



INFORMATION SYSTEM ON BATU TEGI DAM BASED ON MOBILE WEB

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Abstract

Tourist attractions in the Tanggamus district have Various tourist attractions that can be visited such as the Tegi stone dam and others. The lack of need to obtain information quickly and easily about Batu Tegi dam tourism, is the reason that underlies the authors to create an information system for Batu Tegi dam tourism. In making a mobile web-based information system, the method used is the System Development Life Cycle method. This method includes needs analysis, system design, implementation, testing phase, and maintenance, followed by making applications using HTML programming as web pages, PHP for web designing. dynamic, CSS to control the appearance on the web, MySQL database as a data base. The results of this information system research for Tegi Batu Dam tourist attractions can help users search for Tegi Batu Dam tourist objects and get information on Tegi Batu Dam tourist attractions, and can be used to promote Tegi Batu Dam tourist attractions in Tanggamus Regency

Keywords:

Tourist Attractions,
Information Systems,
Tanggamus Regency

I. INTRODUCTION

With the rapid development of information and communication technology, the internet has become media that society really needs media for obtaining or exchanging information, especially for information between parts of the world unhindered by distance, time and place. The internet network is expanding rapidly so it is very easy to use anywhere quickly and accurately. This is evident from more and more web designs are emerging due to the rapid development of the virtual world web -based can provide various conveniences in every sector of human life. Thereby also in the tourism sector, which is one of the potential sectors in Indonesia, including the Tanggamus Regency which is in Lampung Province.

According to research, [1] the design for making this website uses Macromedia Dreamweaver, PHP MYSQL and XAMPP namely to facilitate and expedite transactions carried out electronically and are expected to attract the interest of customers and be able to increase income According to research [2] With the design of a Mobile Web application, namely the PHP programming language, the Macro Dreamweaver text editor, and Photoshop CS6. This application can facilitate promotion, sales, and expand marketing. Therefore, the role of the internet is to promote the Tegi Batu Dam which is known for its beauty.

Based on this, the authors are interested in conducting research and creating a mobile web-based information system. With the aim of developing, improving, and promoting the Tegi stone dam to outside the region and abroad. For this reason, the researcher raised the research title, namely mobile web-based information system on batu tegi dam.

II. LITERATURE RIVIEW

2.1. Definition of System

Davis (2008: 24) in a book entitled introduction to technology, he argues that: A system is a set of things or activities or subsystem elements that work together or are linked in a certain way so as to form a single unit to carry out a function to achieve a goal [3].

Jogiyanto (2006: 683) in a book entitled understanding information systems suggests that: "The system can be defined as a unit consisting of two or more components or subsystems that interact to achieve a goal". From the definition above, it can be concluded that: "The system is a set of sub-system elements that work together to achieve a goal"[4].

2.2. Definition of Information

According to Sutabri (2012) in a book entitled analysis and design suggests that: "Information is data that has been classified or processed or interpreted for use in the decision-making process"[5].

Meanwhile, according to Jogiyanto (2009) in a book entitled management information systems suggests that: "Information can be defined as the result of processing data in a form that is more meaningful to the recipient which describes an event (event) that is real (fact) that used for decision making". From the definition above, it can be concluded that: "Information is data that has been classified in a form that is more meaningful to the recipient that is used for decision making"[6].

2.3 Information Systems

According to [7] in a book entitled Introduction to Information System Technology is data that is collected, grouped and processed in such a way that it becomes a single unit of information that is interrelated and mutually supportive so that it becomes valuable information for those who receive it.

According to in a book entitled information system analysis Information is a collection of data that is processed and processed into data that has meaning for the recipient that describes real events and can be used as a tool for making a decision. So, it can be concluded that the Information System is a collection of data that has

been processed so that it becomes information for the recipient of the information[8].

2.4 Web Programs

a) web

Web is a dissemination of information via the internet. Actually between www (world wide web) and web are the same because most of the people abbreviate www to web. The web is something that cannot be separated from the world of the internet because the web was originally an information space on the internet that used hypertext technology. Users are guided to find information by following links provided in web documents displayed in a web browser[9].

The web is a method for displaying information on the internet, whether in the form of interactive text, images, sound or video and has the advantage of linking one document to another (hypertext) which can be done through a browser[10].

