Unified Modeling Language (UML) method with 4 (four) diagrams according to the design requirements, namely use case diagrams, activity diagrams, class diagrams and sequence diagrams.

The tourism information application in the sub-district office of Bungus Teluk Kabung facilitates visitors to find information and tourist places in the study area.

This system was tested and validated using the software testing method, using black box testing. This system can overcome the problems that exist in the area of Bungus Teluk Kabung sub-district.

A. Introduction

Tourism is a temporary journey from one place to another undertaken by individuals or groups to find balance or harmony with the environment socially, culturally, naturally and scientifically. In every city in Indonesia, there must be beautiful and interesting tourist places, but due to limited information, tourists are less aware of the city's attractions.

Bungus Teluk Kabung is located only 12 km from the city center and is directly adjacent to the regency of Pesisir Selatan. For now Bungus Teluk Kabung has tourism including, Pesumpahan Island Sirandah Island, Sikuai Island, Carolina Beach, Glamping Teluk Sirih, Lubuk Hitam Waterfall, Timbulun Waterfall. Bungus Teluk Kabung also has culinary specialties such as, Rumah makan jaso mande, Rumah makan pak malin, Rumah makan gulai ikan karang, this can also attract tourists so that they can feel culinary, Bungus Teluk Kabung also has accommodation such as, Pesona Beach, Carlos Beach Homestay offers the best facilities in Bungus Teluk Kabung so that tourists are not hard to find accommodation and also here also has a gas station so that tourists are not too worried about refueling their vehicles.

Tourism management in Bungus is very good and is supported by a very friendly community that is able to interact with tourists. Now Bungus Teluk Kabung sub-district has officially introduced a very nice nature tourism, which is less known by tourists. Lubuk Hitam Waterfall, Timbulun Waterfall and Carolin Beach natural attractions are a special attraction to attract tourists.

Building a website-based information system as an effective and efficient information and promotion medium is an attempt to make the tourist attractions in Bungus Teluk Kabung widely known and accessible anytime and anywhere. As for the problems in this research, there are many tourist attractions that are not known by local and foreign tourists because of the lack of information and promotion.

To increase the number of tourist visits, Bungus Teluk Kabung needs information technology support to provide information. One of the means to gain access is to build a tourism website for Bungus Teluk Kabung to facilitate visitors and tourists.

Based on the above, the author makes an investigation entitled "TOURISM INFORMATION SYSTEM IN BUNGUS TELUK KABUNG WEB-BASED".

The problems that arise in informing the general public about tourism are as follows "how to design a tourist information system in Bungus Teluk Kabung so that visitors can easily search for tourist places for out-of-town tourists?"

B. Research Methods

SDLC is the abbreviation for system development life cycle or in Indonesian, system development life cycle. SDLC is a cycle used in the creation or development of information systems to effectively solve problems. In another sense, SDLC is a phase of work that aims to produce a high quality system that meets the customer's requirements or the purpose of system production. SDLC is a framework that contains the steps required to develop a software. This system contains a complete plan for the development, maintenance and replacement of a particular software.

SDLC is also a pattern for software systems development that consists of the following phases: planning, analysis, design, implementation, testing and maintenance.

Designing a web-based information system requires design tools that describe the system components and document the flow processes, relationships, etc. that occur in the system. The system design tool used is the Unified Modeling Language (UML).

System Design

Design System Analysis

The system analysis is a description of the sales and purchase information system currently used for the Bungus Teluk Kabung tourism property. The information is currently still provided manually by distributing brochures and uploading information to social media.

