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APPLICATION OF ARCHIVE SYSTEM IN BATANG CEMERLANG COOPERATIVE

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Abstract. *Documents owned by organizations have a very big and important role because they help leaders in decision-making to achieve the desired goals and carry out operational activities. To achieve this goal, it is necessary to have good and effective document management and easy to rediscover archives, so an archive system application is needed that aims to manage archives and store archives digitally. The archive system application was created to assist the Batang Cemerlang Cooperative in storing archives digitally and rescuing archives. This application was created using the waterfall method and the research and development (R&D) method. There are five stages in creating an application system, namely analysis, design, testing, implementation and evaluation. The result of this research is an archive application that is easy to use by users, able to store archives digitally and can be accessed anywhere so as to help leaders in decision-making. In conclusion, this application is very helpful for the Batang Cemerlang Cooperative in storing archives and saving archives from damage. The hope for further research is the development of an archive system application to maintain effectiveness and work efficiency.*

Keywords: *Archives, Application, Cooperative, R&D Method, Waterfall Method.*

1. INTRODUCTION

The smooth running of operational activities is a determining factor for the success and achievement of organizational goals, one of the supports for this success is good archive management. Archives have an important role and support the achievement of goals, decision-making, planning and supervision in the organization (Adila et al., 2024). Sedarmayanti said that archive management needs attention and there are still obstacles faced by organizations in managing archives such as lack of knowledge about archives, increasing archive volumes and the absence of archive management guidelines (Muhidin et al., 2016). Archive management is considered good if the document search time is not too long and the archive management activities are carried out properly and correctly. The impact felt is the ease of making planning, decision-making, control functions, supervision, evidence and reminders (Kharis et al., 2023; Mulyapradana et al., 2023).

Law Number 43 of 2009 explains that "archives are recordings of activities or events in various forms and media in accordance with the development of information and communication technology made and received by state institutions, local governments, educational institutions, companies, political organizations, community organizations, and individuals in the implementation of society, nation, and state life" (Undang-Undang Republik Indonesia, 2009).

The Batang Cemerlang Cooperative is a business savings cooperative engaged in the production of ice blocks for the needs of fishermen in the Batang Regency Fish Auction Area. In one month, the cooperative can produce as many as 500 ice blocks,

many requests for ice blocks have an impact on the number of order letters from fishermen. The administrative staff at the Batang Cemerlang Cooperative receives an average of around 20 order letters in one day. The large number of order letters is a concern from the cooperative to process all orders and archive storage must be carried out properly so that there are no missing order letters. In addition to order letters from consumers, cooperatives create and receive many important documents for their operational activities. Therefore, the archive management system must run well and appropriately to support its smooth operation.

Cooperative leaders also need to pay attention to the location of the cooperative in an area prone to rob disasters because operational activities and archive management activities will be hampered if the cooperative office is hit by a flash flood. The impact felt in addition to the inhibition of all work activities is the damage to the physical facilitation of the office and the documents it has. Documents will be damaged due to moisture and exposure to water does not even rule out the possibility that it will be lost. These problems need to be overcome as soon as possible so that work activities can run smoothly. There needs to be a solution to this problem, therefore researchers are interested in exploring it. Identification of problems faced by partners is still manual archive management and cooperative locations in areas prone to rob disasters. So it can be formulated, namely "how can archive applications optimize archive governance?".

2. LITERATURE REVIEW

2.1 Archives

Archives, Abdul Jalaluddin said that written notes, either in the form of pictures or charts, contain information about topics or events that are still useful or needed in the future (Mulyapradana & Zulaekho, 2018). Basri and Devitra explained about archives that the recording of activities or events in various forms and media must be managed properly and carefully (Suryanto & Putra, 2020). Haryanto Dadang and Anwar Nasihin said that archiving is a process of organizing and storing materials or documents systematically so that these materials can be searched quickly or their location is known whenever needed (Afif & Dewi, 2020).

The important role of archives can be felt by organizations following the benefits of archives; as an information center, decision-making material and as evidence (Kuswantoro, 2017). Activities in archive management are as follows: archive removal, archive arrangement, archive storage, archive borrowing, archive rediscovery, archive maintenance, archive security and archive shrinkage (Mulyapradana et al., 2021).

