

Design of a Web-Based Mail Management System at The Sub- District Office of Tano Tombangan Angkola

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ABSTRACT

In the process of modernizing the administration, it is necessary to implement an information system that can support all administrative activities in an institution, institution or company. At the CAMAT Tano Tombangan Angkola office, South Tapanuli Regency, there is still a conventional letter archive management method where archive recording is still carried out using books and stationery. This often causes many problems, such as loss of documents, damage or documents that are not recorded. During the practical work, the author tries to develop an application that can record all archives in the agency. Then it will be stored in a database and can be accessed anytime and anywhere. As a result, many benefits are provided to the agency, such as more structured and neat archive data collection.

Keyword : Mail, Data Collection, Archives, Database



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1. INTRODUCTION

Along with the development of science and information technology at this time is growing quite rapidly. It is increasingly triggered to use advanced technology as a tool or medium to maintain its existence in society. An agency needs a filing information system because the filing information system is a system that processes data to produce an agency will produce the right information. The information in an agency will produce fast and accurate information. Fast means producing information in a timely manner and accurate means that the archiving information produced can reduce errors.

There are various kinds of archives stored, including incoming letters and outgoing letters such as assignments, requests and others. Records of incoming and outgoing letters are done by manually recording incoming and outgoing activities in an archive notebook.

Currently, mail processing at the Tano Tombangan Angkola CAMAT Office still uses a manual system. Letter storage is still in the form of archives stored in a book and is irregular, so it requires high accuracy and takes a long time to search for the desired letter and can cause the loss of archives that have been stored. From these activities the process carried out for archiving letters is still slow and the time required is very long.

With this information technology aims to improve the efficiency, accuracy and security of archived documents. It is hoped that this filing technology can facilitate the filing of staff letters at the CAMAT Office. Letter filing is more efficient and effective.

2. RESEARCH METHOD/MATERIAL AND METHOD/LETERATURE REVIEW

A. Implementation Stage

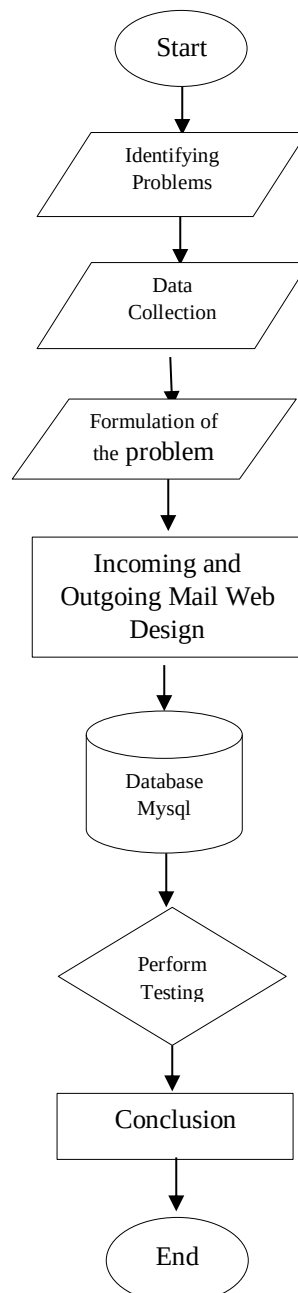


Figure 1. Flowchart of Implementation Stages

Based on the flowchart, the discussion of each stage in the research can be described, namely:

1. Identifying the Problem: With the problem that has been described, a way out is needed to solve the problem so that it is known how to design the solution system.
2. Data Collection: This stage is carried out by observing the problem so that it can collect the necessary data.
3. Problem Formulation: This stage formulates the problem based on the data that has been collected.
4. Web Design of Incoming Letters and Outgoing Letters: This stage is an activity to design a system to increase the effectiveness of performance to meet the requirements of the needs by utilizing the available technology in problem solving.
5. This stage is the stage for the process to create, edit, test the program in accordance with the system design.
6. Conducting Testing Program. This stage This stage conducted to determine the success and shortcomings of the system so that it is feasible to use.
7. Making Conclusions. This stage is the stage of making conclusions from all the steps taken in designing a good system.