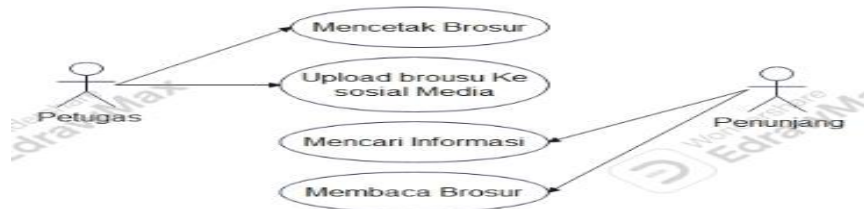


Figure 1 Current System

Proposed system

The proposed system design uses a system design tool in the form of UML (Unified Modeling Language) using multiple diagrams as follows:

Proposed Use Case Diagram

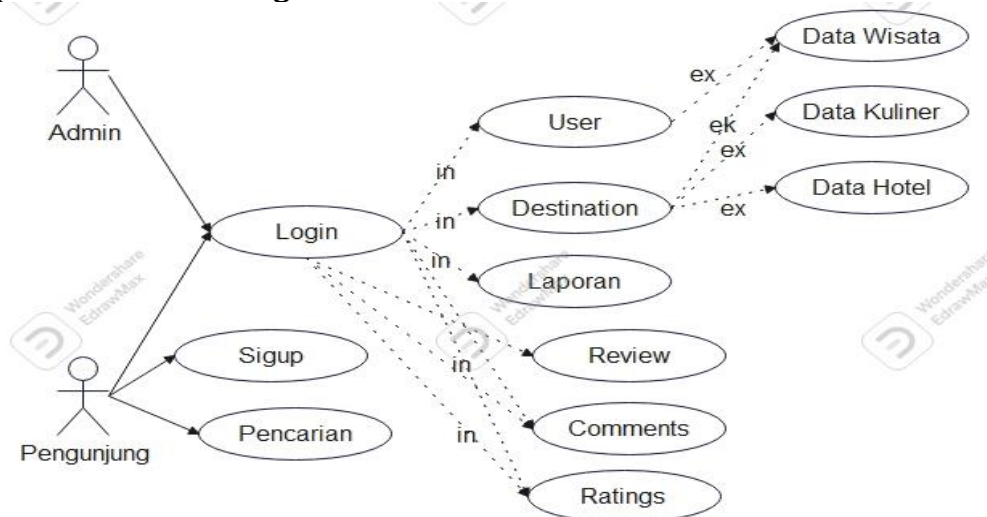


Figure 2 Proposed Use Case Diagram

In the proposed system, the administrator manages everything in the system, such as entering data about tourist attractions, accommodation and culinary offers. Meanwhile, visitors can search for attractions around Bungus by opening Bungus tourism website, and they can also comment and rate.

Class Diagram

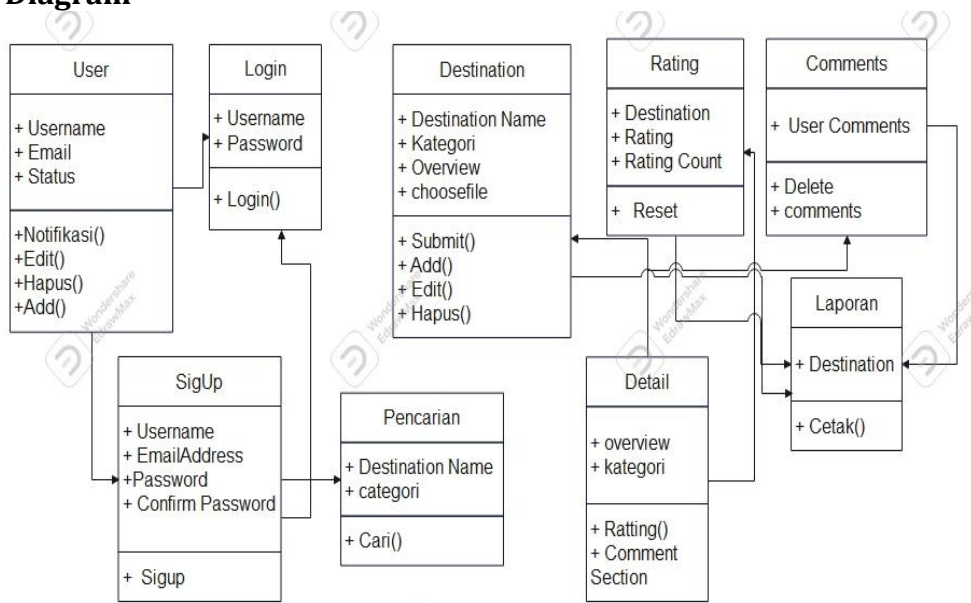


Figure 3 Proposed class diagram

The class diagram shows the relationships between all classes.

