



JOURNAL OF ECONOMIC DEVELOPMENT & VILLAGE BUILDING

Journal Homepage : <http://jedvb.polteksci.ac.id/index.php/jedvb/>



WEB BASED ARCHIVE MANAGEMENT APPLICATION CASE STUDY IN CIJERAH VILLAGE (E-ARCHIVE)

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Abstract

This research has the goal of producing a mathematics learning medium in which the game contains mathematical material, namely matrix material which is designed with various challenges, questions, and in-game events related to the matrix. The research method used is the research and development method. The research procedure is a simplification of Sugiyono's development steps, namely potentials and problems, data collection, product design, design validation, design improvement, product trials, product revisions, usage trials, and conclusions. The results of the study show that educational game media has proper characteristics. This can be seen from the evaluation of the experts, media experts obtained a proportion of 86.7% with a proper rating and material experts obtained a proportion of 88.3% with the assessment criteria, and math teachers of 90.85% with the appropriate assessment criteria. Contribution of the research is that this educational game media can be used by teachers in the learning process for matrix materials. This helps the teacher so that the learning process is more practical because the material is packaged in a game. In addition, this educational game media can also help students learn independently.

Keywords: Archives, Rapid Application Development (RAD), Website, MySQL

Manuscript received 2024-07-19; revised 2024-07-29; accepted 2024-07-29; Date of publication 2024-07-31.

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INTRODUCTION

The advancement of digital technology, which is increasing rapidly at this time, provides benefits in various sectors of life, both in the academic and non-academic fields. Digital technology is based on computer, internet and smartphone technology. The development of the internet in Indonesia in 2021 has greatly increased, reaching 202.6 million. There was an increase of around 15.5 percent from the beginning of 2020 which can be seen in the image below



Figure 1. Penetration of Indonesian Internet Users
(Source: We Are Social/ Hootsuite)

The development of digital technology opens up opportunities for accessing, managing and utilizing information in archival management. The need for digital-based archive services is getting higher, the use and storage of archives by some people is still considered less important (Agustiono et al., 2021). There are still many people who are satisfied with the management of archives that have not been computerized (Guntari & Setiawan, 2016). Digital-based archives are very important and able to support the success of an agency.

Archives are one of the procedures for managing paperwork according to an applicable rule and procedure by bearing in mind the 3 main elements which include storage, placement and retrieval. Archives, namely a record of activities or events in various forms and a medium in accordance with an information and communication technology development that can be made and received by a state agency, local government, educational institutions, companies, political organizations, a social organization, and also individuals in the implementation of social, national and state life (Article 1 point 2 of Law Number 43 of 2009 concerning Archives).

In the digital era, archive management can be done more easily, for example by using a website. The website is often also called the web, which can be interpreted as a collection of pages that display various kinds of text information, data, still or moving images, animated data, sound, video or a combination of all of them, both static and dynamic, which form a series of interconnected buildings where each is connected by a network of pages or hyperlinks (Potoh & Lumenta, 2016).

Based on the background that has been presented, this study aims to develop a web-based archive management application in the Cijerah sub-district. This research is expected to be useful in improving employee performance and facilitating employees in searching data.

THEORETICAL BASIS

E-Web is one of the services obtained by the use of computers connected with hypertext facilities to display data in the form of text, images, sound, animation and other multimedia (Kustiyahningsih & Devie, 2011). The use of the website is of course closely related to information technology. Information technology is a study, design, implementation, development, support or management of computer-based information systems, especially in computer hardware and software applications (Azhar Susanto, 2013). This web-based archive can help ease the work of staff and be more efficient and

effective in finding the documents needed Tirsia Ninia Lina, Matheus Supriyanto Rümetna, Frits Gerit John Rupilele, Annisa Nurul Sucianingsih (2020).

A work unit requires good management of electronic records that will ensure the availability of data, contribute to the efficiency and effectiveness of activities (Tamarawati, 2020).. At this time many government agencies have used the internet and computerized for data management, especially file archiving (Saputra et al., 2021)

. Archive management in Kelurahan Cijerah, which is currently running, is not computerized, the filing process is recorded using a folio book and the physical letters are stored in archive folders arranged by date and stored in the filing cabinet. The process of searching for letters must be searched in every sheet of the notebook. In the search process becomes hampered and letters are often lost and damaged, if an unwanted event occurs such as a fire or flood, the result is that the data will be permanently lost.

Research that is relevant to this research is the first research by Rahayu Amalia, Nurul Huda (2020). The results of the research show that the mail archiving information system can run according to the design that has been made. Next, Listra Firgia's research, Azriel Christian Nurcahyo (2021). The results of the analysis and implementation of the incoming and outgoing mail system can help the activities of the employees of the Head of the Academic Registration and Operations Center (PROA) at the Shanti Bhuna Institute. Gina Mulyani, Zulhalimi, Verdi Yasin (2021). The results of the study show that with the existence of an e-Mail application system, letter disposition can be carried out anytime and anywhere even though there is a division of tasks for employees who carry out official duties at the office (WFO) and employees who carry out official duties at home (WFH). The urgency of this research is because in Cijerah Village they still use conventional. So it will be very important to develop a web-based archive to keep up with digitalization developments

RESEARCH METHOD

The type of research used is Research and Development. The Research and Development (R&D) method is a method used to produce a product and test its effectiveness of the product (Sugiyono, 2013). The system development method used in conducting this research is Rapid Application Development (RAD).

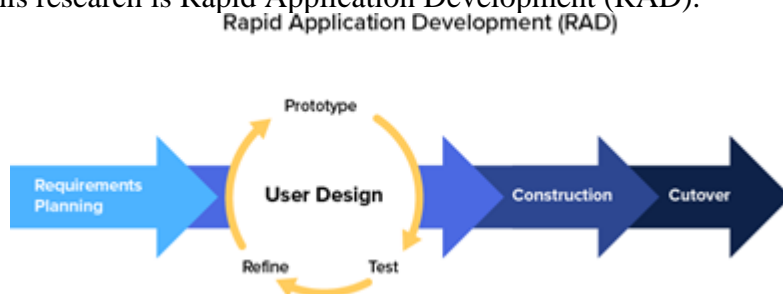


Figure 2. Source RAD Design
(Kissflow.com, 2020)

The steps taken are planning, modeling and implementing these stages can be described as follows.