2.2 Management Information System

A system is a set of elements that are interconnected and mutually influencing in one particular environment. Information is a collection of data that has been processed, both qualitative and quantitative, and has a broader meaning. Management information system is a communication process where inputs are recorded, stored, and retrieved to present decisions in the form of outputs regarding planning, operation, and control (Rochaety, 2016).

A management information system can be defined as a system that integrates the interaction between humans and machines to present information that supports operational activities, management functions, and decision-making in an organization. The main purpose of the management information system is to manage data and transactions so that it can produce information that is useful for the smooth operation, management, and decision-making process. The scope of management information systems includes data collection, data storage, data management, and information distribution (Rosallina & Adiguna, 2023).

The functions of information management systems include improving data accessibility, ensuring the availability of quality and skills in critically utilizing

information systems, developing effective planning processes, identifying the need for information system support skills and determining investments that will be directed to information systems (Rochaety, 2016). The objectives of using driver's licenses for organizations and companies are as follows: improve operational efficiency, improve coordination and communication, increase customer satisfaction and increase competitiveness (Ramadian & Nugroho, 2024)

3. RESEARCH METHODS

The object of this research is the Batang Cemerlang Cooperative located in the Fish Auction Area of Batang Regency, Central Java Province, This activity takes place from August to December 2024. There are two data sources used in this study, namely primary data and secondary data. Primary data was obtained through observation and interviews while secondary data was obtained through literature studies. To obtain valid and reliable data, the researcher uses the triangulation technique (Suprianto & Mulyapradana, 2023).

The method used in this study is the waterfall and research and development (R&D) method, the method is used to create an archival system at the Batang Cemerlang Cooperative. There are five stages of planning for the design of the archive system, including analysis, design, testing, implementation and evaluation.

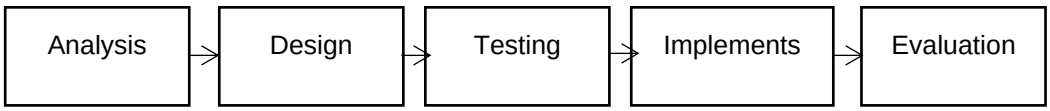
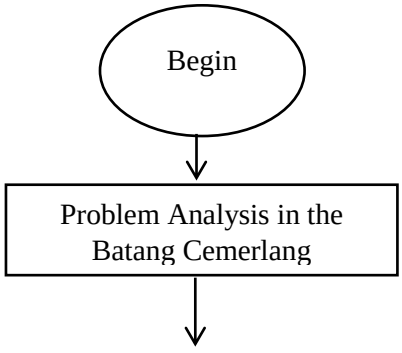


Figure 1. Planning Stages of System Creation

a. Analysis; At this stage, the researcher determines the goals and objectives of the application user to get an overview of the needs of the research object, after which the data received will be filtered, grouped, reviewed and concluded the data obtained.
b. Design; The stage of designing the system that will be made as for the things that need to be prepared at this stage are the application architecture, style, appearance and materials needed.
c. Testing; To ensure that the system made can be used and ensure that there are no obstacles in the system, this stage has an important role.
d. Implementation; At this stage, the system has been created and ensures that the system runs smoothly without any problems.
e. Evaluation; This stage is material for the development of the system that has been created because the user provides input on the use of the system.

For the research flow based on the phenomena that occur in the research object, figure 2 explains the stages in making an archive system using the waterfall method. Here's the flow of the research:



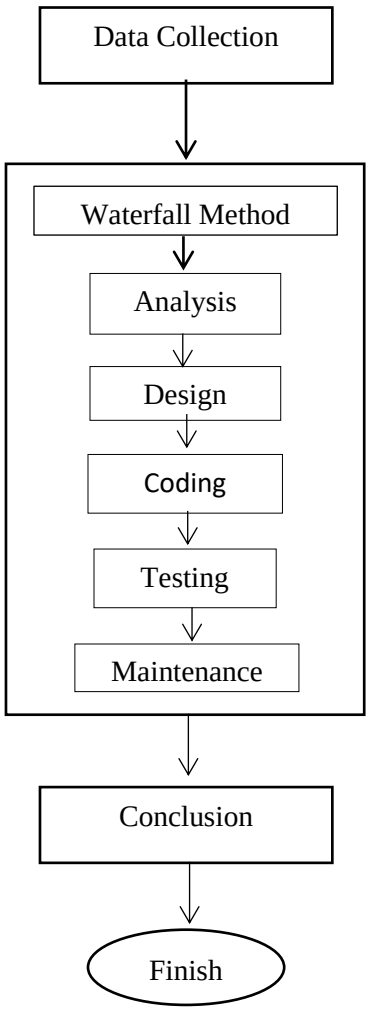


Figure 2. Thinking Framework

4. RESULTS AND DISCUSSION

The problems faced by the research partner, namely the Batang Cemerlang Cooperative, have been mapped by researchers through interviews and observation activities. To obtain very accurate and detailed data, the researcher conducted interviews with operational managers and administrative staff of the Batang Cemerlang Cooperative. The problem faced is that the location of the Batang Cemerlang Cooperative office is in the Batang Regency Fish Auction Area, Central Java Provincewhich is often hit by flash floods and has an impact on cooperative operational activities are hampered. Archive management activities at the Batang Cemerlang Cooperative have been running but are still manual and using Microsoft Office, in the event of a flood of archive management activities will be hampered. In addition, the large number of piles of files on the desk and corner of the workspace results in the length of time to find the required documents and there are some missing files so that archive management is not optimal and can hinder decision-making. To overcome these obstacles, an archive system or application is needed to manage documents digitally that are easily accessible anywhere.

The archive system that will be created has two actors who have a role in the operation of this archive system, namely the admin and the leader. This system can help admins in managing documents, inputting incoming and outgoing letters, searching for needed documents and supervision and decision-making can be easily fulfilled. To create this archive system, software and hardware are needed, here are the needs:

a. Software requirements consist of PHP RAD Classic, XAMPP, Notepad++.
b. Hardwar requirements consist of 4 GB of RAM, a 250 GB SSD for storage, and a 3rd generation Intel Core i3 processor.

To make an archive system design, two designs are needed, including design design and user interface design.

1. Use Case Diagram; its function is to visually describe who uses this application and the interaction between users. There are two actors, namely the admin and the leader. Here is the admin usercase presented in figure 3.

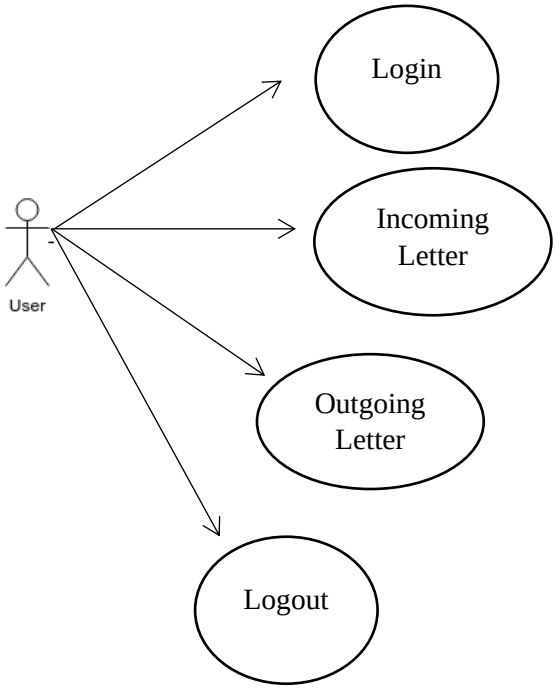


Figure 3. Usecase Admin

Figure 3 is a usecase with admin and leadership actors, there are emapt usecases, namely login, incoming mail, outgoing mail and logout.

1) Login; Admins can input usernames and passwords to access the system, followed by logging in and displaying the dashboard page. For the dashboard page, there is a display of mail data reports that have been inputted, both incoming and outgoing mail.
2) Incoming mail; Activities to add and edit incoming mail received by the admin.
3) Outgoing letters; Activities of adding and editing outgoing letters.
4) Metal; Activities out of correspondence activities by having a logo icon.

2. Activity Diagram; describe the processes that occur in the system and explain the business processes contained in the system (Suparmadi et al., 2024). Here's the activity diagram:

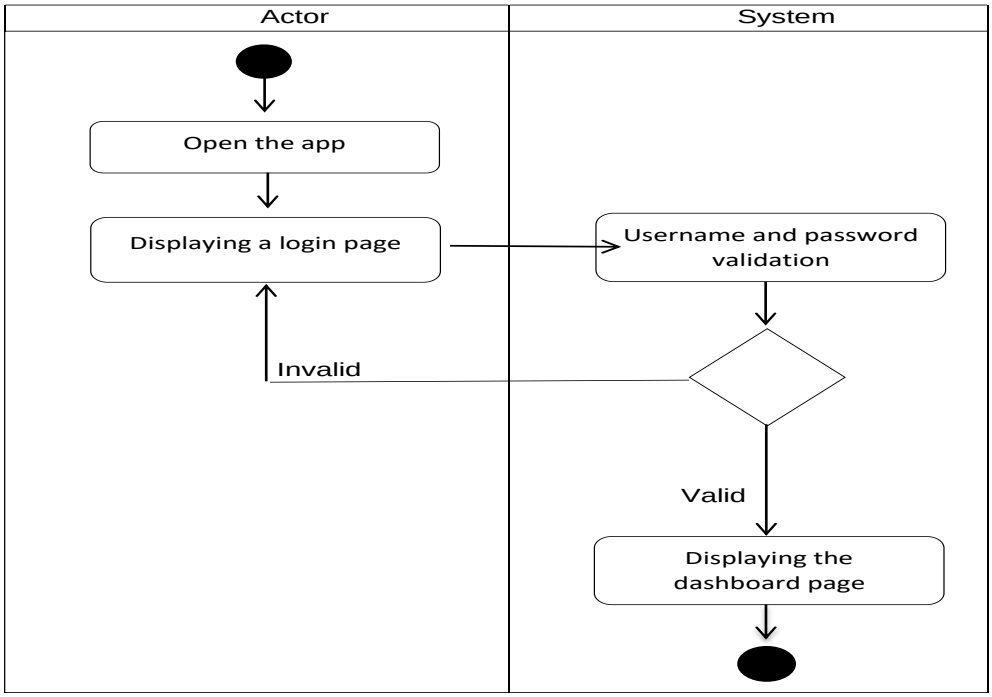


Figure 4. Activity Diagram Login

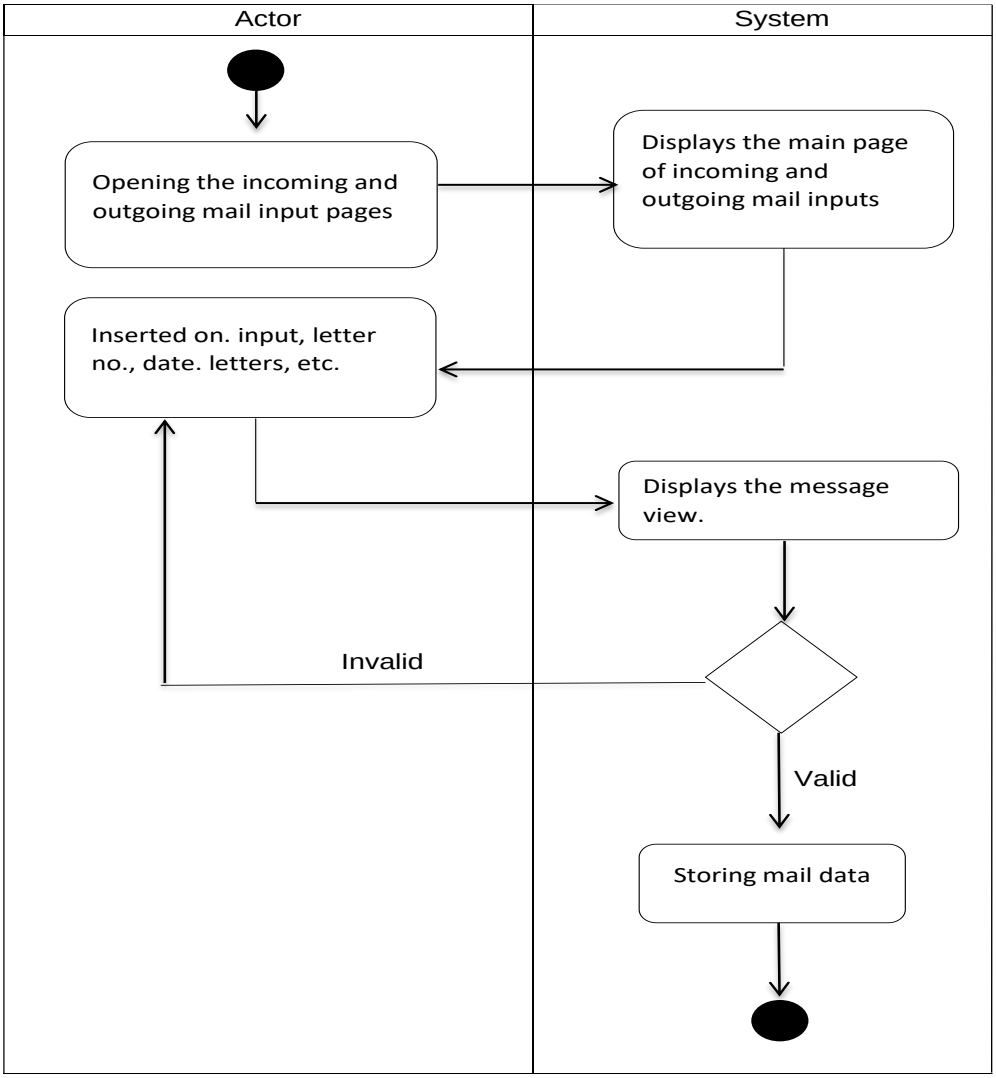


Figure 5. Activity Diagram Input Incoming and Outgoing Letters

Figure 4 explains about admins and leaders to enter the login page in the archive application. The first step, the admin and the leader open the main login page. Then the system will display the login menu. Then enter the username and password, if the admin and leaders make a mistake in entering the username and password, they will return to the login page. On the other hand, if it is true, the system will display the main menu in the archive application. Figure 5 explains the activities of the admin in managing incoming and outgoing letters. First, the admin opens the main page, namely the mail display, then select the incoming mail and outgoing mail input menu display, display the mail addition menu, display the mail change menu and the mail deletion menu. After that, the admin manages the mail and stores the mail in the system.