Through the web, every internet user can access the information on the website, which is not only in the form of text, but can also be in the form of images, sounds, films or animations. This is because the web is a hypertext facility for displaying data in the form of text, images, sound, animation, and other multimedia data, and these data are interconnected with one another.

b) HTML

According to [10] in a book entitled design and design Hyptertext Markup Language is the language used to create a website or homepage. Every document on the web is written in HTML format. All document formats hyperlinks, clickables, images, multimedia documents, fillable forms and so on are based on HTML. HTML places more emphasis on describing the structural components and formatting in web pages than determining their appearance, HTML was not designed for desktop publishing, but was designed as a coding language for the World Wide Web. Example of HTML.

c) MySQL

According to Harun Al-Rosyid, Bambang Eka Purnama, et al. MySQL (My Query Language Structure) is a Data Base Management System (DBMS). MSQL functions to manage databases using the SQL language. MySQL is open source so we can use it for free. PHP programming is also very supportive/support with the MySQL database.

d) PHP

According to Viviliana, et al (2013) PHP (formerly known as Personal, now PHP: Hypertext Preprocessor) is a program developed jointly by programmers from all over the open source world. PHP was developed especially for accessing and manipulating existing data on open source database servers such as MySQL. [11]

e) XAMPP

XAMPP stands for X = running on any operating system, A = Apache, M = My SQL, P = PHP, and P = Perl. XAMPP is free software that supports multiple

operating systems and is a compilation of several programs. Its function is as a stand-alone server (localhost) and consists from the Apache HTTP Server program, My SQL database, and a language translator written in the PHP and Perl programming languages. This program is available in General Public License (GNU) and free, is also a web servers that are easy to use and can serve dynamic web page displays.

According to Yogi Wicaksono XAMPP is a software that functions to run PHP-based websites and use My SQL data processing on a local computer. XAMPP acts as a server website on your computer. XAMPP can also be called a CPanel virtual server , which can help you do a preview so you can modify the website without having to be online or accessed by the internet .

2.5 Tourism

According to Oka A.Yoeti quoted by Siti Munawaroh (1999) in a journal entitled Development of an Android-based arrowroot tourism map application using the *rapid application development method* Tourism is a journey that is carried out temporarily, which is held from one place to another, with the intention not to try to make a living in the place visited but solely to enjoy the trip for sightseeing/ recreation to fulfill diverse desires. The tourism sector is a new type of industry capable of accelerating economic growth and providing employment, increased income, standard of living, and stimulate other productive sectors. Because of this, as a complex sector, tourism can also realize classic industries such as the handicraft and souvenir industry, as well as the culinary, lodging and transportation industries.

Tourism is a variety of tourism activities and is supported by various facilities and services provided by the community, businessmen, government and local government. Meanwhile, Batu Tegi dam tourism is tourism that utilizes the potential of natural resources and their supporting components, both natural and artificial or a combination of natural and artificial.

2.6. Tourism Information System

According to Fardian (2012) Designing West Sumatra Tourism Web and *Mobile Gis Applications* Information System-based tourism means the existence of a tourism information system management based on electronic data processing where the existence of this Tourism Management Information System can also be made a system that supports tourism decisions. The existence of this system will make it easier for tourists to determine their travel plans, besides that for the tourism industry and for the government, a good information system will greatly assist in decision making.

III. RESEARCH METHODS

3.1 Data Collection Methods

According to Muhammad Risyad (2015) in compiling this journal the writer needs to hold a design or method that will be used in collecting data obtained in the following way:

- a. Observation, is an observation which in simple terms is the process by which the researcher or observer sees the situation at the research location. The

observation referred to in this study is direct observation aimed at the situation in general, in the form of everything that takes place at the Tourism Office and Tanggamus Regency.

- b. Interview, is conducting questions and answers with sources (informants) to obtain certain information. The interviews were aimed at personnel who were considered to understand the data and information available at the Tourism Office of the Tanggamus Regency, especially data and information about the Batu Tegi Dam tourist attraction in the Tanggamus Regency. In this study the interviewers were researchers, while the informants (informants) who were interviewed were heads of services, secretaries, heads of personnel subdivisions, and operators at the Culture and Tourism Office of Tanggamus Regency.
- c. Documentation is one of the steps taken to complete the data in the research. The steps in the documentation stage are collecting documents containing information about the Batu Tegi dam tourism object in Tanggamus Regency, as well as written documents regarding the Tourism Office and Tanggamus Regency.

3.2 System Development Method

In designing this information system, the authors use the Waterfall Model, there are 5 steps in the waterfall mode. According to Pressman (2010), the *Waterfall Methodology* is one of the models in software design. The waterfall model is an example of a planning process, where all process activities must first be planned and scheduled before being carried out. The processes of the *waterfall* method include *Communication, Planning, Modeling, Construction and Deployment*.