RAD stage

Requirements Planning (Plan Requirements)

Running system analysis

Analysis of the current system is a process where the author can find out about the business system that has been running in the Cijerah Village. At this stage the author conducts interviews with employees to find out how the system is currently running.

Problem analysis

Problem analysis is a process where the writer can find out the problems that occur, so the writer can find out the problems that exist in the Cijerah Village. At this stage the author conducts interviews directly with the constraints that have occurred so far.

Business process

The business process knows about the business processes that are currently running in the Cijerah Village. At this stage the author conducts interviews and direct observations of how business processes are currently running.

User Design

User analysis

User analysis is carried out to find out who is involved in the Cijerah Village business process.

Functional requirements analysis

Functional requirements analysis was carried out to find out what features are needed for a web-based archive management application.

Analysis of non-functional requirements

Analysis of non-functional requirements is carried out to find out what needs can make non-functional application users more comfortable.

Hardware requirements analysis

An analysis of hardware requirements was carried out to find out the hardware specifications for creating a web-based archive management application in accordance with the provisions in the Cijerah Village.

Software requirements analysis

Software requirements analysis was carried out to find out what software to create a web-based archive management application according to the provisions in the Cijerah Village.

System overview

The general description of the system provides an overview of the system that will be made by the author.

System planning

At the design stage there are use case diagrams, activity diagrams, sequence diagrams, class diagrams and interface design.

Construction

Making the application is done after the system design is complete. The application is made using the php programming language.

cutovers

Application testing is carried out after the creation of the application is complete, aiming to ensure that the application made is not problematic so it is feasible to use.

Application testing carried out is as follows:

Alpha testing

Alpha testing is done when the application has just been created.

Beta testing

Beta testing is the stage after alpha testing after it is declared completed without problems.

System Overview

In developing this web-based archive management application, the authors focus on functions that make it easier for operators and employees to manage archive data and also provide convenience in the archive search process. In this system, operators must log in so that modules in the application such as managing data, managing reports, sending and downloading data can function properly. On the main page of the operator, operators

can create letters, manage reports, improve mail data. Meanwhile, the village head's page can search for the necessary data and check the suitability of the data in the application.

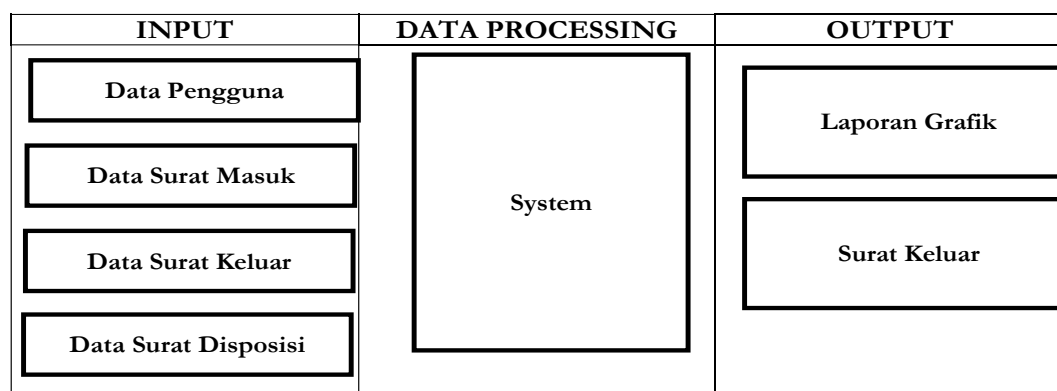
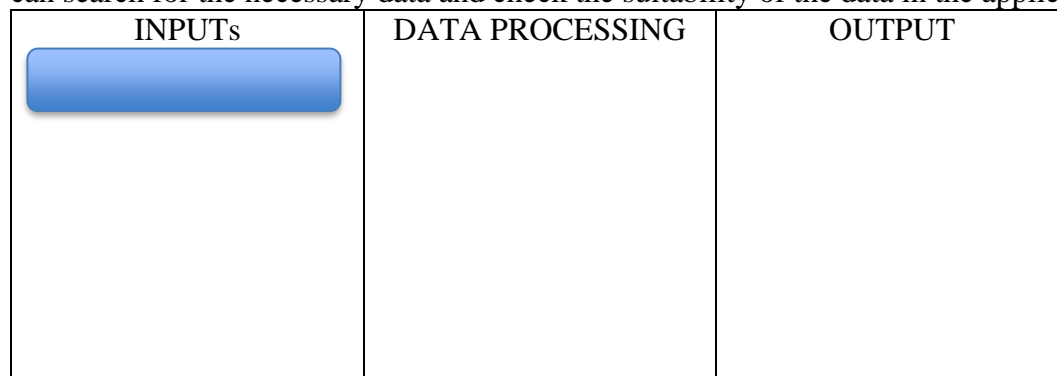


Figure 3. Overview of the System

Construction

For making the application the author will use the php programming language using phpMyAdmin. The steps that the author will do in making this application are:

Table 1. Design Application Development Stages

Stage 1	Stage 2	Stage 3	Stage 4
Login	Show User	Add Notifications	Show Disposition Letter
Forget Password	User Updates	Show outgoing mail	Add Disposition Letter
User Settings	Show Inbox	Add Outgoing Mail	Submit a Disposition Letter
Appearance Operator	Update incoming mail	Outgoing Mail Update	Show Notifications
Appearance village chief	Download Inbox	Send Outgoing Mail	Data Report

Alpha Testing

Alpha testing will be carried out for web-based archive management application programs, namely testing using black-box testing.

