The Application Of Official Manuscripts At The Deli Serdang General Election Commission Is Based On A Website Using The Web Development Life Cycle (Wdlc) Method

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ABSTRACT

Sophisticated technology can make it easier for humans to do things. From the smallest thing to the biggest. The use of information technology is needed to help achieve organizational goals. Management of official documents is a component that plays an important role because it is a means of achieving the goals of the organization or agency. Official document is an official communication tool made by authorized officials in government agencies, state universities, BUMN/BUMD. At the Deli Serdang General Election Commission, the handling of official scripts is still constrained, in terms of managing incoming and outgoing manuscripts, which are still done manually without being computerized. By recording incoming and outgoing manuscripts into the agenda book, this can certainly slow down the performance of the Deli Serdang General Election Commission staff. The vulnerability of the incoming and outgoing scripts is quite high due to human error. The author can conclude that the problems that exist at the Deli Serdang General Election Commission are, how to manage the incoming and outgoing manuscripts of the Deli Serdang General Election Commission using a website-based official script application. The purpose of this research is to build a website-based official script application using the Web Development Life Cycle (WDLC) method at the Deli Serdang General Election Commission in managing incoming and outgoing manuscripts. The benefits of this research are, it gives a sense of ease to the staff and employees of the Deli Serdang General Election Commission in managing incoming letters, outgoing letters and distributing letter dispositions to each division through a website-based official script application. The results of this study are a website-based official script application and testing the application system using the black box method which obtained 100% of the functions of the system running well.

Keyword : Application, Official Manuscript, WDLC, General Eletion Comission

1. INTRODUCTION

Information technology allows organizations to find new business strategies (Riskiono in Desy Ria and Budiman, 2021). Advanced technology can make it easier for humans to do something. From the smallest things to the biggest (Wardhani and Erwin, 2022). Official manuscripts are an important matter in government in accordance with the provisions issued by the Minister of Administrative Reform No. 22 of 2008 concerning General Guidelines for Official Document Management [1]. Official document management is a component that plays an important role because it is a means of achieving the goals of the organization or agency. This is because official scripts are official communication tools made by authorized officials in government agencies, state universities, BUMN/BUMD to carry out government and development tasks[2]. The use of information technology is needed to help achieve organizational goals. In the government sector to support operational performance, one of the efforts is the development of an integrated information system within a certain scope that connects information system management between units, sections or places by utilizing internet access. To support these government activities, the KPU institution has prepared a technology-based system[3]. System development generally goes through a certain process and stages in its development through a method. Then a system development method is needed for software development that is appropriate to the case at hand. The system development method is the main framework for designing and developing software to produce a

system according to the wishes and business needs of an organization or system user[4]. Modeling to build a website portal using the Web Development Life Cycle (WDLC) method. This method was chosen because it was adapted to the circumstances and needs in designing this portal website. To build this portal website, the PHP and MySQL programming languages are used[5]. It is known from the results of discussions with related parties that the condition of the correspondence still uses paper as a media for correspondence and the distribution of letters still uses staff. This creates obstacles to the obstruction of the flow of mail handling due to leaders who are not in the office, loss of disposition control sheet documents, and wasteful use of paper[6]. Based on the results of the research that the author has done at the Deli Serdang General Election Commission on June 1 2022 that the Deli Serdang General Election Commission in terms of handling related to the arrangement of official documents, is still having problems managing letters. Mail management is still done manually without being computerized, by recording letters in an agenda book. The manual management of letters implemented by the Deli Serdang General Election Commission staff can slow down the performance results of the staff, the susceptibility to losing letters is quite high and the occurrence of human error.

2. RESEARCH METHOD

2.1 Data Collection Techniques

In making a website-based official document application, it is necessary to collect data using the right technique to get a clear and complete picture of the application to be developed.

1. Observation Techniques (Direct Observation)

   Observation is a process of recording the behavior of subjects (people), objects (objects) or systematic incidents without any questions or communication. Observations are made to obtain data regarding activities, activities in an object and to record in order to find out the problems that exist. This data collection technique was carried out directly and analyzed related to the need for a website-based official document application at the Deli Serdang General Election Commission.

