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Design of Web-Based Letter Archiving Application at PT. Pegadaian Office Region I Medan

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Archives Website PHP Letter is a communication to convey written information by one party to another party. At the Medan Regional I Office, physically still using archive folders which are then stored in file cabinets, where this method is less efficient and takes a long time. In an agency or company, mail management is very important in the administrative process. So the researchers made an application design using the Dreamweaver editor and using the PHP programming language, with database processing using MySQL. So it is hoped that the mail management process is carried out properly, quickly and easily. With the E-Letter Archive application, it is hoped that it can reduce the use of a long time in filing letters, as well as reduce paper use, speed up the search for letters.

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1. INTRODUCTION

The development of technology and information is happening faster, and the human need for information is increasing. Information is very important in many human activities. As a result, many documents and media have been created to make it easier for people to find, store, and share information. These documents are known as archives.

Archives are a very important document storage place. Therefore, archives must have a good and safe storage system. At PT. Pegadaian Kanwil I Medan all this time using conventional methods for archiving activities. Document archiving is conventionally done by sorting documents according to the type of letter and the month the letter comes in and out, then the documents are stored in a filing cabinet. Conventional archiving is still possible if the document is small, but the volume will increase over time. Such filing is very inefficient and can cause various problems. Based on the problems above, the researcher wants to design a web-based archiving application system that suits the needs of the office. Using this application can benefit performance and storage during the archiving process.

In this design the researcher uses the PHP programming language, which is an open source web server programming language, which is in the form of scripts related to HTML and is located on the server. For the database, the researcher uses MySQL, which is a database operation, especially for the selection and entry of data that allows data operations to be done easily automatically.

Wishnu, et al (2020) in their research used the waterfall method in designing a web-based system for filing letters at the KONI secretariat of the Bangka Belitung Province.

Hatta, et al (2019) in this design use a coding framework in the design of a web-based mail filing and disposition information system.

Based on the theoretical basis and previous research above, the researcher designed a letter filing application to facilitate the search for letters at PT. Pegadaian Kanwil I Medan using the waterfall and web-based method.

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2. RESEARCH METHOD

2.1 Software Development Method

In this study, the software development method is used, namely the waterfall method. The Waterfall method or commonly called the waterfall method, where this method describes a systematic and sequential approach to software development starting with the specification of user needs and then continuing through several more stages. In this study the authors used 5 steps, namely:

a. Needs Analysis

At this stage, the required data is collected and analyzed. Then, identify the *software* needed and understand the function of the *software* used.

b. Design

In this stage describes the layout design. The results of this stage describe the basic abstraction of software systems and their relationships. At this stage will form a system architecture based on the requirements that have been set.

c. Implementation

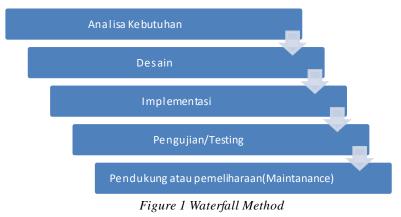
At this stage, the implementation of the design that has been carried out is carried out. In this study, the author uses the PHP programming language and MySqL as the database in making the application.

d. Testing

After the device is built, testing is carried out to further explore the applications that have been made, to determine the quality of the software being tested. In this stage of testing using the blackbox method.

e. Support or maintenance (Maintenance)

Programs that have been created are maintained so that they can be used in accordance with the previously designed system. If during the maintenance period it turns out that during the maintenance period it turns out that during the maintenance period it turns out that there is damage or the addition of other features, it will be repaired.



2.2 System Design

Use Case diagrams are used to describe the system from the point of view of the system user (user), so that making use case diagrams is more focused on the functionality that exists in this letter filing system as follows:

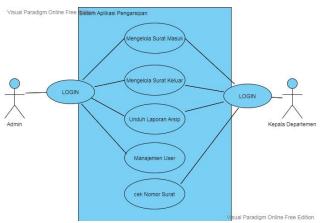


Figure 2 Use Case Diagram

The definition of the acror contained in the use case is, the admin acror has access rights to manage incoming mail, outgoing mail, filing reports and user management. Meanwhile, the Head of Department has access to view incoming and outgoing mail, filing reports. This section consists of several departments located at Kanwil I Medan PT. Pegadaian.

3. RESULTS AND DISCUSSION

After conducting data analysis and research, this study aims to produce a document archiving information that can assist in processing archival documents at PT. Pegadaian Regional Office I Medan. This system is designed to replace the document archiving system which initially still uses conventional methods.

a. Admin Login Form Display

The login page contains the username and password that have been created. This login page is an application access process by entering a user account and password in order to gain access in order to use this application.

Login /	Admin
Usemame	
Password	
🔶 Kembali	🖴 Masuk
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Figure 3Admin Login Page

b. Admin Main Page

This main page is the second page after logging in to the application, on this page it displays several menus, namely incoming and outgoing mail, and user management.

Arsip Surat	=				🥐 admin v
Selamat Datan admin GENERAL			Selamat Datar	ng, admin	
🗟 Kategori Sunt	• • • • • • • • • • • • • • • • • • •	uk	1 Surat Keluar Telan Daruptan	8 Bagian Tean Doatartan	
				Contololla - Root	intran Arlmin Tomelato ku Colorlik

Figure 4 Admin Main Page

c. Incoming Mail Page

On this page, the user can collect letters such as edit letters, delete letters, download mail files, view letter details, and download mail reports.