Black-box testing

At this black-box testing phase, it focuses on the functional specifications of the software, which defines a set of input conditions and tests the functional specifications of the program. By using all the possibilities that will occur in the web-based archive management application program to determine functional errors in the web-based archive management application program.

Integration Testing

Integration testing is carried out to check the functional and performance of the program structure that has been designed to check for program errors (errors) connected to the interface. The following is a test plan that will be carried out using the button-up integration method in a web-based archive management application program.

Beta Testing

Beta testing will be carried out through a questionnaire by operators, village heads, and employees in the Cijerah sub-district, based on the results of interviews that the admin staff operator in the Cijerah sub-district is 1 person and 2 ASN employee staff, the questionnaire will be distributed to 32 respondents, namely 1 village head, 20 computer operators, 6 Administrative Personnel and 5 other employees. The test plan will be carried out by the author on a web-based archive management application using the Technology Acceptance Model (TAM) method where respondents fill out a questionnaire made using the Likert scale model.

RESULT AND DISCUSSION

System Implementation

At this stage is the stage to continue the process of designing a system that has been designed and defined in the previous chapter. At this implementation stage, an overview of the website-based archive management application will be displayed that has been designed and tested on the system created, and will be used by users to interact with the software that has been built. The implementation of the system built is carried out using the PHP programming language. After the implementation phase has been completed, then the next stage is the system testing stage, where deficiencies will be seen in the new application for further system development.

Implementation of Functional Requirements

Implementation of functional requirements is carried out to implement the designs that have been made (Wardana, 2010). In implementing the design made, the functional requirements for the software system that will be used in the process of making this website-based archive management application are needed. The functional requirements of the software used by the author can be seen in the table below.

Table 2. Implementation of Functional Requirements

No.	Software	Information
1.	Information Systems	<i>Microsoft Windows10</i>
2.	<i>Visual Studio Code</i>	<i>Texteditor</i> for scripting archive management applications.
3.	<i>Codeigniter</i>	<i>Codeigniter</i> as a PHP framework with version 3
3.	XAMPP	XAMPP as media database. XAMPP with version 3.2.2
4.	<i>PHPMYAdmin</i>	<i>PHPMYAdmin</i> as media database. <i>PHPMYAdmin</i> with version 8.0.10

Implementation of Non-Functional Requirements

The implementation of non-functional requirements is carried out to implement the designs that have been made. In implementing the design that was made, non-functional requirements for the hardware used in the process of making a website-based archive management application are needed. The hardware used by the author can be seen in the table below.

Table 3. Implementation of Non-Functional Requirements

No.	Hardware	Information
1	Intel(R) Celeron(R) CPU N3350 @ 1.10GHz 1.10 GHz	Processor
2	RAM 2.00GB	RAM memory

Interface Implementation

Login Users

Login displayed on the first page when users access the archive management application. Users must fill in the username and password to be able to enter the main user page according to the user level.