3. Interface Design; In this study, a digital archive system is produced. The product design is made based on story boards and databases that have been adapted to the needs of the system. The following is the appearance of this system, namely login, username, password, then if successfully accessed, users can access this archive system.
   a. Login; display to access the Batang Cemerlang Cooperative archive application. User enters the username and password that has been created.

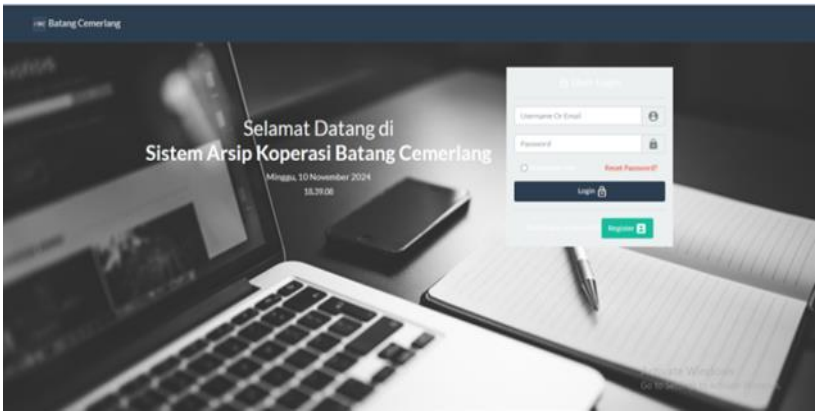


Figure 6. Login Page

   b. Dashboard; View to view the report on the number of incoming and outgoing mails that have been inputted.

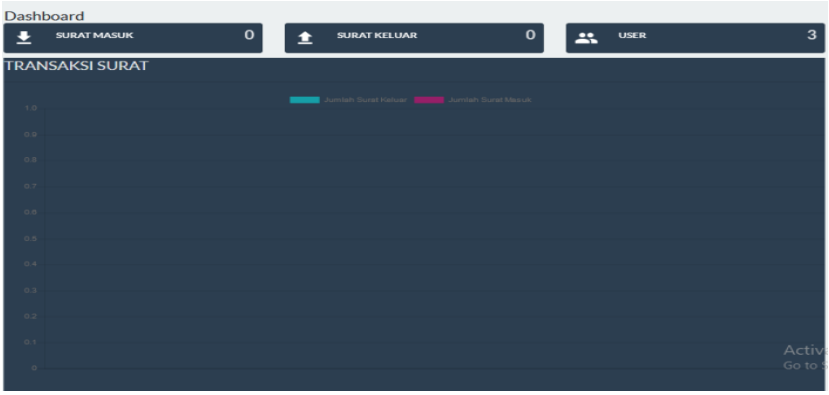


Figure 7. Dashboard Page

   c. Incoming mail page: this view is where to access incoming mail received by the user. The activities carried out are that users can access, input and edit in this

archive application.

