INFORMATION SYSTEM MODEL OF WEBSITE-BASED TAX PAYMENT AND VILLAGE BUILDING

Verry Ronny Palilingan

Department of Information and Communication Technology Education, Universitas Negeri Manado, Indonesia

ABSTRACT

Property tax is one of the instruments in obtaining funding for village development. Property tax proceeds are used to finance development in the area. Good management is needed to maximize property tax revenue. This study aims to help model to design and develop e-village property tax information system, the method used is the description method and is used to model the system while the prototype method is used to build the e-village system. The testing stage uses the black box technique and the usability test to test the quality, usability, and reliability of the system functions that have been made. This research succeeded in building an e-village model that is efficient and can be used easily to carry out property tax transactions. the results of this study also help villagers easily obtain information and assist in the processing of village data that is structured, organized and to help calculate the amount of property tax costs to be paid. The conclusion of this study is that the system has been made to facilitate the community and village officials in calculating the property tax, managing and obtaining village information more effectively and efficiently.

Keywords : tax payment, tax information system, e-village, Property tax, usability

INTRODUCTION

Government policy is an obligation to pay taxes by taxpayers. One of the biggest income of a country especially Indonesia is tax. There are various types of taxes, one of which is the Building Land Tax (PBB). Building Land Tax (PBB) becomes an obligation of taxpayers to pay taxes on land and buildings such as dwellings, and small and medium businesses in accordance with the size of the building.

The government is working on all region to have Village websites to use online media or the internet in accordance with the changing times. People who are less aware of paying taxes, especially the Building Land Tax (PBB) must be familiar with the government's obligations and policies on the Building Land Tax (PBB).

The web-based Village Information System, designed by the author, helps web creation in villages that until now Tumaratas Dua Village does not yet have a website. The advantages of using a website-based Building Land Tax Information System (UN) are helping the implementation of government regulations for the community to be aware of the obligation to pay taxes, helping to introduce Building Land Tax (PBB) in the village, helping the community in calculating the United Nations.

METHOD

This chapter will describe the method used by researchers in the research "Web Based Building Tax Information System (PBB) in Tumaratas Dua Village" The method used is the Prototype method.

The stages in the Prototype Model :

1. Communication

This stage is the stage of collecting data or information about the research to be made. At this stage the researcher collected information from various sources be it journals, articles, related books. Then the software engineer and user meet and define the desired software goals.

2. Quick Plan and Modeling Quick Design

This stage is a stage of rapid planning and rapid design. At this stage the researcher made a quick design using the use case diagram model and the interface design of the Star UML and Ms. applications. Word. Then the software engineer and user meet and the researcher displays the design plan that has been made to the user. If it is according to user needs, it will proceed to the next stage.

3. Construction Of Prototype

In this stage the researcher builds a prototype of an agreed web-based information system. Researchers make prototype designs that are translated into programming languages. Researchers use the Xampp application which includes Apache, PHP and MySQL in the process of creating a database, entering user data and Sublime Text for editing. This supporting application helps the process of designing a prototype model that is translated into a programming language. This prototype is a description of the program that will be used or applied later.

4. Deployment Delivery & Feedback

At this stage researchers and users meet. Researchers point out that the prototype system is left to the user. Then the system testing and prototype evaluation are carried out with Black Box Testing. This Black Box Testing will test the system that has been made whether it is in accordance with its internal performance, as seen whether the prototype that was built was in accordance with the wishes of the user or not according to the initial design. If when testing does not match the initial design, the system will be revised or repeated in the previous stage, namely the third stage. But if it is in accordance with the wishes of the user, the prototype is developed and refined to be a software that is ready to be applied in this case a web-based information system.

RESULT

The results of this research refer to the stages of the prototype development model that have been carried out. The following are the steps that have been carried out as follows :

1. Communication

Data collected at this stage of communication were obtained from village officials, village heads, guard chiefs and from observations from researchers. And can be summarized and can be seen in the following table 1:

| | Table 1. Data Collec | ction |
|-----|----------------------|------------|
| No. | Data | Amount |
| 1. | Surface area village | 0.7 Ha |
| 2. | Total family heads | 506 |
| 3. | Total population | 1.555 jiwa |
| 4. | An area | 870 Ha/Km2 |

This stage the researchers get data and information that 80% of Tumaratas Dua villagers already use the internet both from mobile phones and computers. Tumaratas Dua area has an internet shop so internet use in the village is no doubt because both children, adolescents, adults and parents are accustomed to using the internet, for that in making this village website will make the community get information about the village around Tumaratas Two.

2. Quick Plan and Modeling Quick Design

At this stage the researcher combines the stages of rapid planning and rapid design models. Based on the needs that are needed the researcher makes an interface design for the user and admin.

1. User

Desain user interface yang dibangun pada menu home seperti terlihat pada figure 1.

| 1060 | MENU | | | | |
|---------|------------------------------|-------------------------------------|----------------------------------|--------------|-----|
| | HOME | PROFILE | INFORMASI | GALERI FOTO |] |
| | Selama D | t Datang Diwel Jesa Tumaratas | bsite Resmi s Dua | | PBB |
| | Informasi 1 : | Informasi | 2 : | | |
| | Gale | ri foto Desa Ti | omaratas | | |
| Desa Tu | umaratas Dua, Keo Nomor T | camatan Langowa elepeon : +62 85 | n Barat, Kabupat 2 408 397 90 | en Minahasa. | |
| | | copyright | t | | |

Figure 1. design user interface home menu

2. Admin

Design yang telah dibangun, di implementasikan menjadi user interface aplikasi yang dapat di akses. Untuk dapat di akses user diharuskan untuk login terlebih dahulu untuk mengakses seluruh menu yang terbangun di dalam sistem. Menu login dapat dilihat pada figure 2.

| Silahkan Login. E-mail & Password & |
|---|
| E-mail 1 Password A |
| Password 🖴 Masuk |
| Masuk |
| |

Figure 2. menu login

3. Construction Of Prototype

At this stage the programming stage to display website design.