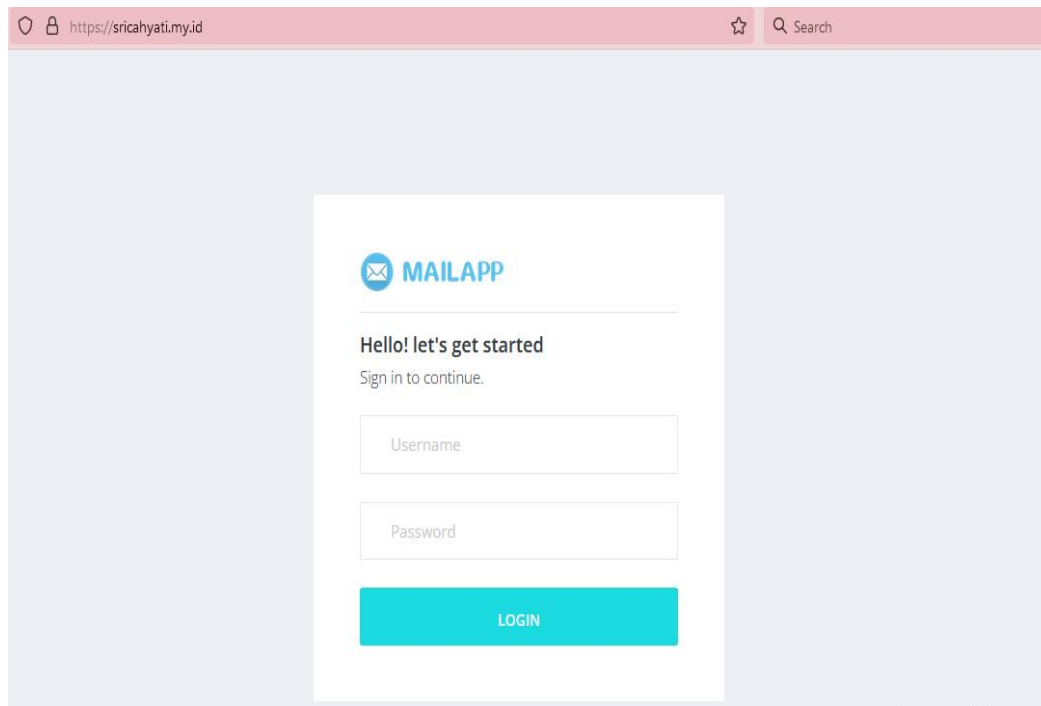


Figure 4. User Login page

Main page view of Lurah's account

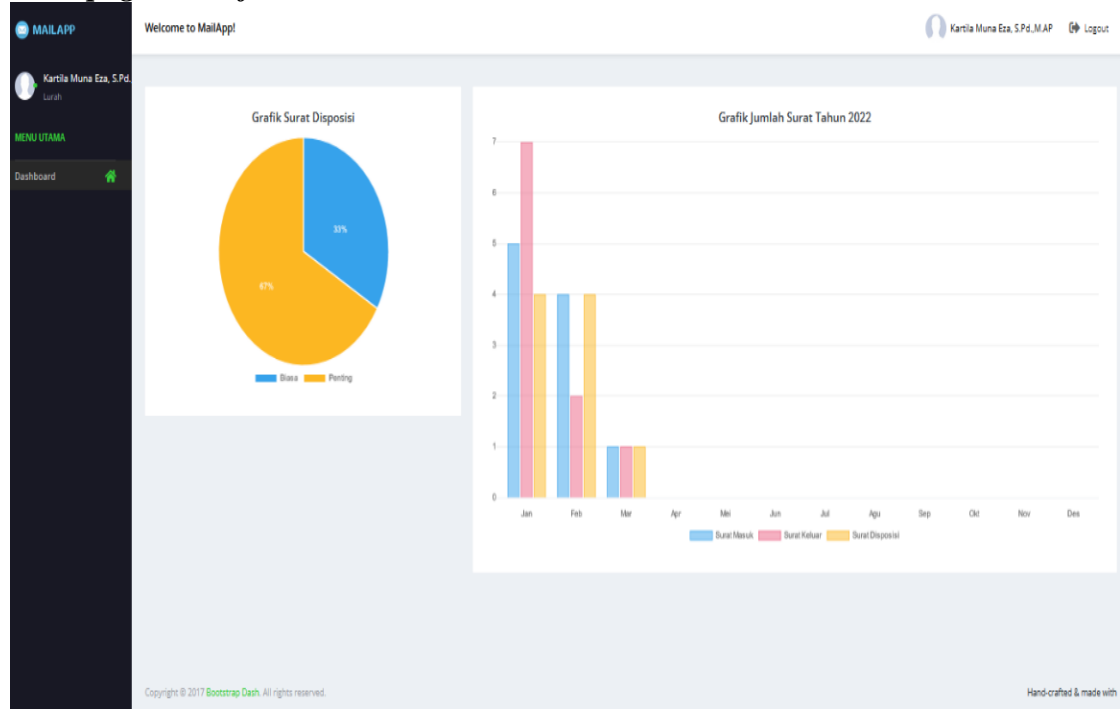


Figure 5. Main Page of Lurah's Account

Operators Main Page

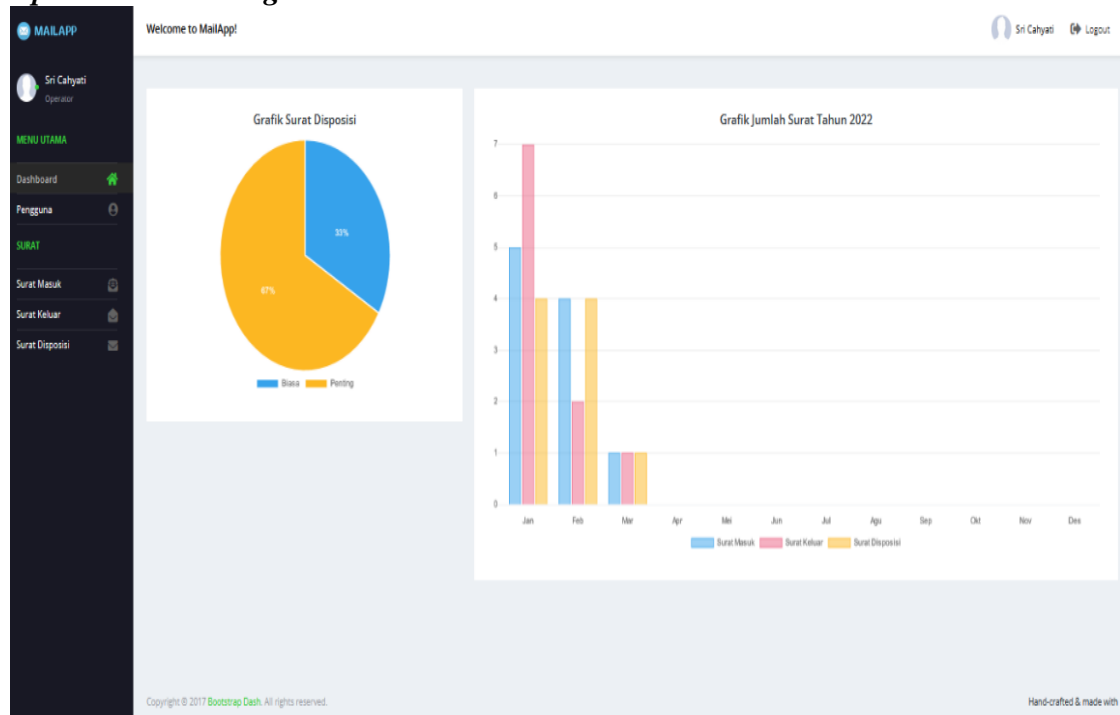


Figure 6. Operator Main Page

User Page

Welcome to MailApp!

Sri Cahyadi Operator

MENU UTAMA

- Dashboard
- Pengguna
- SURAT
- Surat Masuk
- Surat Keluar
- Surat Disposisi

Pengguna

Fitur untuk mengelola data pengguna

TAMBAH DATA

Pencarian... 10 Data

No	Username	Nama	Level	Aksi
1	Lurah	Karola Muna Eza, S.Pd.,M.AP	Lurah	
2	Operator 1	Adika Rahman, SIP	Operator	
3	Operator 2	Eka Kartika	Operator	
4	Operator 3	Dikdik Priyadi	Operator	
5	Operator 4	Asri Prilianti	Operator	

Previous 1 Next

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Figure 7. User Page

Incoming Mail Page

Welcome to MailApp!

