

Document Management System in Ibnu Sina Middle School Administration

Nofri Yudi Arifin*¹

Ibn Sina University, Jl. Teuku Umar, Lubuk Baja
Informatics Engineering Study Program, Ibnu Sina University Batam
e-mail: *[1nofri.yudi@uis.ac.id](mailto:nofri.yudi@uis.ac.id),

Abstract

This study aims to design a management system that can assist staff of SMP Ibnu Sina Batam in storing and collecting incoming and outgoing mail data online. Because there is no document management system related to correspondence storage, it is necessary to design a system. The object of this research is the admin and administrative staff of SMP Ibnu Sina, the modeling method used in the system is Unified Modeling Language (UML) while the system research development method uses Object Oriented Analysis Design (OOAD). The purpose of this research is to provide a solution in helping the Administration of SMP Ibnu Sina Batam in saving files online and numbering letters automatically and helping admins in doing their jobs so that they can complete their work properly and can store data safely. The data collection method used is by conducting interviews and collecting various sources, namely library research, observation. The conclusion in this study is that it is hoped that this system can be implemented by admins and other employees to facilitate performance.

Keywords— Document Management System, Object Oriented Analysis Design, UML.

PRELIMINARY

Every institution, company and organization in their daily activities, of course, produces documents. These documents need to be stored and retrieved if one day it is needed for a decision. Thus the document needs to be managed properly so that it is not damaged and easy to find again. SMP Ibnu Sina Batam, is one of the private junior high schools in Batam, Riau Islands Province. Similar to junior high schools in general in Indonesia, the period of school education at Ibnu Sina Middle School in Batam is taken within three academic years, starting from Class VII to Class IX.

Currently, Ibnu Sina Batam Junior High School has been accredited B. This shows the quality of Ibn Sina Batam Junior High School as an institution which is considered professionally to get a good predicate, but to support improving the quality of the institution in the future, an information system is needed in terms of document management that is more comprehensive. good because based on the observations that the author made during the research at the administrative unit of the Ibnu Sina Junior High School Batam, the management and maintenance of documents in the unit is still done manually by using a Gobi to store hardcopy documents. This method is very ineffective because if you want to do a document search it is very difficult to find because the document archiving process is still not neatly organized and structured, in addition to supporting government programs in carrying out online lecture programs, the Ibnu Sina Junior High School Batam is also required to improve services so that the Ibnu Sina Junior High School must also prepare an integrated document management system facility to improve the service process for teachers and students.

RESEARCH METHODS

Data Collection Method

Explains that the qualitative research data collection method uses in-depth interviews. The stages of collecting data in this study are as follows:

- a. Study of literature
The literature method is carried out by reading and making comparisons from information system journals that have been obtained and compared with existing schemes in designing websites, so that the data obtained from this literature study will be used as a reference.
- b. Literature review
Interview is a method of collecting data by means of direct question and answer with the Junior High School Administration Bureau.
- c. Observation
The observation method is one of the techniques of collecting data or information by conducting direct observations on the object of the problem (SMP Ibnu Sina Batam) and then from these observations a conclusion is drawn.
- d. Interview
Documentation method is a method of collecting data in the form of notes, transcripts, books, newspapers, magazines, minutes of meetings, leggers, agendas and so on at Ibnu Sina Junior High School Batam.

Data Processing Method

Processing of the data that the author has collected in the form of primary and secondary data to support the design of a Document Management System at Ibnu Sina Junior High School Batam.

Troubleshooting Framework

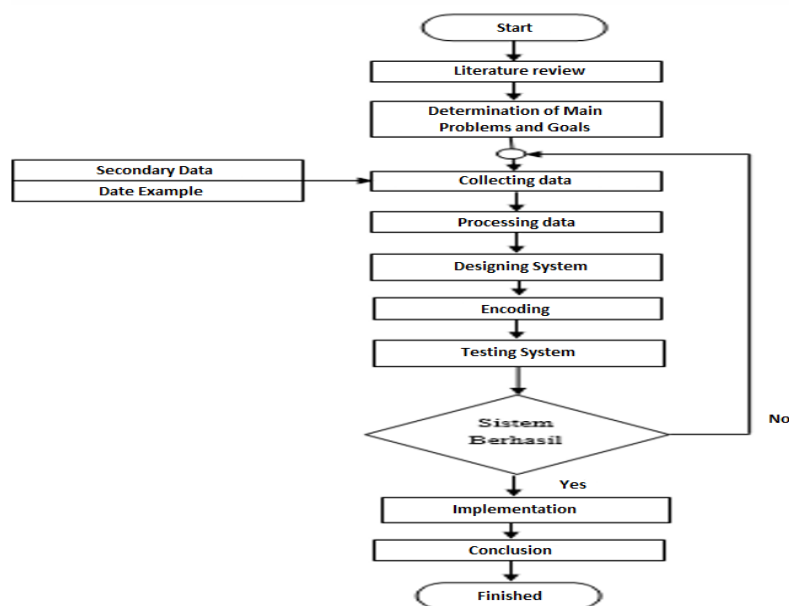


Figure 1. Problem Solving Framework

RESULTS AND DISCUSSION

System analysis

Ongoing system analysis is one way or technique to describe the problem and look for an overview of the existing system or ongoing technique, whether it is maintained or not, which can be explained as follows:

1. Incoming letters from other institutions or agencies will be received by the Staff
2. The staff records the incoming mail in the incoming mail book
3. The staff distributes incoming mail to the section related to the incoming letter
4. The section processes incoming letters for later follow-up based on the subject of the attached letter
5. If a letter comes out, the letter will also be recorded by the staff
6. Outgoing letters that have been recorded will be processed and followed up by the section related to letter attachments
7. The staff will recap all incoming and outgoing letters to be processed into reports which will be submitted to the principal.

Troubleshooting Solution

From these problems, one solution that can be used by the Ibnu Sina Batam Junior High School to overcome these problems is to design an information system for incoming and outgoing letters at the Ibnu Sina Junior High School Batam. The solutions for the system to be designed are as follows:

1. The system is designed for data storage that is safer, not easily damaged, and has a very large capacity and the system can also archive in the form of digital files such as jpg, pdf, and word.
2. The system can search for incoming and outgoing mail data
3. by using a letter code or letter number.
4. The data search process is faster and can be directly used for certain purposes in order to save time, by utilizing the search function on the system.
5. Data processing will be carried out in a computerized manner, where incoming and outgoing mail data are integrated with each other and previously entered data will be processed more quickly and accurately to assist in reporting.

System Requirements Analysis

Based on some of the existing problems, the author is interested in recommending a system that can be used as an alternative in introducing and assisting data processing.

1. Functional Needs Analysis

System functional requirements describe processes or functions that must be carried out by the system to meet user needs in detail regarding data and information related to the admin. The system functions that must be performed are as follows:

- a) Login function
This function is a function performed by the admin to enter the system by inputting a username and password.
 - b) Manage admin data
This function is a function performed by the admin to view, add, change and delete admin data
 - c) Manage category data
This function is a function performed by the admin to view, add, modify and delete category data.
 - d) Manage outgoing mail data
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- This function is a function performed by the admin to view, add, change and delete outgoing mail data
- e) Manage incoming mail data
This function is a function performed by the admin to view, add, change and delete incoming mail data
- f) Print report
This function is a function performed by the admin to view and print report
- g) Logout function
This function is a function performed by the admin to close connection or exit the system

2. Analysis of Non-Functional Needs

In addition to the functional requirements to be met, the designed system is also expected to meet the following non-functional requirements:

- 1) Usability
The system has an easy-to-use interface design.
- 2) Security
Have a security system using the login and logout features by entering the correct username and password.
- 3) Flexibility
Ease of finding the data needed because the system has a good data organization.

System planning

Unified Modeling Language is a visual language for modeling and communicating about a system using diagrams and supporting texts, defining requirements, making analysis and design, and describing architecture in object-oriented programming.

- a. Use Case Diagrams
Use case is a description of a system, so that system users understand and understand about the system to be built. The components that make up the use case are actors who can represent someone who interacts with the system.
- b. Use Case Models
Use Case model serves to describe the need or describe the interaction between one or more. In this system there are actors and users involved.

Table 1 Model Use Case Diagram Between User and Admin

No	Aktor	Definisi
1.	Super Admin	<ul style="list-style-type: none"> 1. Can login 2. View the information displayed in the document management system of BAAK STT Ibnu Sina Batam 3. Can input incoming and outgoing mail 4. Can see the agenda of incoming and outgoing mail 5. Can see the file gallery of incoming and outgoing mail 6. Can view and input letter classification references 7. Change the name of the agency 8. Adding a new User 9. Can backup and restore data base

2.	Normal User	<ol style="list-style-type: none"> 1. Login 2. View the information displayed in the document management system of BAAK STT Ibnu Sina Batam 3. Can see the agenda of incoming and outgoing mail 4. Can see the file gallery of incoming and outgoing mail
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Implementation