Program Code On the Login Page

```
<?php if (!defined('BASEPATH')) exit('No direct script
access allowed');
class Login extends MY_Controller {
```

public function __construct()

4. Deployment Delievery & FeedbackEach program goes through a personal test to ensure that the program that we have made can be free of errors (bugs), although it does not rule out the possibility of a few bugs or not 100% free of bugs, but testing can at least minimize errors that occur.

At this stage, researchers used a testing method with a black-box testing and Usability testing approach. Black box testing, which is an approach to test whether every function in the program can run correctly.

DISCUSSION

The village community can use this website for UN calculations and also the introduction of the UN for those who do not understand it and can submit complaints or reports. In making this information system the authors make a problem limitation, where this research was conducted in the village of Tumaratas Dua, the community can only access information about the village and calculate the nominal amount of the United Nations that will be paid. Village officials or trusted administrators as data and information processors will be displayed on this website.

Making this website-based UN information system, has been tested in Blackbox Testing and Usability Testing. So this information system can run and can be used or accessed according to the needs of users or the public. So that it can display a website that is useful for the Tumaratas Dua village community.

CONCLUSION

Based on the results of research and testing of a website-based UN information system that has been made, it can be concluded that: the researcher successfully designed and built the Building Land Tax Information System (PBB) of the Website-based Tumaratas Dua village well, currently the village apparatus can be more easily processing data and information about the village of Tumaratas Dua. And the community can easily access the latest information around Tumaratas Dua village and can calculate the nominal amount of the Building Land Tax (PBB) easily. This system is made according to the needs of the Tumaratas Dua village and can be accessed quickly via the internet using the use of information and communication technology facilities in the form of a website anytime and anywhere without knowing the distance and time.

SUGGESTIONS

Based on the benefits of research, the authors hope to be useful for students or friends in arousing interest in continuing research on information system design and improving the ability to understand system development methods, for villages useful in helping data and information processing and making people aware of the obligation to pay taxes and how to calculate Building Land Tax (PBB), and hopefully this research can be used as a literature review for readers or a reference for future researchers.

REFERENCES

- Abdulloh, R. (2018). 7 in 1 Web Programming For Beginners. Jakarta: PT. Elex Media Komputindo.
- Arbie, E. (2000). Introduction to Management Information Systems (7th ed.). Jakarta: Build Indonesian Alumni.
- Arief, R. M. (2011). Dynamic Web Programming Using PHP and MySql. Yogyakarta: Andi.
- Arief, R. M. (2014). Dynamic Web Programming Using PHP and MySql. Yogyakarta: Andi.
- Bunafit, N. (2008). Dynamic Web Programming Application with PHP and MySql. Yogyakarta: Gava Media.
- Chisnell, J. R. (2008). Handbook of Usability Testing, How to Plan, Design and Conductive Test Test. Indianapolis: Wiley.
- Davis, G. B. (1991). Basic Framework for Management Information Systems (1st ed.). Jakarta: PT. Reader Binamas Pressindo.

- Jogiyanto, H. (1999). Information Analysis and Design: Structured Approaches to Business Application Theory and Practice. Yogyakarta: Andi.
- Kalbuana, A. d. (2010). Designing Academic Applications for Mobile Technology Using J2ME. CCIT, 4 No. 2
- Lani, S. (1995). Introduction to Business Information Systems. Jakarta: PT. ELEX Media Komputindo.
- Mcleod, R. (2001). Management information System. Jakarta: PT. Prenhallindo.
- Muhyuzir, T. D. (2001). Analysis of Data Processing System Design (2nd ed.). Jakarta: PT. Elex Media Komputindo.
- Nielsen, J. (2012). Usability 101: Introduction to Usability. Indianapolis: Alertbox.
- O'Brein, J. A. (2005). Introduction to Information Systems. Jakarta: Salemba 4.
- Prasetyono. (2012). Tax Smart Book. Yogyakarta: Like.
- Pressman, R. S. (2010). Software Engineering A Practitioner's Approach (7th ed.). Yogyakarta: Andi.
- Pressman, R. S. (2012). Software Engineering (7th ed.). Yogyakarta: Andi.
- Purbadian, Y. (2016). Quick Tricks to Build Visual Based Applications with the CodeIgniter Framework. Yogyakarta: CV Andi Offset.
- Raharjo, B. (2011). Self-taught Learning to Create a Database Using MySql. Bandung: Informatics.
- Riyanto (2010). Sales Information System with PHP and MySql. Yogyakarta: Gava media.
- Rizky (2011). Software Engineering Concepts. Jakarta: Literature Achievement.
- Sadeli, M. (2014). Business Applications With PHP and MySql Using Dreamweaver CS6. Palembang: Maxikom.
- Simarmata. (2010). Web Engineering. Yogyakarta: Andi.
- Sutabri, T. (2005). Management information System. Yogyakarta: Andi.
- Turban (2003). Introduction to Information Technology. Yogyakarta: John Wiley & Son Inc.