2. Interview Techniques (interview)

   Collecting surveyed data and interviewing research subjects. In this study, the subjects interviewed were Deli Serdang General Election Commission employees. This technique was applied to find out all the information directly and to find out which system was still running.

3. Documentation Techniques

   Documentation is a data collection technique through information media such as the internet, e-books, theories and others related to research. In the documentation technique, the author obtains data related to making a website-based official manuscript application using journals that the author quotes via the internet.

2.2 System Development Method

The system development method that the author uses in making website-based official document applications, namely the Web Development Life Cycle (WDLC) is the method used in building a website from planning to publishing the website. There are several stages that must be passed in building a website with the wdlc method. In figure 1 (a) is a system framework that is still running at the General Election Commission of Deli Serdang in managing incoming letters that have not been computerized which are still recorded in the agenda book. Where administrative users will send letters to other divisions. Figure 1 (b) is a system framework that is still running at the Deli Serdang General Election Commission regarding outgoing letters. Where the division will ask for the signature of the chairman or secretary regarding the exit letter. After getting the signature of the division will send a letter out to the administration. Based on these problems, an application is needed in the management of incoming and outgoing letters and the disposition of letters.

Activity diagrams, Sequence diagrams and Class diagrams.

a. Use case diagrams

It is an activity about the user in the system that will be made such as logging in, inputting letters, disposition of letters and logging out.

b. Activity diagrams

Contains the process of the features used by the user such as the user's process of logging in, inputting letters, disposition of letters.

c. Sequence diagrams

Used to show messages sent between objects and interactions between objects and describe the workflow of the system to be created.

d. Class diagrams

Contains the flow of the database that is created such as what tables will be created in the database to hold data. The author designed the interface as an illustration to make it easier to display the system created. The interface design will be visible from the login page, dashboard page, incoming script input page, outgoing script and letter disposition page. After the design phase is complete, the authors proceed to the development stage by starting to create the system as designed at the design stage and the functions needed in the system. The author uses sublime as a text editor in building a website-based official script application. The programming language that the author uses is the PHP programming language.
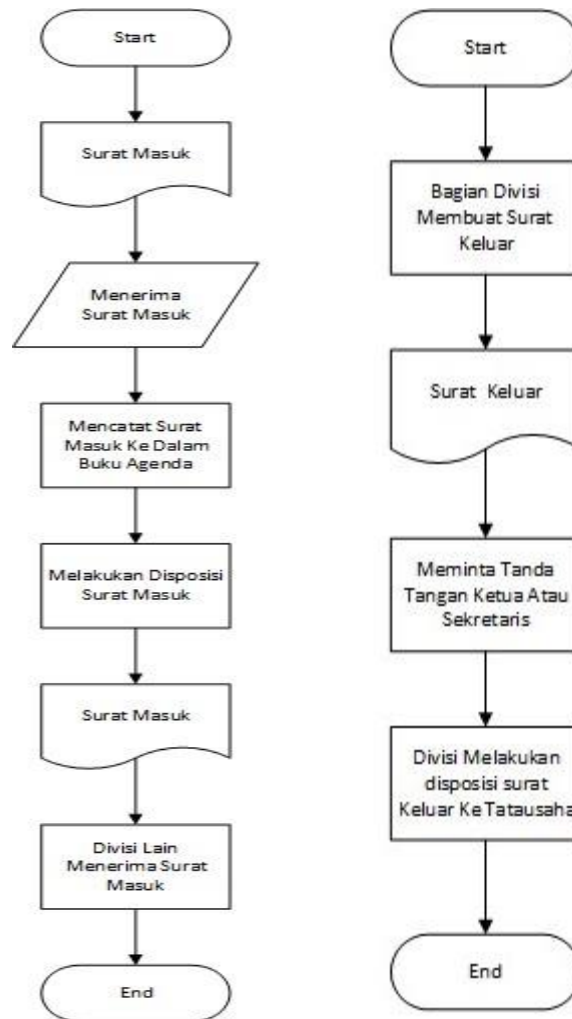

Figure 1 a and b. Flowchart System

2.4 Functional Requirements Analysis

The functional requirements analysis is intended to define the features possessed by the website-based official document application, there are four users, namely:

1. Chairman of the KPU and secretary
a. Log in to the application.
b. Sign the letter.
c. Can input archive data
2. Administrative Section
a. Log in to the application.
b. View the dashboard view.
c. View the display of incoming and outgoing scripts.
d. Perform data input incoming and outgoing script.
e. Delete incoming and outgoing scripts.
f. Edit incoming and outgoing scripts.
g. Sending incoming manuscripts to other divisions.

h. Disposition of the manuscript in pdf format.
i. Print the script.
j. Perform archival data input.
k. Recap script data.
l. Doing acc on outgoing script and re-uploading.
m. Log out of the application.
3. Department of Finance, Legal, HR
a. Log in to the application.
b. View the dashboard display.
c. View the display of incoming and outgoing scripts.
d. Perform data input incoming and outgoing script.
e. Delete incoming and outgoing scripts.
f. Edit incoming and outgoing scripts.
g. Sending incoming manuscripts to other divisions.
h. Print the script.
i. Perform archival data input.
j. Log out of the application.

2.5 Designing Use Case Diagrams
The following is a use case diagram of the official document application at the Deli Serdang General Election Commission. Use case diagrams are used to determine user interaction with the system.
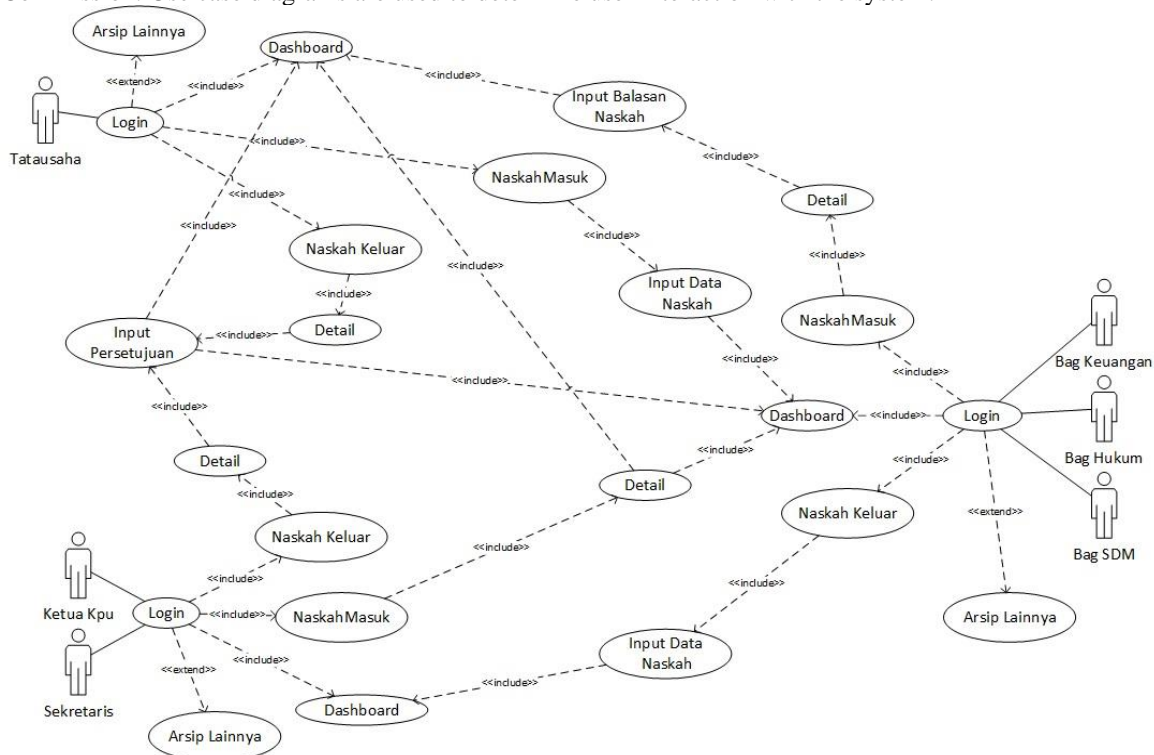

Figure 2. Use Case Diagrams

Figure 2. is a use case diagram of the activity process for incoming scripts, outgoing scripts, and input of archival data using a website-based official document application starting from the administration of sending incoming scripts, inputting incoming script data, disposition of letters to divisions of the financial department, legal division, HR division. After that, the finance department, legal team, HR department inputted incoming manuscript data and made dispositions to the administration regarding incoming manuscript replies. On the outgoing manuscript, each division of the finance division, legal division, HR department will input the outgoing manuscript and send it to the chairman of the KPU or secretary to ask for a signature. After the chairperson or secretary signs the outgoing document, he will send the outgoing manuscript back to the

divisions of the finance, legal, human resources department, after which the financial, legal, and human resource departments can dispose of the outgoing manuscript to the administrative division. Each division, both the chairman and the secretary, can input archival data into the official document application.

