

The Information System of Payable Tax Management on Village Government

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ABSTRACT

The lack of effectiveness occurred in the conventional management of the earth and building taxes in Sumbermulyo village, Jogoroto sub-district, Jombang, Jawa Timur. The process of tax management each year depends on both the strategy and the mechanism used by each village. Tax management of the earth and such buildings should be effective and efficient, as this activity is repeatedly on each year and is a financial concern. The tax management is done by the village officer, which means each village officer has a duty to make records, collections, and tax reporting management. Based on these conditions, it need to provide the information systems that could help village's governments level better in managing land and building taxes also the transparency of tax information to the public. The following research will explain how a website-based tax payable management information system is built. The method that used in making information system is waterfall method. In the system testing using the black box method. The study will produce an e-government information system so, it will make the village officer easier to manage taxes and minimise the leakage of tax payment. The built of information system has several items such as SPPT's data, cancellation and payment.

Keywords: e-government; tax; SPPT; information systems; websites.

INTRODUCTION

The changing times that are increasingly sophisticated are followed by the development of science and technology, making changes in the life order of the community at large and encouraging people to work more effectively and efficiently. With the existence of technology, it can help human work both in the fields of politics, education, business, and in other fields. Currently the website is one technology that is growing rapidly. A website can be defined as a collection of web pages that contain information, be it text, images, animations, or a combination of all of them, whether static or dynamic. A website can contain several linked web pages (Ahmadi & Juliansa, 2019).

To improve public services in paying taxes or information about taxes, it is necessary to create a website-based information system that can make the tax payment process fast, effective, and efficient (Sujono & Herlambang, 2021). An information system can be defined as a collection of several procedures that produce information for decision makers to control the organization (Wijaya, 2015).

With the information system can help the organization to achieve its goals by helping to control and organize the activities of the sub-systems - other sub-systems (Melinda et al., 2018).

Generally, information systems are made with the aim of being able to provide information quickly and widely. Information systems can also be used as administrative services. "Service is the provision of (serving) the needs of individuals or communities who have an interest in the organization in accordance with the basic rules and procedures specified" (Nurdina & Andani, 2020). "Administrative services are services in the form of providing various forms of documents required by the public, for example: Making Identity Cards (KTP), Land Certificates, Birth Certificates, Death Certificates, Motorized Vehicle Ownership Books (BPKB), Vehicle Registration Certificates (STNK), Building Permit (IMB), Passport, and so on" (Risna, 2018).

Sumbermulyo Village is one of the administrative areas in Jorogoto District, Jombang Regency, East Java Province. In managing land and building taxes, Sumbermulyo Village still uses the conventional method, namely for recording taxpayers, just remembering. Land and building tax is one source of state revenue that must be managed properly. The land and building tax is handled by the village level government. The tax management process every year depends on the strategy and mechanism used by each village concerned.

Based on these conditions, the solution that can be offered to make services more effective and efficient is to create a web-based information system that is equipped with a population database so that village officials can search for data more easily and quickly (Komsari & Airlangga, 2021). "Web-based population administration services (online) can be defined as a breakthrough to increase community satisfaction with the performance of village government officials as well as optimizing technology in the field of information and communication where with the use of this technology people can be served anytime and anywhere"(Hidayatulloh & Mulyadi, 2015). Making the information system, not only used as a service but also can be used to disseminate information to the public.

"Website can also be interpreted as a page that contains data, both text data, images, sounds and others that can be accessed online"(Josi, 2017). Based on the type, the website is divided into two, namely static and dynamic websites. A static website is a website whose content remains or is rarely changed. Websites like this still do not use a database to store or process data. Generally this website is built using HTML. While a dynamic website is a website whose content can change or change frequently. Usually it is built using the PHP, ASP, .net programming languages and already uses a database to store and or process the data(Syukron & Hasan, 2017). The similarity between a static website and a dynamic website is that both can display pages that contain certain or special information that can be displayed on the internet(Khair et al., 2016). Static websites have drawbacks, namely "the need to maintain the program continuously to keep up with any developments that occur. This weakness is overcome by the dynamic web application model. In dynamic web applications, changes to information in web pages are carried out without program changes but through data changes.(Arif, Nur Saiful; Wanda, 2013).