Sri Cahyadi Operator

MENU UTAMA

- Dashboard
- Pengguna
- SURAT
- Surat Masuk
- Surat Keluar
- Surat Disposisi

Surat Masuk

Fitur untuk mengelola data pengguna

TAMBAH DATA

Pencarian... 10 Data

No	No. Agensi	No. Surat	Tgl. Surat	Asal Surat	Aksi
1	001	BK/01.06/021-Kec. Bankul/W/2021	23 Desember 2021	KECAMATAN BANDUNG KILON	
2	002	PN.02-Roses Kec. Bankul	14 Januari 2022	KECAMATAN BANDUNG KILON	
3	003	PPN/04.01/178-Bogelbarng/2022	14 Januari 2022	Pemerintah Kota Bandung	
4	004	KP.12.02/SE.003-BKPSDM/2022	5 Januari 2022	Sekretariat Daerah	
5	005	PKK.01.09/76-Kec.Bankul/2022	3 Januari 2022	KECAMATAN BANDUNG KILON	
6	006	PN.02.02/1181-Kec.Bankul	2 Februari 2022	Kecamatan Bandung Kulon	
7	007	LA.01/167-Kec.Bankul/W/2022	11 Februari 2022	Kecamatan Bandung Kulon	
8	008	HL.09.02/276-Satpol PP/W/2022	27 Februari 2022	Satpol PP Kota Bandung	
9	009	KI.02.02/275-Diskominfo	24 Februari 2022	DINAS KOMUNIKASI DAN INFORMATIKA	
10	010	PTU.04/212-Kec.Bankul/W/2022	7 Januari 2022	KECAMATAN BANDUNG KILON	

Previous 1 2 Next

Figure 8. Incoming Mail Page

Add Incoming Mail Data Page

Figure 8. Add Incoming Mail Data Page

Outgoing Mail Page

No	No. Agenda	No. Surat	Tgl. Surat	Sifat	Perihal	Tujuan	Aksi
1	001	Nomor : KK.03.01/009-Kel.Cy/157/2022	1 Januari 2022	Biasa	Surat Tugas	ASN Kelurahan Cjerah	
2	002	Nomor : 800 / Kel. Cjerah	3 Januari 2022	Penting	Surat Perintah	Karyawan Kelurahan	
3	003	Nomor : 800 / 010 Kel. Cj/0202	7 Januari 2022	Penting	Surat Perintah	Kasi Pemerintahan	
4	004	KK.3.1.1/011-Kel. Cjerah	10 Januari 2022	Penting	PROGRAM P2WK3S	Kader LKK	
5	005	008/KTM/Kel.Cj/1/2022	19 Januari 2022	Biasa	Rapat Bulanan	Karang Taruna Unit	
6	006	PD.5.3/020-Kel. Cjerah	16 Januari 2022	Penting	Surat Permohonan Penyempurnaan Diselamatkan	Dinas Kibaran dan Peranglindungan Bencana	
7	007	PD.5.3/021-Kel. Cjerah	21 Januari 2022	Penting	Surat Permohonan Bantuan Sae	Dinas Pangan dan Pertanian Kota Bandung	
8	008	KI.02.02/075-Kel.Cj/02	24 Februari 2022	Penting	Pembentahan Program Internet RW Tahun 2021	Ketua RW	
9	009	PTU.04/042/Kel.Cj/02	28 Februari 2022	Biasa	Undangan	Ketua Karang Taruna	
10	010	UND.03/Ses/PKK/Cj/RW/2022	9 Maret 2022	Biasa	Undangan	TP-PKK Irti	

Figure 9. Outgoing Mail Page

Add Outgoing Mail page

Welcome to MailApp! Sri Cahyati Logout

Surat Keluar

Fitur untuk menambah data surat keluar

No. Agenda:

No. Surat:

Tgl. Surat:

Sifat: Biasa Penting

Lampiran:

Perihal:

Tujuan:

Isi

Email Penerima:

Figure 10. Add Outgoing Mail page

Mail Print View

 **PEMERINTAH KOTA BANDUNG**
KELURAHAN CIJERAH
KECAMATAN BANDUNG KULON
Jl. Melong Asih No.5 Telp. 0226019250 Bandung

Bandung, 10 Maret 2021

Nomor : PA.02/043-Kel.Cjr/III/2021
Lampiran : 1 (Satu) Lembar
Perihal : Rapat Koordinasi P2WKSS

UNDANGAN

Dipermaiklumkan dengan hormat, dalam rangka persiapan kegiatan Peningkatan Peranan Wanita Menuju Keluarga Sehat dan Sejahtera (P2WKSS) tahap 0 persen dengan ini kami mohon Bapak/Ibu dapat hadir dalam Acara Rapat Koordinasi Peningkatan Peranan Wanita Menuju Sehat Sejahtera (Rakor P2WKSS) yang akan dilaksanakan pada:

Hari : Rabu
Tanggal : 10 Maret 2021
Pukul : 15.30 WIB s.d Selesai
Tempat : Kantor Kelurahan Cijerah
Keterangan : Berpakaian Bersih dan Rapi serta Mematuhi Protokol Kesehatan

Demikian kami sampaikan, atas perhatian dan kehadirannya kami ucapkan terima kasih .

Hormat Kami,
Lurah Cijerah


(KARTILA MUNA ELZA, S.Pd., M.AP.
NIP.19700125 199503 2 003

Figure 11. Letter Print Display

Disposition Letter page

No	Tujuan	Tgl. Surat	Sifat Surat	Email Penerima	Aksi
1	KASI EKONOMI DAN PEMBANGUNAN	14 Januari 2022	Penting	adikarocks@gmail.com	[Edit] [Hapus]
2	SEKRETARIS LURAH	14 Januari 2022	Penting	dadangmik@gmail.com	[Edit] [Hapus]
3	SEKRETARIS LURAH	5 Januari 2022	Penting	dadangmik@gmail.com	[Edit] [Hapus]
4	KASI PEMERINTAHAN	3 Januari 2022	Penting	adikarocks@gmail.com	[Edit] [Hapus]
5	KASI EKONOMI DAN PEMBANGUNAN	2 Februari 2022	Biasa	adikarocks@gmail.com	[Edit] [Hapus]
6	KASI EKONOMI DAN PEMBANGUNAN	11 Februari 2022	Biasa	adikarocks@gmail.com	[Edit] [Hapus]
7	KASI PEMERINTAHAN	22 Februari 2022	Biasa	adikarocks@gmail.com	[Edit] [Hapus]
8	KASI PEMERINTAHAN	24 Februari 2022	Penting	adikarocks@gmail.com	[Edit] [Hapus]
9	KASI PEMERINTAHAN	7 Maret 2022	Penting	adikarocks@gmail.com	[Edit] [Hapus]