2.6 Designing Activity Diagrams
The following is an activity diagram, the process of incoming manuscripts, outgoing manuscripts and the disposition of manuscripts on the website-based official document application at the Deli Serdang General Election Commission.
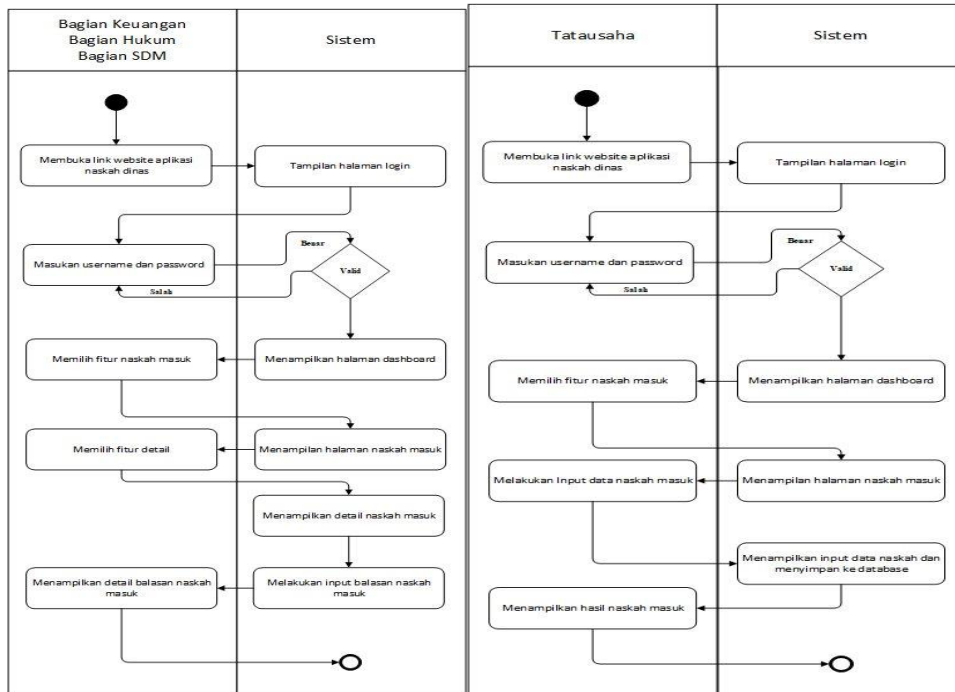

Figure 3. a and b. Activity Diagram

Fig 3 a is an activity diagram of incoming scripts replying to users in the finance, legal, HR department will reply to incoming scripts that have been disposed of by the administration by inputting incoming script data then sending it and displaying the results of incoming scripts that have been sent. Figure 3 b is an activity diagram for incoming scripts for administrative users. Tatausha receives incoming manuscripts, logs into the application, inputs incoming script data, dispositions incoming scripts to the divisions of the financial division, legal division, human resources division.

3.   RESULT AND DISCUSSION
3.1 Result
At this stage the discussion regarding the making of a website-based official document application at the Deli Serdang general election commission. The design described in the previous chapter is the method for building official document applications, so with this stage it will be known whether the application is in accordance with the previous design or not.
3.2 System Testing
Testing this system is done to find out if the application is functioning properly or not and to find out the error in the application the author is testing. The author conducts testing through test data and checks every function of the application and tests are carried out. The following is a website-based official script application test at the Deli Serdang general election commission using the blackbox method, namely testing carried out to observe the results of execution.
3.3 System Interface
Website-based official document application for the Deli Serdang General Election Commission which was designed to consist of several pages, namely pages namely, login menu display, dashboard menu display, incoming script menu display, incoming script data input menu display, incoming script reply menu display, script menu display exit, display of script data input menu display exits, display of output script reply menu, display of archive menu.
Login Page Interface

