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Pejabat Daerah Setiu Letter and File Management System

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Bachelor of Computer Science with Honours (Software Engineering)

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PEJABAT DAERAH SETIU LETTER AND FILE MANAGEMENT SYSTEM

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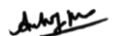
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ABSTRACT

Pejabat Daerah Setiu Letter and File Management System is a web-based system that will be developed to help *Pejabat Daerah Setiu (PDS)* staff to carry out their task efficiently in their daily work life. The PDS staff are facing some problems when doing their work such as having difficulty when they want to find files, and time consuming when registering incoming letters. When doing some research on how to solve this problem, we found a few existing systems that offer similar problem-solving; they develop a system for their organization. Thus, an idea comes up which is to develop a web-based system specifically for PDS staff. This project provides several functionalities for *PDS* staff such as letter registration into the online system and file tracking. This system will be developed on a PHP platform and supported by SQL database to store letter and file information. In conclusion, with the existence of this system, PDS staff can do their work efficiently without wasting their time.

ABSTRAK

Pejabat Daerah Setiu Letter and File Management System merupakan sebuah sistem berasaskan web yang akan dibangunkan bagi membantu pekerja Pejabat Daerah Setiu (PDS) melakukan tugas mereka dengan cekap. Namun begitu, pekerja PDS menghadapi beberapa masalah semasa menjalankan tugas mereka seperti pencarian fail dan semasa mendaftar masuk surat. Kami menjalankan beberapa penyelidikan bagi menyelesaikan masalah ini dan telah menemukan beberapa sistem yang telah wujud; mereka membangunkan sebuah sistem bagi organisasi tertentu. Oleh itu, sebuah idea telah tercetus, iaitu kami akan membangunkan sebuah sistem berasaskan web khusus buat pekerja PDS. Sistem ini menyediakan beberapa fungsi seperti daftar masuk surat secara atas talian and pencarian fail. Sistem ini akan dibangunkan dengan menggunakan platform PHP dan pangkalan data SQL bagi penyimpanan data fail dan surat. Kesimpulannya, dengan wujudnya sistem ini, pekerja PDS mampu menjalankan tugas mereka dengan cekap.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

Pejabat Daerah Setiu (PDS) is an administrative management organization of district. This organization was established in 1985 which located at Bandar Permaisuri, Setiu, Terengganu. This organization play a role in implementing government policies as safeguarding the welfare and interests of the community its administration. The main functions of *PDS* are planning, implementing, and reporting development of project, coordinating the activities of government agencies, and coordinating secretariat duties for official government ceremonies and programs.

Due to these functions, this organization would receive many invitation letters that need to distribute to the officials and staff and these letters are stored by category using physical files. This organization currently use a physical book called *Buku Daftar Surat* to register incoming letter and Microsoft Excel to store and categorize the file, but this method is inefficient as it is time-consuming and gives hassle to the staff. In *Buku Daftar Surat*, the staff needs to write some information such as *Tarikh Penerimaan, No. Fail Kementerian Ibu Pejabat, Tarikh Surat, Daripada Siapa, Perkara* and *Dirujukkan Kepada*. All this information needs to write manually and only one staff can register it at one time. After the letter successfully registered, *PDS* staff need to assign the letter to the official in charge for them to act according to the letter.

As for file tracking, currently, they use Microsoft Excel to store file information such as *Siri Fail, Bahagian, Perkara, Hantar Kepada, Diterima Daripada* and *Tarikh Terima*. Microsoft Excel is not efficient because only one staff can access the main file. After all, the file information needs to be updated one by one at one time. Thus, *PDS* staff are having a hard

time when they want to find the location of the file because only one staff that have access to the Excel document.

Therefore, an idea came up which is to develop a web-based system called Pejabat Daerah Setiu Letter and File Management System. This system aims to be able to keep and record all the files information online and a feature where user can register letter into the online system. With this system, any PDS staff can access the system to register letters or tracking files.

1.2 Problem Statement

Pejabat Daerah Setiu (PDS) are required to register incoming letter and store it in a file for future use. Sometimes, the letters are pile up, thus leading to the staff needing to work harder and faster as only one staff at one time can register the letter. This is time consuming because PDS staff needs to write manually in a book called *Buku Daftar Surat*. Figure 1.1 shows the data that needs to be registered in the book. Then, the registered letters are assigned to an officer or stored in a file by category.