Sequence Diagram

Sequence diagrams help explore the flow of control and identify collaboration between objects in the system. They facilitate understanding and evaluation of business processes and help in system design.

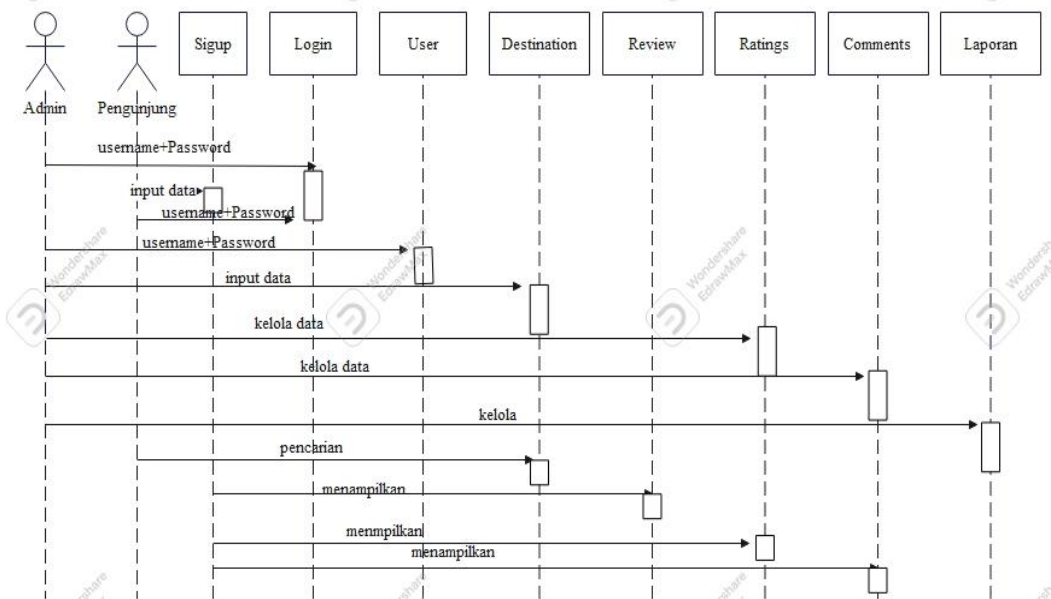


Figure 4 Proposed Sequence Diagram

Activity Diagram

Activity diagrams show how actions in a business or system process relate to each other.

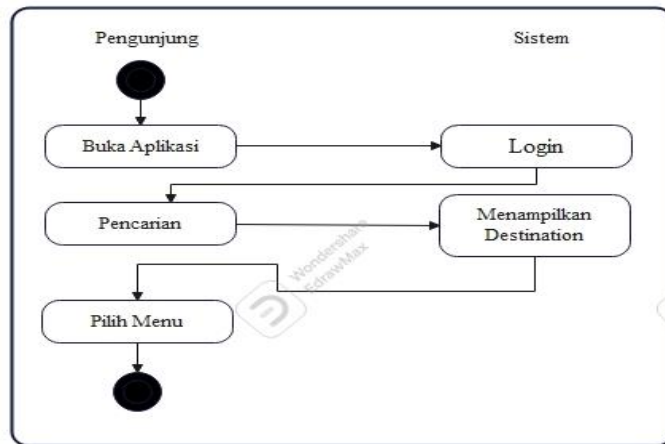


Figure 5 Activity Diagram Of The Proposed Management

Database Design

Database design is the process of creating a database system that is optimized for performance, scalability, and reliability. It includes the definition of data structures and relationships between tables.

Entity Relationship Diagram (ERD)

ERD (Entity Relationship Diagram) is a model for explaining the relationships between data in a database based on basic data objects that have relationships between relationships.