The login page is an application security system in the form of an access process for users to access inside. Registration is used to manage the identification process.
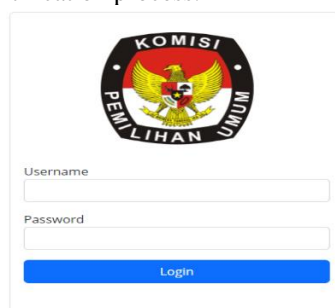

Figure 4. Login Page

Figure 4 is the login display, the initial display of the system when the user accesses the official document application link at the Deli Serdang General Election Commission. On the login page there is a username and password menu. The following shows the login page on the application that has been created.

Dashboard Page Interface
The main page or commonly called the dashboard is the initial appearance of the application when the user has successfully logged in by entering the correct username and password, when entering the main page there are many features of the application.
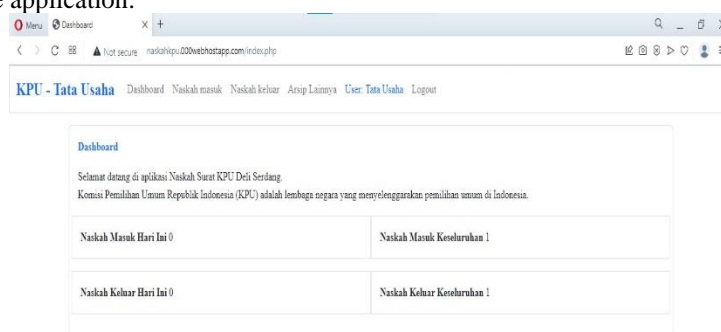

Figure 5. Dashboard System

is the initial display when the administration user has successfully logged in, the administration user can see the incoming and outgoing manuscripts today, see the overall incoming and outgoing manuscripts that have been put before, input incoming manuscript data, send incoming manuscripts to each division, reply to incoming manuscripts sent by each division, input outgoing manuscript data, Seeing the approval done by the chairman and secretary on the outgoing manuscript, filing the incoming manuscript and the outgoing manuscript.

Login Script Page Interface

On the login script page, the administrative user will input incoming manuscript data, be able to see the incoming script, and implement the incoming script that will be addressed to each division. Each division can send incoming manuscripts and can also reply to the incoming manuscripts.

Figure 6. Inbox Interface

Figure 6 is the display when the administration *user* sees the initial display of the incoming script feature. Where *administrative users* can *input* incoming script data, view details of incoming manuscripts, make changes to data on incoming scripts, delete scripts

Login script data input page interface

Pada halaman naskah masuk user tata usaha akan melakuka input data naskah masuk dan melakukan pengiriman naskah masuk sesuai dengan isi dari naskah masuk.

Figure 7. Incoming Script Data Input Page Display

In figure 7 is the display when the administrative *user* is inputting data on the script data *input* feature by filling in the agenda number, publication date, receipt date, manuscript number, origin of the manuscript, purpose, content of the manuscript, follow-up and selecting files to be sent to the previously selected division.

Incoming manuscript page interface on the details menu

On the incoming script page, *the administration user will* input the script data, after *inputting the* manuscript data successfully, the *administration user can see by entering the detail menu feature and* the administration user *can also delete the script that has been previously* inputted.
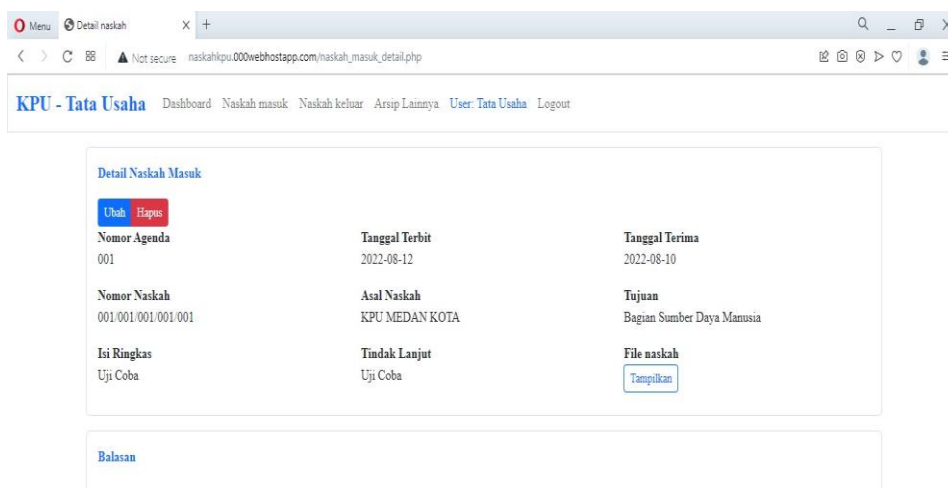
Figure 8 Entry manuscript page view on the Details menu