Figure 12. Disposition Page

Add Disposition Data page

Form fields and options:

- Tujuan: [Text Input]
- Tgl. Surat: [Text Input]
- Sifat: Biasa Penting
- Isi: Tindaklanjuti Arsipkan
- Email Penerima: [Text Input]
- Buttons: SIMPAN (green), BATAL (grey)

Figure 13. Add Disposition Data page

System Testing

System testing is an important part that aims to determine errors and deficiencies in the application being tested. In the testing process it aims to find out whether the system to be made meets the criteria in accordance with the application design. The author uses the black box method for testing website-based archive management applications.

Table 4.3. Operator Page Test

Test Class	Testing Details	Expected results	Information
<i>Login</i> Success	Enter the correct username and password	Enter Main Menu	[√] Appropriate [] It is not in accordance with
<i>Login</i> username is correct password is wrong	Enter the correct username and wrong password	Displays an incorrect password message	[√] Appropriate [] It is not in accordance with
<i>Login</i> username wrong password correct	Enter the wrong username and the right password	Displays the message username not found	[√] Appropriate [] It is not in accordance with
<i>Login</i> username is not input password is input	Just enter the password	Displays the message please fill out this field	[√] Appropriate [] It is not in accordance with
<i>Login</i> username is input password is not input	Just enter username	Displays the message please fill out this field	[√] Appropriate [] It is not in accordance with
<i>Dashboards</i>	Click the dashboard menu	Operators can see the main menu of the system	[√] Appropriate [] It is not in accordance with
User Data	Click on the user menu	Operator can view user data	[√] Appropriate [] It is not in accordance with
Add User data	Click the add user button and enter input then save	Operators can add user data	[√] Appropriate [] It is not in accordance with
Save User Data	Click the button select save	Operators can store user data	[√] Appropriate [] It is not in accordance with
Find User Data	Click search for the required user data	Operators can view search results	[√] Appropriate [] It is not in accordance with
Change User Data	Click the edit user data icon	Operator can change user data	[√] Appropriate [] It is not in accordance with
Delete User Data	Click the delete user data icon	Operators can delete user data	[√] Appropriate [] It is not in accordance with
Incoming mail	Click the inbox menu	Operators can add incoming mail data	[√] Appropriate [] It is not in accordance with
Add Incoming Mail Data	Click the add button and enter input then save	Operators can add incoming mail data	[√] Appropriate [] It is not in accordance with
Save Incoming Mail Data	Click the button select save	Operators can store incoming mail data	[√] Appropriate [] It is not in accordance with
Find Inbox	Click search letter needed	Operators can view search results	[√] Appropriate [] It is not in accordance with
Edit Incoming Mail Data	Click the edit incoming mail data icon	Operators can edit incoming mail data	[√] Appropriate [] It is not in accordance with
Delete Incoming Mail Data	Click the delete incoming mail data icon	Operators can delete incoming mail data	[√] Appropriate [] It is not in accordance with
Outgoing mail	Click the outgoing mail menu	Operators can add outgoing mail data	[√] Appropriate

Test Class	Testing Details	Expected results	Information
			[] It is not in accordance with
Add Outgoing Mail Data	Click the add button for outgoing mail data and input input then save	Operators can add outgoing mail data	[√] Appropriate [] It is not in accordance with
Save Outgoing Mail Data	Click the button select save	Operators can store outgoing mail data	[√] Appropriate [] It is not in accordance with
Search Outgoing Mail	Click search letter needed	Operators can view search results	[√] Appropriate [] It is not in accordance with
Send Outgoing Mail Data	Click the icon send outgoing mail data	Operators can send outgoing mail data	[√] Appropriate [] It is not in accordance with
Change Outgoing Mail Data	Click the edit outgoing mail data icon	Operators can change outgoing mail data	[√] Appropriate [] It is not in accordance with
Delete Outgoing Mail Data	Click the delete outgoing mail data icon	Operators can delete outgoing mail data	[√] Appropriate [] It is not in accordance with
Disposition Letter	Click the disposition letter menu	Operators can add disposition letter data	[√] Appropriate [] It is not in accordance with
Add Disposition Data	Click the add data disposition button and enter the input then save	Operators can add disposition data	[√] Appropriate [] It is not in accordance with
Save the Disposition Letter Data	Click the button select save	Operators can store disposition letter data	[√] Appropriate [] It is not in accordance with
Find a Disposition Letter	Click search letter needed	Operators can view search results	[√] Appropriate [] It is not in accordance with
Edit Disposition Letter Data	Click the edit data disposition letter icon	Operators can edit disposition letter data	[√] Appropriate [] It is not in accordance with
Delete Disposition Letter Data	Click the delete data disposition letter icon	Operators can delete disposition letter data	[√] Appropriate [] It is not in accordance with
<i>Logout</i>	Click the Logout icon	The operator successfully exited the archive application	[√] Appropriate [] It is not in accordance with

Table 4.4. Lurah's Yard Testing

Test Class	Testing Details	Expected results	Information
<i>LoginSuccess</i>	Enter the correct username and password	Enter Main Menu	[√] Appropriate [] It is not in accordance with
<i>Loginusername is correct password is wrong</i>	Enter the correct username and wrong password	Displays an incorrect password message	[√] Appropriate [] It is not in accordance with
<i>Loginusername wrong password correct</i>	Enter the wrong username and the right password	Displays the message username not found	[√] Appropriate [] It is not in accordance with
<i>Loginusername is not input password is input</i>	Just enter the password	Displays the message please fill out this field	[√] Appropriate [] It is not in accordance with

Test Class	Testing Details	Expected results	Information
Loginusername is input password is not input	Just enter the username	Displays the message please fill out this field	[√] Appropriate [] It is not in accordance with
Dashboards	Click the dashboard menu	Operators can view the system's main menu and reports in the form of diagrams	[√] Appropriate [] It is not in accordance with

Testing with Integration

In this test the results obtained from each menu can be seen in the tables below.