The information system that will be made in this study uses the Codeigniter programming language. According to Hakim (2010), CodeIgniter is a PHP framework that can help speed up developers in developing PHP-based web applications compared to writing all program code from scratch.(Haris et al., 2021).

There are several studies that have been carried out to improve village administration services. One of them is research on the creation of an information system for population administration services in Sidakangen Village, Purbalingga(Khaerunnisa & Nofiyati, 2020). The research focuses on administrative correspondence services, such as Bedadata Letters, Lost Letters, Disability Letters, Business Letters and SKCK. The research is almost the same as the research in Sidakangen Village, but there are some differences, namely the presence of a mobile version to access it. The research was conducted in the District of Samigaluh Kulonprogo(Vol, 2014).

Based on the problems that occurred in Sumbermulyo Village, Jorogoto District, Jombang Regency, an information system and population administration service was made so that it was easier for the community to carry out the administrative process of paying taxes.

METHOD

The method used in making this information system is the Waterfall method. In making or developing software, the Waterfall method is one method that is often used for software development. The Waterfall method or the waterfall method develops systematically and structured from one stage to the next starting from analysis, design, code, testing, and maintenance(D. Wijaya & W. Astuti, 2019).

The following general description of the stages of the Waterfall method can be seen in Figure 1, starting from the analysis stage to testing. The research was not carried out until the maintenance stage.

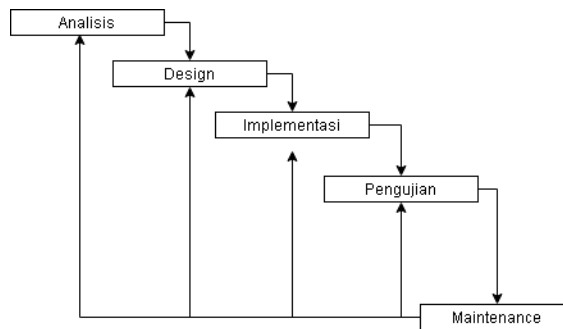


Figure 1. Waterfall method stages

In this study, the data used are administrative data from Sumbermulyo Village, Jogoroto District, Jombang Regency.

At the analysis stage there are several steps taken, the first step is to analyze the problems that occur. The second step prepares the need to solve the problem. The third step determines the method for data collection. And the last is to determine the analysis for system design.

At the design stage, it is done by making an overview of the system to be created. At this stage, an interface is created to make it easier to build the system. The tool used in interface design is Figma.

Implementation is done by making systems that have been previously designed such as; system menu, SPPT data, and cancellation. The tools used for this stage are XAMPP, Visual Studio Code, Chrome, HTML and Code Igniter.

The testing phase is testing the system using the black-box testing method, namely by testing the system that has been made to find errors in the application before it is implemented. If an error is found, it will be corrected.

At the maintenance stage, the system created will be implemented directly or tested by the user and started to be used as it should. At this stage changes can occur due to the appearance of errors that may not be traced during the testing stage or application development with the environment..

RESULT AND DISCUSSION

This research resulted in a website-based system and has also been tested with the blackbox testing method or testing in terms of functionality. The following are the results of the tests that have been carried out. The following is the result of making a website.

SPPT Data Menu

After the admin logs in or logs in, the admin will be taken to the Dashboard page with several sub menus. In the SPPT Data sub menu, displays the population data that has been registered as a resident to pay taxes. The SPPT data display is as shown in Figure 2 below.