Model base management is a system design process that is visualized through a visual modeling language, namely by using diagrams. In the preparation of this Practical Work report, the Context Diagram design model, DFD (Data Flow Diagram), to ERD (Entity Relationship Diagram) are used.

B. Database Management

Database management is the process of designing database tables that will be implemented in the developed system. Then the database table designed is :

Table 1. Incoming Mail Table

No.	Field Name	Type	Char	Description
1	No_Agenda	Int	11	No. Agenda of IncomingLetters
2	Letter Number	Varchar	255	Incoming Mail Number
3	Date/Letter	Date	-	Incoming Mail Date
4	Date_Received	Date	-	Mail Entry Date
5	Origin/Letter	Varchar	255	Origin of Incoming Mail
6	Subject	Varchar	255	Mail Entry
7	File_Surat	Varchar	500	Mail Entry File

Table 2. Outgoing Mail Table

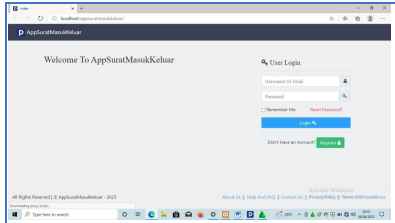
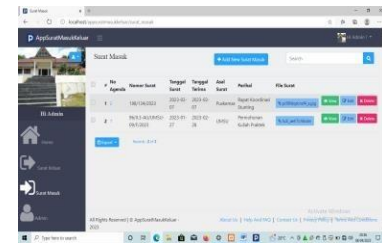
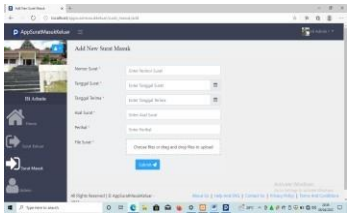
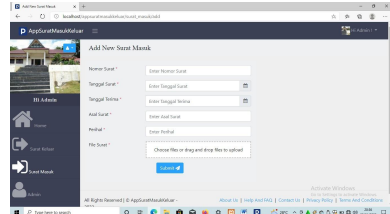
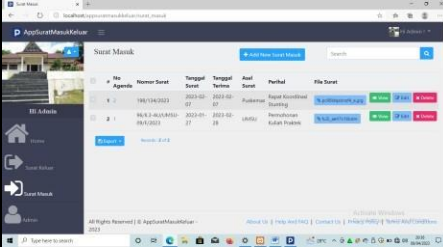
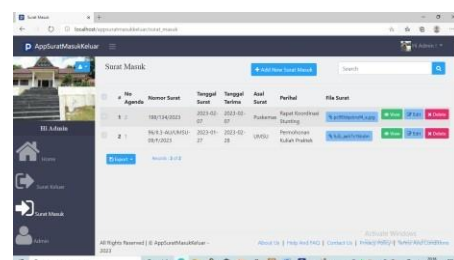
No.	Field Name	Type	Char	Description
1	No_Agenda	Int	11	Outgoing Letter AgendaNumber
2	Date/Letter	Date	-	Mail Out Date
4	Purpose/Letter	Varchar	255	Purpose of Outgoing Mail
5	Letter Number	Varchar	255	Outgoing Letter Number
6	Subject	Varchar	255	Outgoing Letter Subject
7	File_Surat	Varchar	500	Mail Out date

3. RESULTS AND DISCUSSION

A. System Testing

System testing is carried out to find errors in development and make improvements. In this testing process, the method used is the Black Box method.