Table 4.5 Testing Login Page Program Integration

Test Steps	Test Step Description	Expected Result	Actual Results	Status
Actor Users - Login				
Test Case Description: Test Login with a Valid Username and Password				
1	Running system (localhost/mail)	The system is successfully run to the login page	The system is successfully run and redirected to the Login page	Valid
2	Enter a valid username	The username field can be filled	<i>Inputs</i> Username is successful	Valid
3	Enter a valid password	The password field can be filled	<i>Enter passwords</i> successful and displayed with dots	Valid
4	Pressing the Login button	<i>Users</i> successfully logged in and redirected to the main menu page	<i>Users</i> successfully logged in and redirected to the main menu page according to user level	Valid
Test Case Description: Test Login with Valid Username and Invalid Password				
1	Running system (localhost/mail)	The system is successfully run to the login page	The system is successfully run and redirected to the Login page	Valid
2	Enter a valid username	The username field can be filled	Username input was successful	Valid
3	Enter a valid password	The password field can be filled	<i>Inputs</i> the password is successful and is displayed with dots	Valid
4	Pressing the Login button	<i>Users</i> unable to login, the system will display that the username or password entered is incorrect and the system will redirect to the login page	The system runs as expected	Valid
Test Case Description: Test Login with Invalid Username and Valid Password				
1	Running system (localhost/mail)	The system is successfully run to the Login page	The system is successfully run and redirected to the Login page	Valid
2	Enter a valid username	The username field can be filled	<i>Inputs</i> Username is successful	Valid

Test Steps	Test Step Description	Expected Result	Actual Results	Status
3	Enter a valid password	The password field can be filled	<i>Enter passwords</i> successful and displayed with dots	Valid
4	Pressing the Login button	<i>Users</i> unable to login, the system will display that the username or password entered is incorrect and the system will redirect to the login page	The system runs as expected	Valid
Test Case Description: Test Login with Invalid Username and Password				
1	Running system (localhost/mail)	The system is successfully run to the Login page	The system was created successfully and redirected to the Login page	Valid
2	Enter a valid username	The username field can be filled	<i>Enter usernames</i> succeed	Valid
3	Enter a valid password	The password field can be filled	<i>Enter passwords</i> successful and displayed with dots	Valid
4	Pressing the Login button	<i>Users</i> unable to login, the system will display that the username or password entered is incorrect and the system will redirect to the page <i>login</i>	The system runs as expected	Valid
Test Case Description: Test Login with a Username and Password that is not entered or the username and password fields are empty				
1	Running system (localhost/mail)	The system is successfully run to the Login page	The system is successfully run and redirected to the Login page	Valid
2	Enter a valid username	The username field can be filled	<i>Enter usernames</i> succeed	Valid
3	Enter a valid password	The password field can be filled	<i>Enter passwords</i> successful and displayed with dots	Valid
4	Pressing the Login button	The user cannot login, the system will display that the username or password entered is incorrect and the system will redirect to the login page	The system runs as expected	Valid

Table 4.6 User Data Integration Test

Test Steps	Test Step Description	Expected Result	Actual Results	Status
Actor Operator – Records Management				
<i>Test Case Description: Testing User Data</i>				
1	The operator selects the user menu	Displays user data	The system successfully displays user data	Valid
2	Click the add new user button	The system will display the add user form	The system displays the added user successfully	Valid
3	Click the save button	Displays data successfully saved	The system successfully saved the data	Valid
4	Click the edit user data button	Displays the user data edit page	Successfully displays the user data edit page	Valid
5	Click the user search search field	Displays user search results	Successfully displays the user's search results	Valid

Table 4.7 Integration Test of Incoming Mail Data

Test Steps	Test Step Description	Expected Result	Actual Results	Status
Actor Operator – Records Management				
<i>Test Case Description: Test Data Incoming Mail</i>				
1	The operator selects the incoming mail menu	Displays incoming mail data	The system successfully displays incoming mail data	Valid
2	Click the add data button	The system will display an incoming mail form	The system successfully displays the form added incoming mail	Valid
3	Click the save button	Displays data successfully saved	The system successfully saved the data	Valid
4	Click the search column search incoming mail	Displays search results for incoming mail data	Successfully displays search results for incoming mail data	Valid

Table 4.8 Outgoing Mail Data Integration Test

Test Steps	Test Step Description	Expected Result	Actual Results	Status
Actor Operator – Records Management				
<i>Test Case Description: Test Outgoing Mail Data</i>				
1	The operator selects the outgoing mail menu	Displays outgoing mail data	The system successfully displays outgoing mail data	Valid
2	Click the add data button	The system will display an outgoing mail form	The system successfully displays the form added outgoing mail	Valid
3	Click the save button	Displays data successfully saved	The system successfully saved the data	Valid
4	Click the Send icon	Displays outgoing mail sheet	The system successfully sent outgoing mail	Valid
5	Click the search column search incoming mail	Displays search results for incoming mail data	Successfully displays search results for incoming mail data	Valid

Table 4.9 Testing of Disposition Letter Data Integration

Test Steps	Test Step Description	Expected Result	Actual Results	Status
Actor Operator – Records Management				
<i>Test Case Description: Testing Disposition Letter Data</i>				
1	The operator selects the disposition letter menu	Displays disposition letter data	The system successfully displays disposition letter data	Valid
2	Click the button to add disposition letter data	The system will display a disposition letter form	The system successfully displays the form added disposition letter	Valid
3	Click the save button	Displays data successfully saved	The system successfully saved the data	Valid
4	Click the search column for disposition letters	Displays search results for disposition letter data	Successfully displays the search results for disposition letter data	Valid