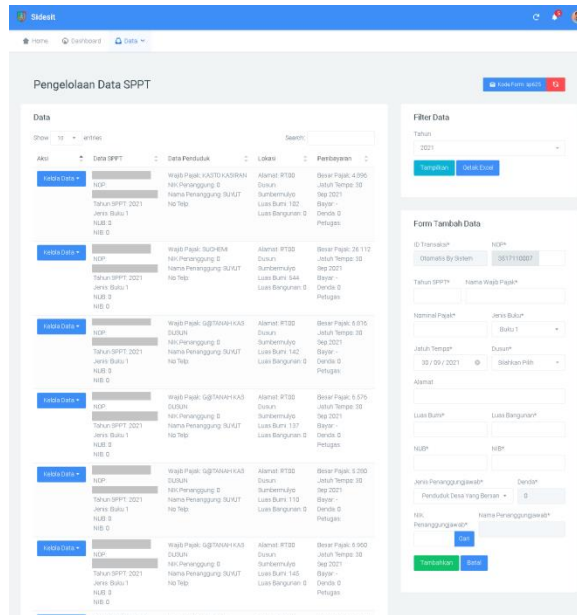


Figure 2. Display of SPPT Data sub menu

There are two categories for the type of population in the added data form, namely residents of the village concerned and residents outside the village concerned. The population of the village in question is used when the NIK entered is the NIK of residents in Sumbermulyo Village, Jogoroto District, Jombang Regency, East Java. And the choice of residents outside the village concerned is used if the NIK entered is not the NIK in Sumbermulyo, Jogoroto District, Jombang Regency, East Java.

Cancellation Menu

The cancellation page is a page for displaying population data for which SPPT will be canceled for the following year. The following shows the cancellation sub menu page as shown in Figure 3.

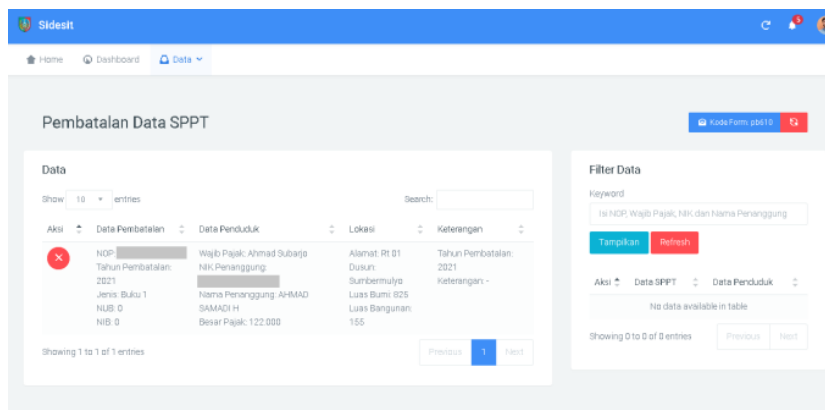


Figure 3. Cancel sub menu page

On this page the admin can add and delete population data that will be submitted for cancellation of land and building tax payments for the following year. So, data that has been added to the cancellation page, the data will not be entered for the next year's SPPT data or the year that has been determined.

To add population data on this page, you can fill in your NIK or NOP or taxpayer's name or name of the insurer in the data filter form on the right side of the cancellation page. The blue button is used to display data based on the fields that have been typed in the search field.

Payment Menu

The payment page is a page that contains data on those who have paid taxes. The following is a display of the payment sub menu page as shown in Figure 4.

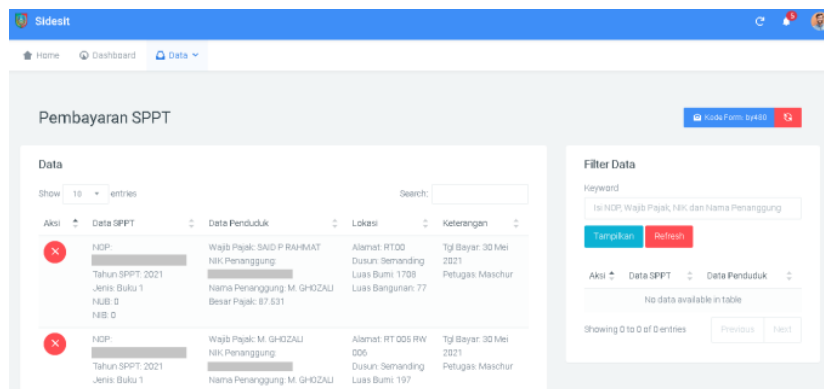


Figure 4. Display of payment sub menu

This page contains data filter forms and data tables. The data filter form is used to search or filter unpaid tax data by typing the NOP or NIK or the name of the person in charge or taxpayer in the keyword field. If the tax has not been paid, then the data will appear on the data filter form, but if the tax has been paid then the data will not appear on the data filter form. And to add taxpayer data, just click the blue button in the action column, then the data will automatically enter the list of tax payments in the data table.