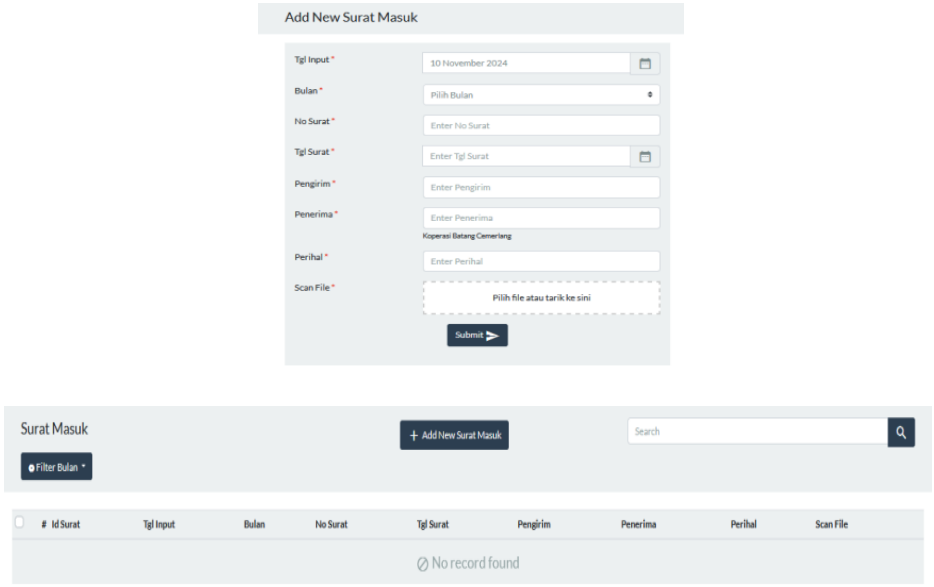


Figure 8. Incoming Letter Page in the Batang Cemerlang Cooperative archive system application

a. Outgoing mail pages; This view is where to access the outgoing mail received by the user. The activities carried out are that users can access, input and edit in this archive application.

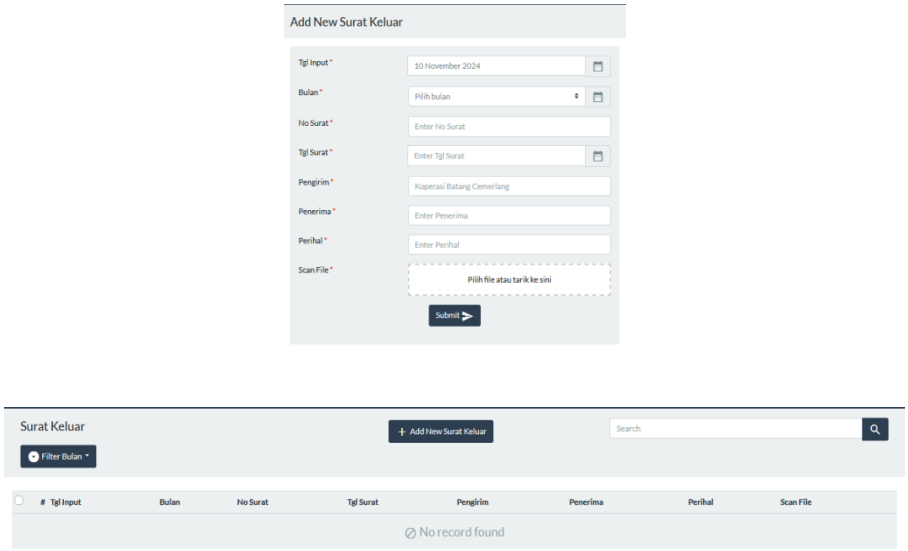


Figure 9. Outgoing Letter Page in the Batang Cemerlang Cooperative archive system application

CONCLUSION

The Batang Cemerlang Cooperative archive application is designed to help overcome the problems faced because the location of cooperative operational activities in areas prone to flash floods so that the archives they have must be saved so that they are not lost and damaged by disasters. In addition, with this application, the cooperative has started to switch to digital archive management so that it is easy to search for

archives quickly, minimize file loss and help leaders for decision-making. The appearance of this application is very simple because it makes it easy for users to access, input data and control all the documents they have.

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