Arsip Surat	=											3	adn
Selamat Datang,	Surat Masi	uk > Data Surat N	lasuk										
🥑 admin	Data su	rat Masuk											
INERAL	Pilih B	ulan 🗸	Pilih Ta	ihun 👻	📥 Unduh Lap	oran	Surat Masuk	+1	ambah Surat Ma	suk			
Kalegori Surat 🗸	Show 1	0 v entries								Search:			
🚀 Surat Keluar	No Urut 11	Tanggal Masuk 11	Kode Surat 11	Tanggal Surat	Pengirim		Nomor Surat		Kepada 11	Perihal		Aksi	
Bagian 🗸	1	2021-12-13 17:30:00	04	2021-12-14	KABAG PENGADAAN LOGISTIK		1960/SOA- 80101/2021		KEPALA DEPARTEMEN LOGISTIK	SOA Pembayaran Gaji ten satuan Pengamanan	aga		
	Showing 1	to 1 of 1 entries									Previo	us N	lext
	-												

Figure 4 Incoming Mail Page

d. Page Add Incoming mail

On this page the user can input incoming mail to be archived.

() Arsip Surat	=		🙁 admin 🗸
Selamat Datang, admin	Surat Masuk Surat Masuk > Tambah Surat Masuk		
🖹 Kategori Surat 🗸 🗸	Tanggal Masuk *		
👹 Bagian 🗸 🗸	Kode Surat * Nemer Urut * Nomer Surat * Tanggal Surat *	Massidkan Kode Surat 2 Nomor Unit hans 4 Digit (Pasikan Lihat Komor Sebalumnya) Masidkan Nomor Surat 12/14/2021	
	Pengkim * Kepada * Perihal * File *	Masukkan Asal/Pengrim Surat Masukkan Penhul Surat Masukkan Penhul Surat Choose File, No file chosen	

Figure 5 Add Incoming Mail Halaman

e. Outgoing Mail Page

On this page the user can manage outgoing mail that he wants to archive

Arsip Surat	≡		🥐 admin v
Selamat Datang, admin	Surat Keluar Surat Keluar > Tambah Surat Keluar		
📔 Kategori Surat 🗸 🗸	Tanggal Keluar *		
矕 Bagian 🗸 🗸	Kode Surat*	Masukan Kode Surat Lihat Kode Klasifikasi Surat	
	Nomor Surat *	2 4 Digit Awal merupakan Nomor Surat (Pastikan Lihat Nomor Sebelumnya)	
	Bagian *		~
	Tanggal Surat *	12/14/2021	
	Kepada *	Masukkan Tujuan Surat	
	Perihal *	Masukkan Perihal Surat	
			li li
	File*	Choose File No file chosen	

Figure 6 Outgoing Mail Page

f. Section Pages Or User Management

On this page the admin can manage users of this application

Arsip Surat	≡							adn
Selamat Datang, admin	Bagian > Data Bagian							
GENERAL	Data > Bagian + Tambah Bagian							
🞽 Bagian 🗸 🗸	Show 10 v entries	Username		Tanggal		Search:		
🖸 🖸 Data Bagian	Nama Bagian 🛛 👫	Admin 11	Nama J1	Lahir 1	Alamat 11	No HP 11	Aksi	
	Departemen Keuangan	keu	Keuangan	2017-11-10	Medan	24224242	🖻 🖸 📓	
	Deputy Operasional	dop	dop	2017-11-17	Bali	3333333333333	🖻 🗹 🗐	
	HUMAS	humas	humas	2017-12-01	Medan	08134444444	🖹 🗹 🗐	
	INFRASTRUKTUR	infrastruktur	infrastruktur	2017-12-01	smd	083455253225	🖻 🗹 🗐	
	KABAG PENGADAAN & LOGISTIK	pengadaan	kabagpengadaan	2017-11-04	Medan	081222222222	8 🛛	
	Kepala Departemen	walikota	Kepala Departemen	2017-05-25	Medan	08122222222	🔊 🖉 🧰	
	Pegawai	pegawai	Pegawai	2017-11-10	Medan	081299101309	🖹 🗹 🗐	
	Sekretaris	sekretaris	Sekretaris	2017-11-17	Medan	098979989999		

Figure 7 Section Pages

g. Letter Number Page

On this page the user can take a letter number to fill in the letter number code, this page is only found in the actor section

Arsip Surat	= 0	Kepala Departemen ~
Selamat Datang, Kepala Departemen GENERAL	Hi, Kepala Departemen	
Q Cek Normor 🗸	Nomor Surat Keluar Berikutnya :	
Nomor Surat Keluar	2	* 9
	Terakhir Diperbarui Pada :14-12-2021 17:33:21	- 1
	Lihat Kode Klasifikasi Surat	- 1
	# AMBIL NOMOR	- 1
		T

Figure 8 Letter Nunmber pages

h. Head of Department Login Page View

The login page contains the username and password that have been created. This login page is an application access process by entering a user account and password in order to gain access in order to use this application.

Username Password Kembali Masuk	
	1
🗲 Kembali 🔒 Masuk	•
©2021 ILMU KOMPUTER	

Figure 9 Department Head Login Page

4. CONCLUSION

From the results of the research that has been described in the previous section, it can be concluded that the design of filing applications facilitates archiving. This application can also be used as a digital mail storage area, making it easier to find letters. By using the waterfall method which is passed from several stages, Needs Analysis, Implementation Design, testing stages and maintenance stages. This application uses a dreamweaver text editor with the PHP programming language and a database manager using MySQL. Suggestions for further research is to develop applications by adding several features to improve services, and can be developed into the mobile version and also add features as needed.

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