Test

Testing for the design of this information system using the black-box method. Williams (2010) states that blackbox testing or functional testing is a test that ignores the internal mechanisms of the system or components and only focuses on the output produced in response to the selected input and execution conditions. So it can be concluded that blackbox testing is a functionality-oriented test, namely the behavior of the software on the input given by the user so that it gets / produces the desired output without looking at the internal processes or program code executed by the software. (Febiharsa et al., 2018).

This test is done repeatedly by trying all the possibilities that occur in the system. If an error is found, a search and repair will be carried out on the system. If the repair has been completed, it will be tested again on the system. The system will be tested and improved continuously to obtain the best results. The table of test results by experts from the input process of several possibilities that occur in the system can be seen in tables 1, 2, 3 and

- SPPT data addition

Table 1. SPPT data addition process

Case Data and Test Results (Incorrect Data)	
Input Data	NOP : 3517110007112 SPPT Year: 2021 Taxpayer Name : Ahmad Subarjo Tax Amount : 122000 Book Type : Book 1 Due : September 30, 2021 Hamlet : Sumbermulyo Address : Rt 01 Earth Area: 825 Building Area : 155 NUB : 0 NIB : 0 Type of Person in Charge: Villager Involved NIK in charge : 3517190107480037 Responsible Name : Ahmad Samadi H

Which is expected	An error message appears "NIK not found"
Observation	An error message appears "NIK not found"
Conclusion	Accepted
Case Data and Test Results (Data Correct)	
Input Data	NOP : 3517110007 SPPT Year: 2021 Taxpayer Name : Ahmad Subarjo Tax Amount : 122000 Book Type : Book 1 Due : September 30 Hamlet : Sumbermulyo Address : Rt 01 Earth Area: 825 Building Area : 155 NUB : 0 NIB : 0 Type of Person in Charge: Villager Involved NIK in charge : 3517190107480038 Responsible Name : Ahmad Samadi H
Which is expected	An error message appears "SPPT Data Added Successfully"
Observation	An error message appears "SPPT Data Added Successfully"
Conclusion	Accepted

- SPPT data cancellation process

Table 2. SPPT data cancellation process

Case Data and Test Results (Incorrect Data)	
Input Data	NIK in charge : 3517190107480037
Which is expected	SPPT data does not appear in the form because the input entered is incorrect (NIK).
Observation	SPPT data does not appear in the form because the input entered is incorrect (NIK).
Conclusion	Accepted
Case Data and Test Results (Data Correct)	
Input Data	NIK in charge : 3517190107480038
Which is expected	SPPT data appears in the form.
Observation	SPPT data appears in the form.
Conclusion	Accepted

- Tax payment process

Table 3. Tax payment process

Case Data and Test Results (Incorrect Data)	
Input Data	NIK in charge : 3517190107480037
Which is expected	SPPT payer data does not appear in the form because it is entered incorrectly (NIK).
Observation	SPPT payer data does not appear in the form

	because it is entered incorrectly (NIK).
Conclusion	Accepted.
Case Data and Test Results (Data Correct)	
Input Data	NIK in charge : 3517190107480038
Which is expected	SPPT data appears in the form.
Observation	SPPT data appears in the form.
Conclusion	Accepted

CONCLUSIONS

The tax management information system has been completed and tested. The system is made using the Waterfall method. The system was built using the codeigniter programming language and MySQL database. Website-based information system. The system can be used by village officials to manage land and building taxes. The purpose of making this information system is to assist village officials in managing land and building taxes that must be paid annually. The information system created is designed to be easy and easy to operate by village officials. Village officials can manage SPPT data, submit requests for cancellation of SPPT data for the following year and enter data on taxes that have been paid.

Tests carried out using the black-box method have not found any problems. All features or menus run according to their functions. The design that has been made can be implemented on the menu or features contained in the system.

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