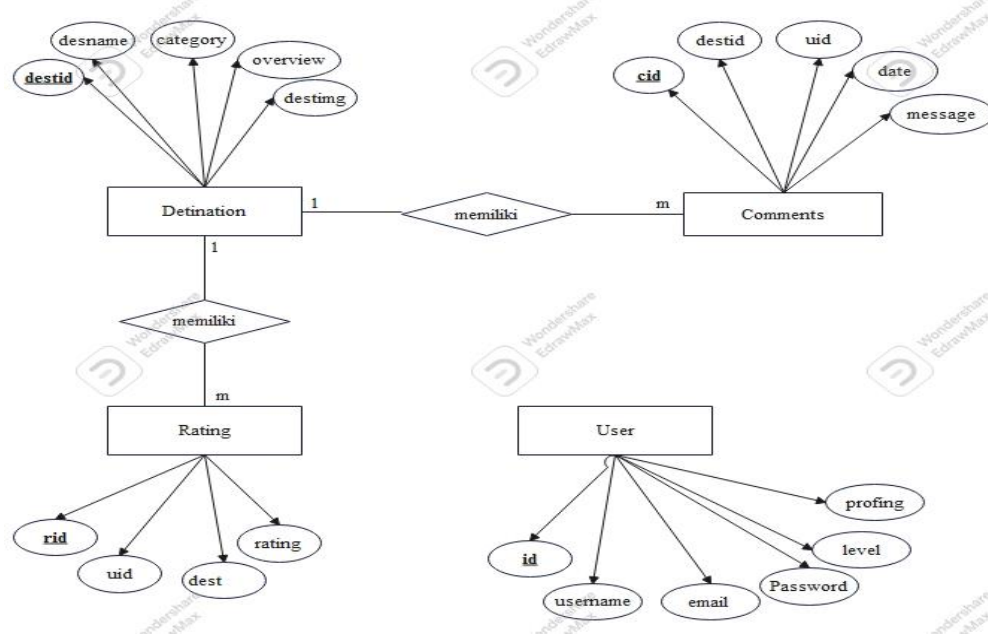


Figure 6. Entity Relationship Diagram

**C. Results And Discussion
System Implementation**

System implementation is the phase of implementing the system, which is performed when the system is approved, including the program created in the system design phase, so that it is ready for operation. The Bungus Tourism Information System can be run on different browsers, and the testing of this system is done on the available browsers using Google Chrome or Mozilla Firefox.

Interface Implementation

Website Page

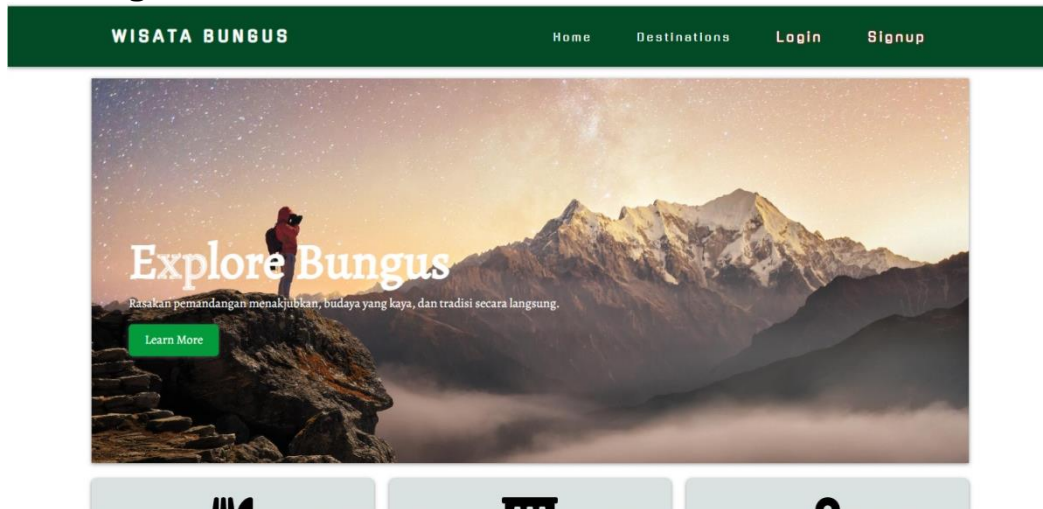


Figure 7. Website Page

Displays the front page of the bungus tourism website. On this page, tourists can see the tours that exist in the bungus area.