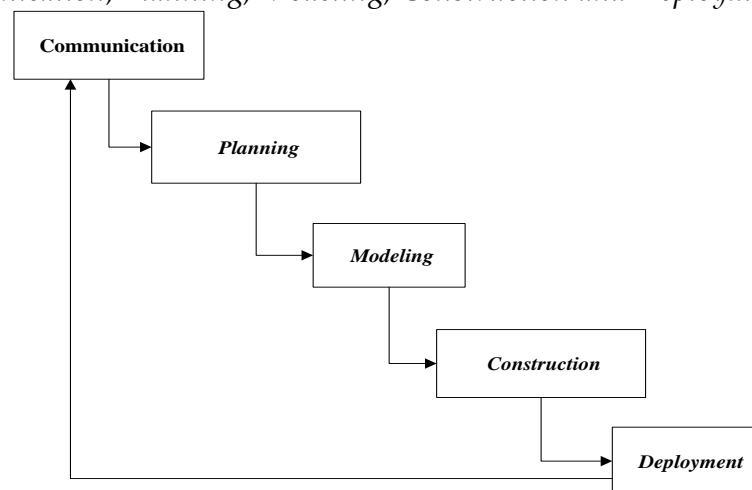


Figure 1 Waterfall

1. Communications

This step is an analysis of software requirements, and the stage for holding data collection by holding meetings with customers, as well as collecting additional data both in journals, articles, and from the internet.

2. Planning

The planning process is a continuation of the communication process (requirement analysis). This stage will produce a user requirement document,

or it can be said as data related to the user 's wishes in making the software, including the plans to be carried out.

3. Modeling

modeling process will translate the requirements into a predictable software design before coding. This process focuses on data structure design, software architecture, interface representation, and procedural (algorithmic) details. This stage will produce a document called software requirements.

4. Construction

Construction is the process of making code (coding). Coding or coding is the translation of a design into a language that can be recognized by a computer. The programmer will translate the transaction requested by the user. This stage is the real stage in working on a software, meaning that the use of computers will be maximized at this stage. After the coding is complete, testing will be carried out on the system that was created earlier. The purpose of testing is to find errors in the system so that they can be repaired later.

5. Deployment

This stage can be said to be final in making a software or system. After doing the analysis, design and coding, the finished system will be used by the user. Then the software that has been made must be evaluated if there are deficiencies and carried out periodic maintenance.

IV. DESIGN AND IMPLEMENTATION

4.1 System Design

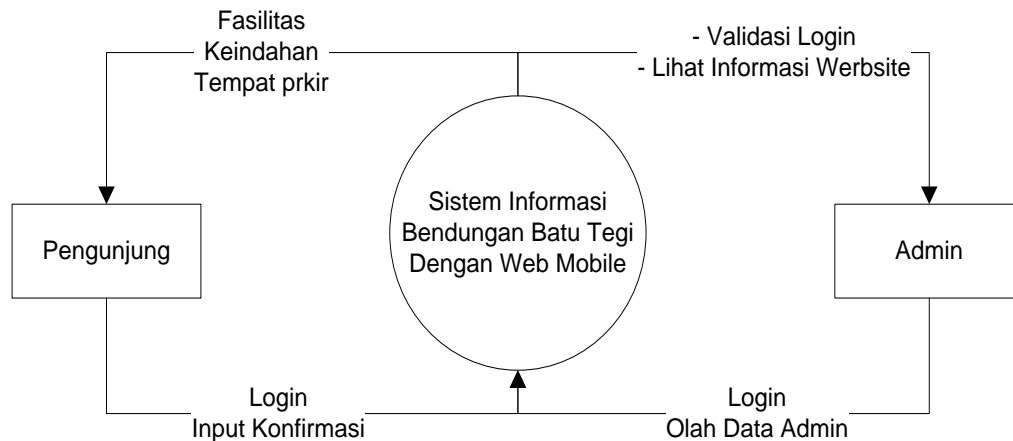


Figure 2. Data Flow Diagrams

4.2 Interface Design

a. Login Page Design

login input design is used to enter the administrator page if you want to add data manipulation or update the website. The administrator login input design is as follows:

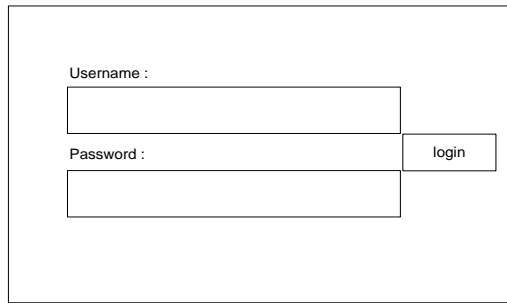


Figure 3. Login admin

b. Admin Master File Design

The admin page needs to be designed in such a way with the hope of providing comfort and convenience to the admin when inputting data/information to on the website. The admin page design is as shown in the following figure:

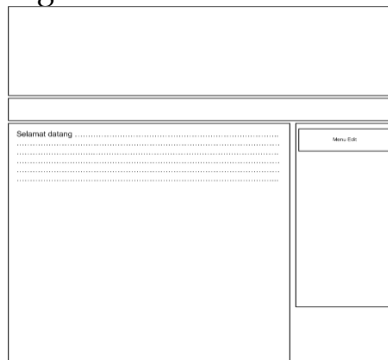


Figure 4. Administrator Menu

c. Website Main Page Design

When a visitor opens a website, the visitor will be presented with some information contained on the main page of the website. The design of the main website page on this website is as follows:

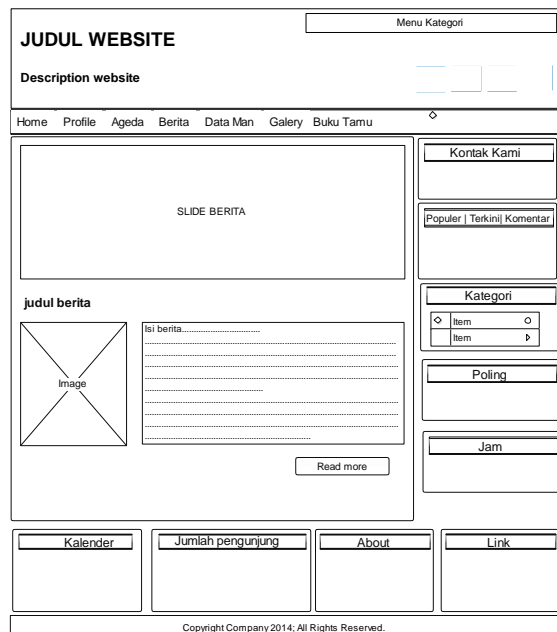


Figure 5. Website Main Page Design

4.3 Implementation

a. Admin Login Page

Used by Administrators in changing or adding data and information in a system.

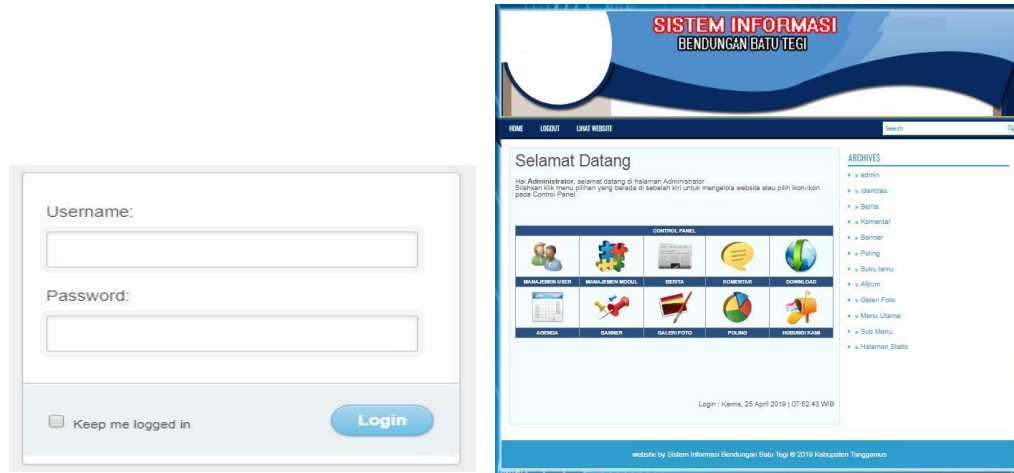


Figure 6. Login and Administrator Page

b. Website Main Page

Display The main page of the website contains a main page view which is a depiction of all existing pages.



Figure 7. Website Main Page

V. CONCLUSION

mobile web-based Batu Tegi Dam tourism information system built in this study is the first information system used to promote Tegi Batu Dam tourism in the Tanggamus Regency area. mobile web-based Batu Tegi Dam tourism information system is so that the Tourism Office of the Tanggamus Regency can manage existing tourism potential data effectively and efficiently so that they can provide the latest

information about Batu Tegi Dam tourism in Tanggamus Regency to the public quickly and easy.

Based on the results of the analysis, design, implementation, and testing. The author gives some suggestions, for further development, the Batu Tegi Dam Tourism Information System Application based on the Mobile Web Province of Tanggamus Province should use a database to make it easier to update the information contained therein. It is necessary to develop applications using language choices, especially English which is useful for foreign tourists. It is necessary to develop an application to deepen the material presented, especially regarding the Batu Tegi Dam tourist attraction in the Province of Tanggamus.

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