In figure 8 is the display when *the user has replied to the incoming script sent by the administrative division,* the user *can see the content and purpose of the letter and send the incoming script to reply to it.*

Reply Login Script Page Interface

On the reply entry script page, it is a feature when the user receives the incoming script and sends the reply entry script to the administrative division, and the HR division can see the reply entry script by clicking the details button.
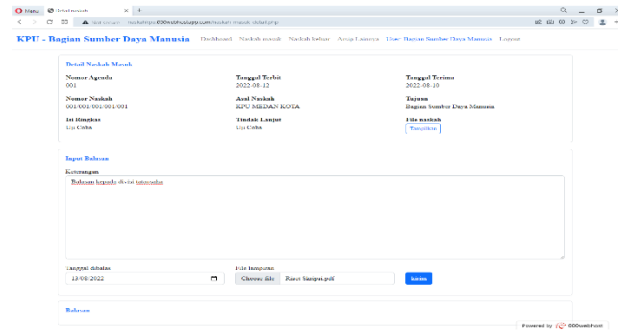

Figure 8 Page view of reply logon script

In figure 8 is the display when the HR user has seen the reply entry script sent by the administration user, the HR user can see the content and purpose of the script and click the details button.

Input Page Interface Incoming Script Reply

On the input page of the incoming script, the *HR user's reply has seen the destination string of the incoming script sent previously by the administration user.*

Input Page Interface Incoming Script Reply

On the input page of the incoming script, the *HR user's reply has seen the destination string of the incoming script sent previously by the administration user.*

Exit Script Page Interface

On the exit script page, the HR *user* will send the exit manuscript that has been *inputted* into the official manuscript application and wait for approval both from the secretary and approval from the chairman of the general election commission.
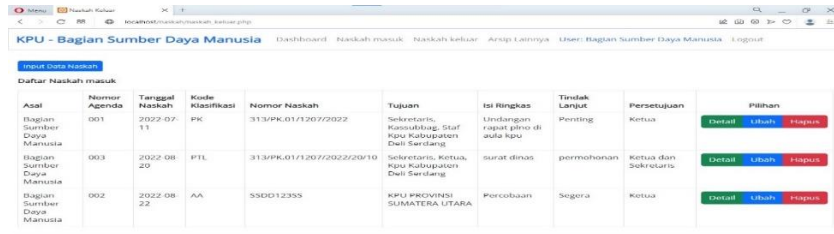

Figure 10 Page View of Exit Manuscript
Figure 10 Page View of Exit Manuscript

3.2 Discussion

Making a website-based official script application at the deli serdang general election commission uses the WDLC method, which is with the aim of designing a website-based official script application to assist employees in processing incoming and outgoing letters and the disposition of letters becomes easier which is not done in writing in the agenda book. The use of the wdlc method is to make it easier to make website-based applications in a structured manner. Making official script application programs using *PHP* and *Mysql* programming languages as *databases*. So that in terms of distributing letters, it becomes easier and more understandable, and in the application of official manuscripts based on *data collection websites*, both incoming and outgoing manuscripts can be run easily.

4. CONCLUSION

The conclusions that the authors draw from this study are:
The result of this study is that it can assist employees of the general election commission of deli serdang in terms of distributing letters and managing the disposition of letters using a website-based official script application.The website-based official script application can input incoming manuscript data, outgoing manuscripts, letter dispositions and store archival data such as photos, certificates, official travel letters in pdf form.

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