Login Page

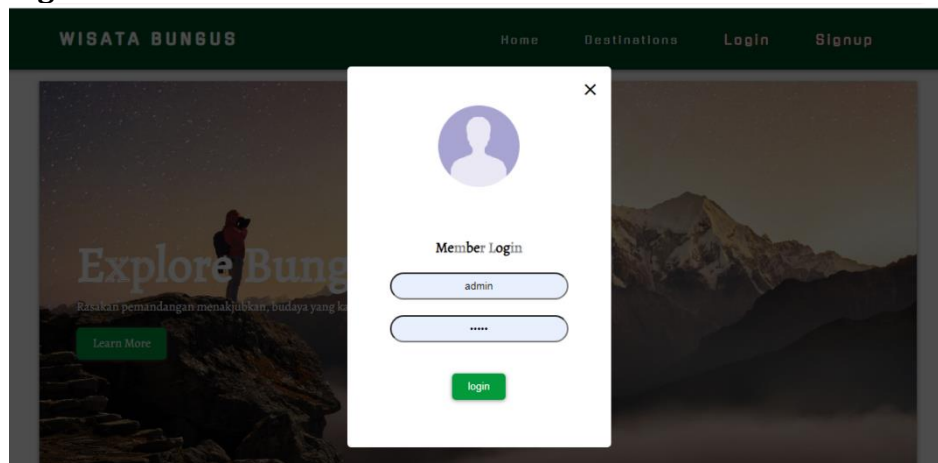


Figure 8. Login Page

Login page used by the admin to manage the bungus tourism information system. On this page the admin can update information about tours around the object.

Add Destinations Page

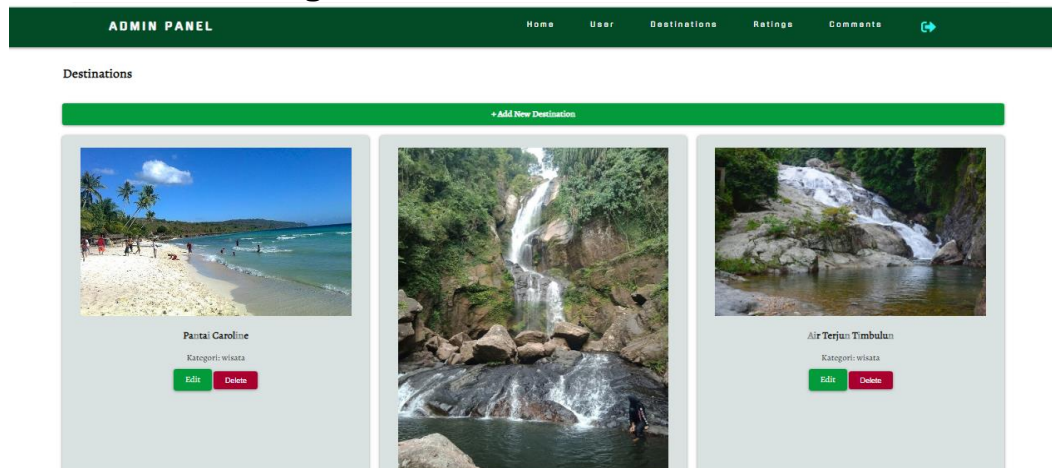


Figure 9 Add Destinations page

Displays the destinations page where the admin can update, add the latest tourist data in the Bungus area.

D. Conclusion

Based on the entire discussion of the writing of the Final Project regarding the bungus tourism information system, the author can draw several conclusions, namely:

1. Designing a web-based bungus teluk kabung tourism information system that makes it easier for visitors to find information.
2. The design of a web-based tourism information system at the bungus teluk kabung sub-district office was built using the System Development Life Cycle (SDLC) method and the PHP programming language and MySQL database.

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More and less in this writing I apologize profusely if there are still many mistakes in writing this Final Project.

E. Referensi

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