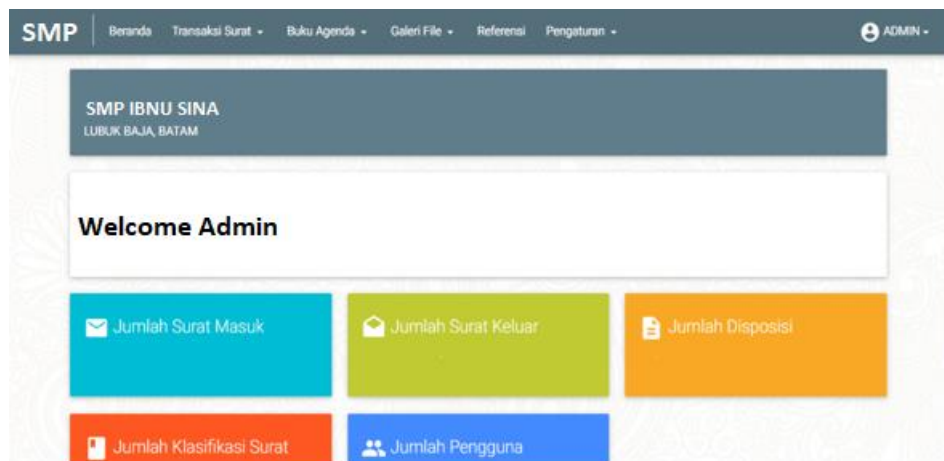


Figure 2: Homepage

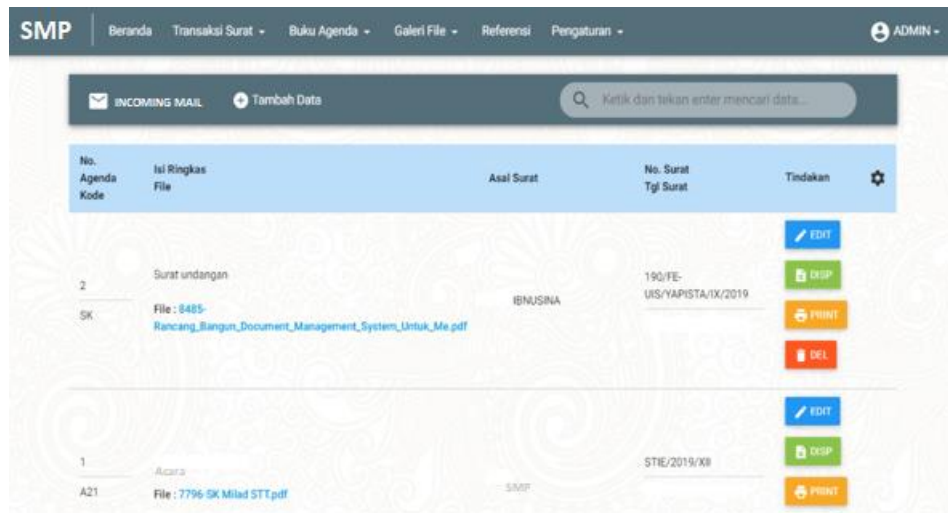


Figure 3: Incoming Mail Page View

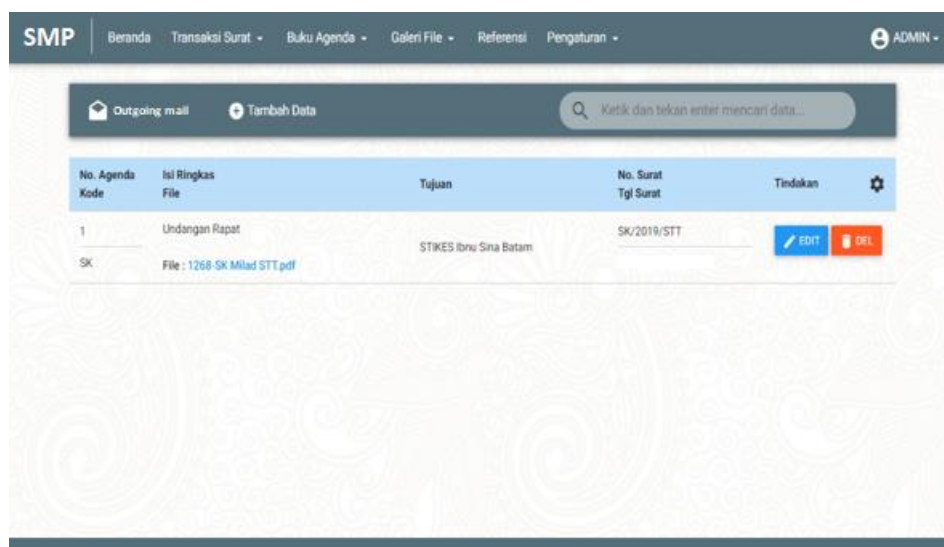


Figure 4: Outgoing Mail Page View

CONCLUSION

Based on the results of the system analysis that the researchers have done and based on the discussions that have been described in the previous chapters, the researchers can draw conclusions from the problems faced by the staff of SMP Ibnu Sina Batam as follows:

1. This study resulted in a document management system that facilitates and speeds up the SMP Ibnu Sina Batam in managing the archiving of incoming and outgoing letters.
2. With this information system, it is hoped that it can help improve the performance of officers in their duties and facilitate the data archiving process carried out by Ibnu Sina Junior High School Batam.

SUGGESTION

To achieve the expected goals, the researcher provides several suggestions that are expected to provide benefits. The suggestions include:

1. To be able to improve the performance of the admin in every archiving of incoming and outgoing letters using this new programming, the researchers suggest that it is better to train first so that they can recognize and understand the new program work system that has been designed by the researcher, so that this application can run well.
2. In order to optimize the use of the document management system for incoming and outgoing mail, the researcher suggests that in the future this information system can be developed and the researcher hopes that this information system can be used not only for one user but can be used for multiusers and for further researchers it is expected to be able to develop the system that the researcher has made.

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