Beta Testing

Beta Testing Beta testing is a test carried out with the aim of knowing the extent to which the quality of the system, whether the system that has been designed meets expectations or does not meet expectations. For this reason, in beta testing, research was carried out on respondents or system users by collecting data using a questionnaire or questionnaire. Beta testing of the application uses a questionnaire given to 32 respondents, namely 1 Village Head, 20 computer operators, 6 Administrative Personnel and 5 other employees. Questionnaires or questionnaires will be submitted to respondents or system users using the Technology Acceptance Model (TAM) method. Question grids include Perceived Usefulness, Perceived Ease of Use, Attitude Toward Using, Behavioral Intention to Use, Actual System Use.

The method of testing is done by looking at the results of the questionnaire that has been filled in according to the questions that have been asked, for the calculation will be carried out using the formula below. Each answer will be given a score of:

SS means Strongly Agree	= 5
S stands for Agree	= 4
N stands for Neutral	= 3
TS means Disagree	=2
STS means Strongly Disagree	= 1

To find the percentage value of each questionnaire answer, the Likert scale formula is used as follows.

$$P = \frac{Skor}{Skor\ Ideal} \times 100\%$$

Based on the percentage results obtained through questionnaire calculations for each statement for each respondent, the following results are obtained.

Perceived Usefulness with percentages (90%, 90%, 89%, 90%) can be taken on average, namely 89.8% of the 32 respondents who approved the questions that have been submitted through the questionnaire given to the responses.

Perceived Ease of Use with a percentage (89%, 88%, 88%, 88%) it can be taken on average that is 88.3% of 32 respondents who agreed with the questions that have been submitted through the questionnaire given to the responses.

Attitude Toward Using with percentages (91%, 91%, 89%, 91%) it can be taken on average that is 90.5% of the 32 respondents who agreed with the questions that have been submitted through the questionnaire given to the responses.

With the percentage of Behavioral Intention to Use (89%, 91%, 89%, 91%) it can be taken that the average is 90% of the 32 respondents who agreed with the questions that were submitted through the questionnaire given to the responses.

Actual System Use with percentages (80%, 74%, 76%, 73%) can be taken on average, namely 75.8% of 32 respondents who approved the questions that have been submitted through the questionnaire given to the responses.

Based on the results of alpha testing and beta testing on the Website-Based File Management Application Case Study of the Cijerah Village using a questionnaire that was conducted on 32 respondents, namely 1 Village Head, 20 computer operators, 6 Administrative Personnel and 5 other employees. The test results have shown that the application built is useful for operators and admins to manage archival data.

CONCLUSION

Based on the results of the research and discussion that has been carried out, several conclusions can be drawn, namely: This archive management application has conducted beta testing which has obtained results that make it easier for operators to manage mail archiving because it is already computerized so that it will facilitate the process of managing mail data automatically previously not computerized. The application that was built can simplify the search process, no longer searching archive folders one by one and can minimize the occurrence of letter data loss. There is an update report that can be viewed immediately by accessing it online through the website so that report information can be obtained quickly.

The results of data analysis of service features and word of mouth, they simultaneously and significantly affect customer decisions in using mobile banking for BSI Cirebon KCP Plered 2 customers with an influence percentage of 21.89%. Customers who use mobile banking will continue to experience an increase if the service features continue to offer features that provide many conveniences for transactions and are balanced with promotions through word of mouth marketing strategies. The research conclusions are presented briefly, narratively, and conceptually that describe the research findings and their impact. Avoid using numbering and symbols (bullet and numbering).

BIBLIOGRAPHY

- Agustiono, W., Putri, I. R. & Anamisa, D. R. (2021). Desain Layanan E-Surat Untuk Desa Waru Barat, PAMEKASAN, Madura Menggunakan QR-code. *Jurnal Teknologi Informasi dan Ilmu Komputer*, 8(6), p.1127.
- Amalia, R. & Huda, N., 2020. Sistem Informasi pengarsipan Surat Masuk Dan surat Keluar Pada Dinas Tenaga Kerja Dan Transmigrasi kabupaten musi banyuasin. *Jurnal Media Informatika Budidarma*, 4(2), p.363.
- Guntari, R. & Setiawan, R., (2016). Rancang Bangun Aplikasi Pengelolaan surat di desa tanjung kamuning. *Jurnal Algoritma*, 13(2), 269–274.
- Mulyani, G., Zulhalim, Z. & Yasin, V., 2021. Perancangan aplikasi e-persuratan berbasis web menggunakan framework codeigniter Pada Direktorat lalu Lintas Dan Angkutan Laut Kementerian Perhubungan. *Journal of Information System, Applied, Management, Accounting and Research*, 5(3), p.546.
- Ninia, L. T. (2020). Sistem Informasi E-ARSIP Berbasis web (Studi Kasus: PT Haleyora Powerindo Cabang Sorong). *Jurnal Jendela Ilmu*, 1(1).
- Saputra, C., Sulistyanto, A., & Sianipar, A. Z. (2021). Pengaruh Pengalaman Kerja, Prestasi Kerja, Pendidikan dan Pelatihan terhadap Pengembangan Karir pada PT. PLN (Persero) Kota Padang Rayon Kuranji. *Journal of Information System, Applied, Management, Accounting and Research.*, 5(2), 523–531. <https://doi.org/10.52362/jisamar.v5i2>
- Tamarawati, S., (2020). Aplikasi Sistem Informasi pengolahan data Administrasi Pada Klinik Mitra Sehat Jakarta Selatan berbasis java. *JURNAL FASILKOM*, 10(3), 261–266.
- Wardana, S. H. (2010). Menjadi Master PHP dengan Framework Codeigniter. Elex Medi Komputindo.