Table 3. System Testing

NO	Scenario	Test Case	Results	Status
1	Main Page Access	Accessing the Main Page 	Main Page Displayed 	Valid
2	Access Mail List Page	Access Mail List Page 	Mail List Page Shown 	Valid
3	Access the Add Letter and Add Letter pages	Open the Add Letter page and input the letter 	Letter Added to database 	Valid
4	Access Letter Detail Page	Accessing the Mail Detail Page 	Details Page Displayed 	Valid

B. System Implementation

System implementation is done by developing applications based on the design that has been done before, then the results of the development are:

a) Login Page

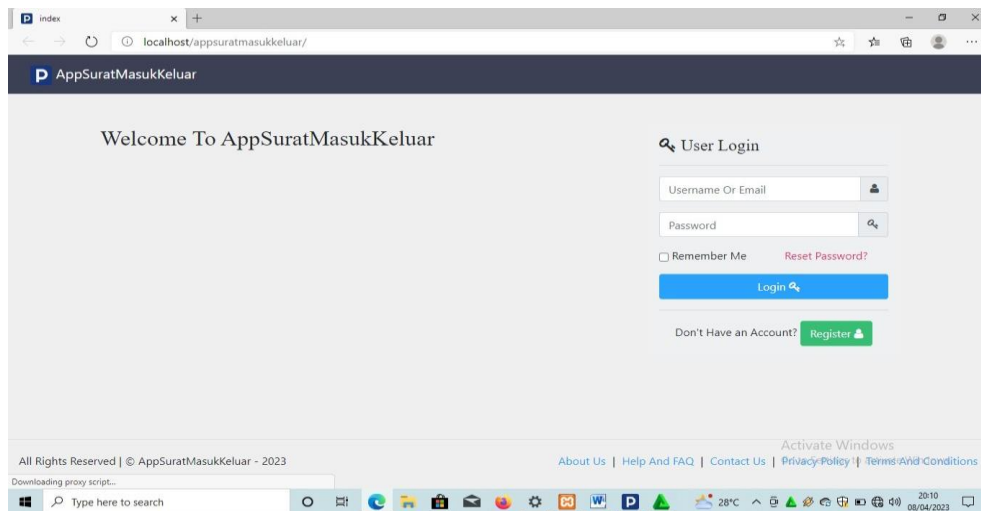


Figure 2. System Login Page

b) Home Page

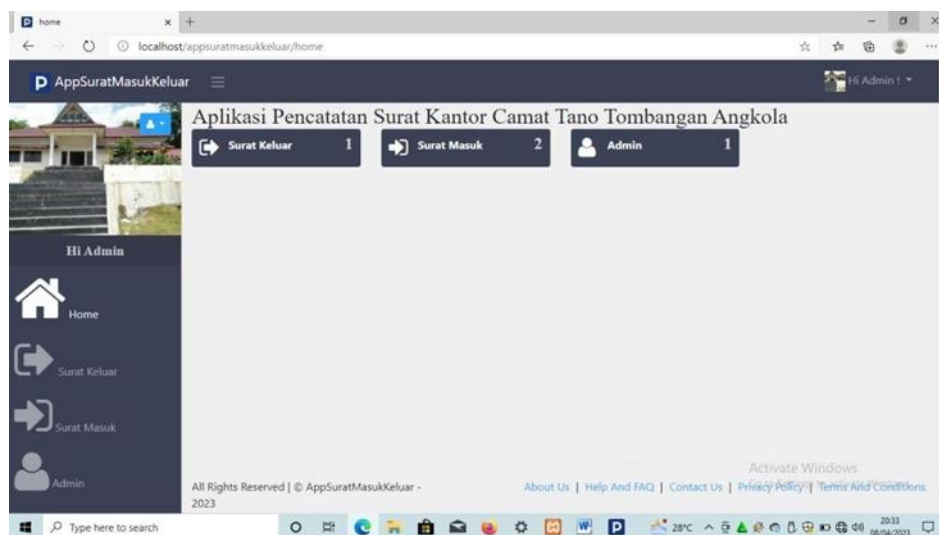


Figure 3. System Home Page

c) Incoming and Outgoing Mail List Page

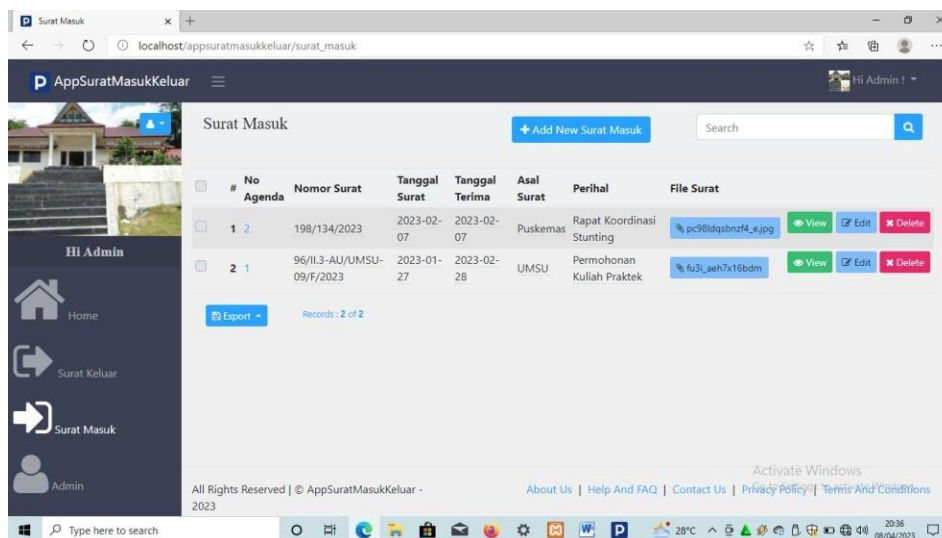


Figure 4. Incoming Mail List

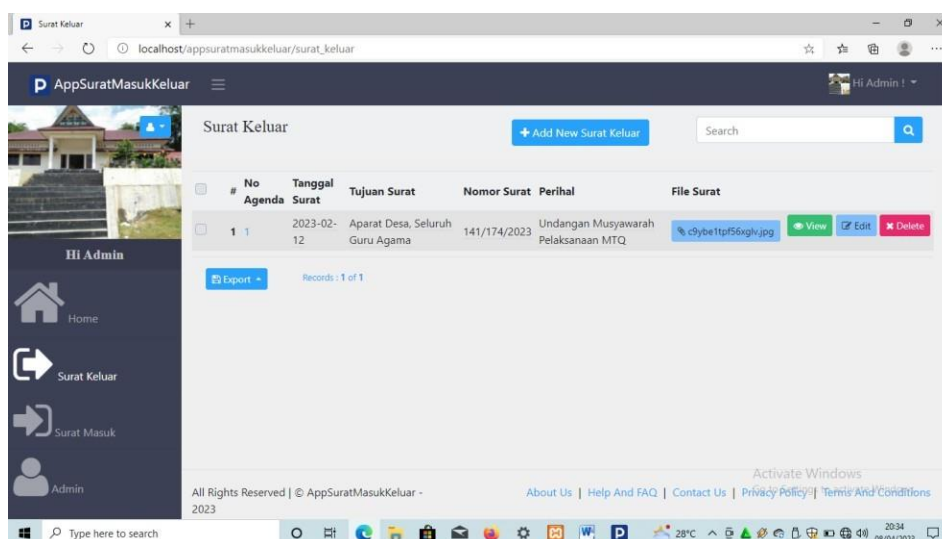


Figure 5. Outgoing Mail List

d) Add Incoming Letter and Outgoing Letter page

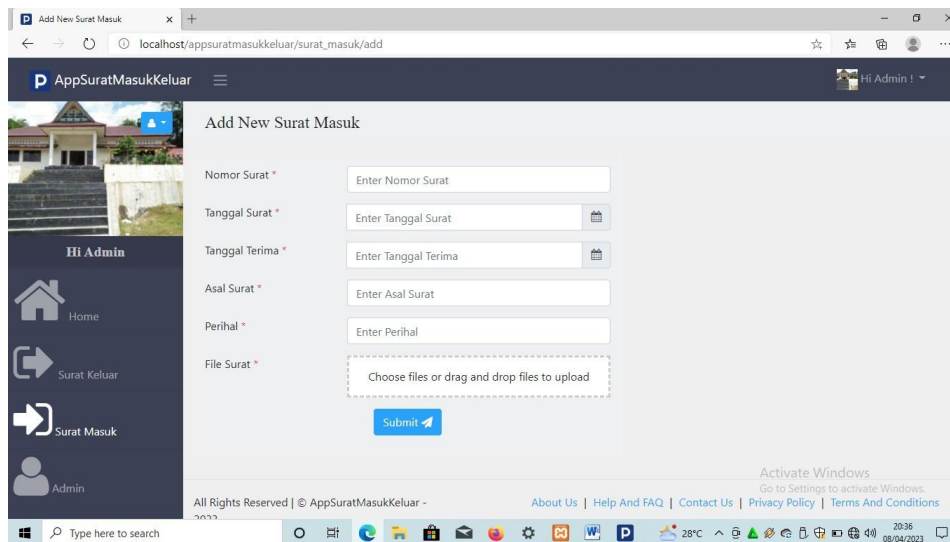


Figure 6. Add Incoming Mail Page

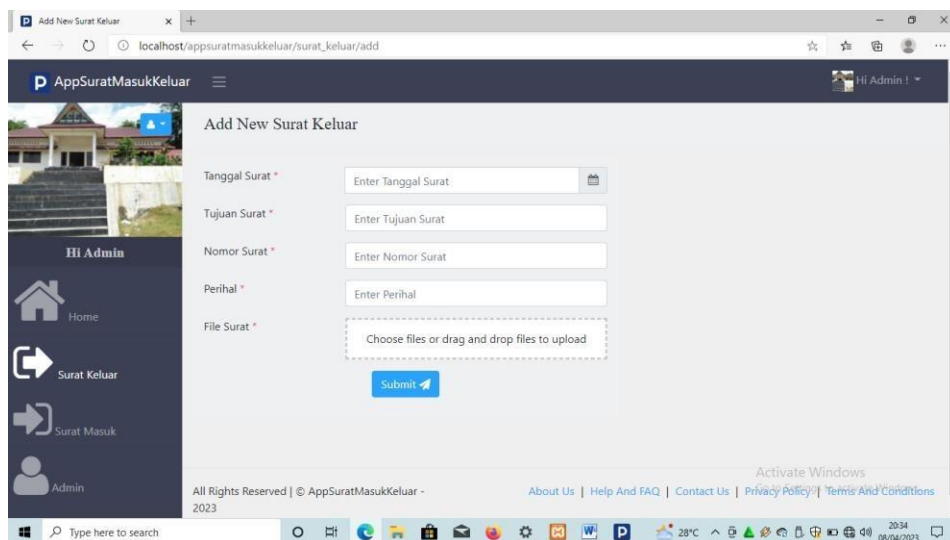


Figure 7. Add Incoming Mail Page

4. CONCLUSION

Based on the previous explanation, the conclusion that can be drawn is:

1. Development of mail data collection applications, carried out by designing using the php programming language, which uses Context Diagrams, DFDs and ERDs which describe how the system works as a whole. Then it can be implemented in the form of an application. The application will record incoming letters and outgoing letters, where the data collection is done by utilizing the database as data storage.

2. This application will be effective where it can help the data collection process digitally so that it can be accessed at any time, so that the mail archiving process becomes easier.

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