DAFTAR SUR					MENYURAT	
No	Tgl	No File	Tgl	Isi	Isi	Isi
1	14-12-21	MOPN-TR-200-1/90-1	12-12-21	majlis Perundingan Tembak Naga 20	Program Perancangan Persekitaran Taman Rekreasi Jlnk Wawasan	4/8/13 - Muzik dan
2	"	TI 62/06/204-574	12-12-21	Terengganu IHC	Jemputan ke Anugerah PHS dgn "Gubahan Mambau Kulekasi"	1/10/13 - Jemputan
3	"	PEL 161/21/12	12-12-21	Perak School Out Letter	Tertarikan Pelaksanaan Program Persekitaran Dan	1/12/13 - Perak (Persekitaran)
4	"	"	25-12-21	Selamat Hari Tahun	Pelaksanaan Program	25/12/2021 - 1/1/22
5	"	"	25-12-21	Amer Mambau 21- Anon	Pelaksanaan Program	25/12/2021 - 1/1/22
6	"	AEB (MOPN) 2/102/105	16-8-21	Amambau PDS	Melaksanakan Program Persekitaran Dan	1/1/22 - Perak (Persekitaran)
7	"	SUK-TR-200-1/26-2	12-12-21	SUK-Tig (GEM)	Program Perancangan Persekitaran Dan	1/1/22 - Perak (Persekitaran)
8	"	SUK-TR-200-1/26-2	8-12-21	SUK-Tig	Program Perancangan Persekitaran Dan	1/1/22 - Perak (Persekitaran)
9	"	SUK-TR-200-1/26-2	14-12-21	SUK-Tig (GEM)	Program Perancangan Persekitaran Dan	1/1/22 - Perak (Persekitaran)
10	"	SUK-TR-200-1/26-2	12-12-21	SUK-Tig	Program Perancangan Persekitaran Dan	1/1/22 - Perak (Persekitaran)
11	"	SUK-TR-200-1/26-2	12-12-21	SUK-Tig	Program Perancangan Persekitaran Dan	1/1/22 - Perak (Persekitaran)
12	"	"	12-12-21	SPK 10 Baharu - Baharu	Program Perancangan Persekitaran Dan	1/1/22 - Perak (Persekitaran)
13	"	"	12-12-21	SPK 10 Baharu - Baharu	Program Perancangan Persekitaran Dan	1/1/22 - Perak (Persekitaran)
14	"	102/10/102/102/102	12-12-21	10 Baharu dan Baharu dan Baharu	Program Perancangan Persekitaran Dan	1/1/22 - Perak (Persekitaran)
15	"	102/10/102/102/102	12-12-21	10 Baharu dan Baharu dan Baharu	Program Perancangan Persekitaran Dan	1/1/22 - Perak (Persekitaran)

Figure 1.1 Buku Daftar Surat

The current system they use to keep track of the location of each file is using Microsoft Excel which the staff needs to key in the file information and change the data manually. By using this Excel file, only one worker can access to Excel document at one time since not everyone has the updated Excel file. *PDS* staff are having a hard time to find the file because the file location is not fixed due to the file being moved from one place to another place.

1.3 Project Aim and Objectives

Pejabat Daerah Setiu Letter and File Management System aims to help *PDS* staff to work efficiently and able to manage the file tracking and letter registration via online. Specifically, the objectives of this project are stated as below:

- a. To design a user-friendly web-based system that will store files and letters information.
- b. To perform CRUD (create, read, update, and delete) function on the files and letters records.
- c. To evaluate the functionality and usability of the web-based system.

1.4 Project Scope

The scope of the Pejabat Daerah Setiu Letter and File Management System is:

- a. This web-based system is developed for *Pejabat Daerah Setiu (PDS)*, Terengganu.
- b. This web-based system only collects and store data for file and letter information of *PDS*.
- c. This web-based system only accessible to *PDS* staff and admin and need to login and logout via online.

1.5 Project Methodology

Software methodology that will be used for the development of Pejabat Daerah Setiu Letter and File Management System is Waterfall methodology. The waterfall methodology is

a linear project management approach in which the project's needs are first obtained from stakeholders and customers, after which a sequential project plan is made to meet those requirements (ProjectManager, n.d). In this methodology, it consists of five phases which are requirements, design, implementation, verification, and maintenance. Figure 1.2 shows the illustration of the Waterfall methodology.

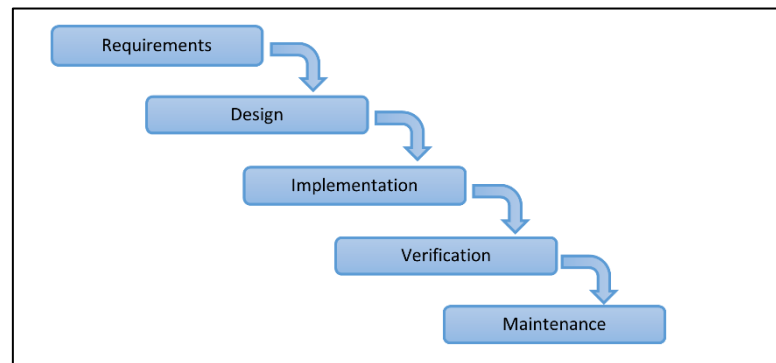


Figure 1.2 Waterfall Methodology Phases (ProjectManager, n.d)

a. Requirement

During the requirement phase, we would observe the problem, collect the *PDS*'s user requirements and plan on how to find the solution. Other than that, we also identified the project's risks, assumptions, and timeline. The initial documentation of *PDS*'s user requirements and list of priorities also will be determined in this phase.

b. Design

In the design phase, we need to design a database, create a prototype of the user interface (UI) and user experience (UX). Other than that, we need to determine to use which programming language and framework.

c. Implementation

The implementation phase focuses on converting all the design documentation (prototype) that we have created into real software. By the end of this phase, a functional product needs to be completed and we able to test the functionality of the system. However, it will go through many revisions before we release the final product to the *PDS*.

d. Verification

During the verification phase, we focus on the functionality and quality of the developed system. The system will be gradually tested after the system goes through an improvement and has fully met *PDS*'s requirements.

e. Maintenance

In the maintenance phase, we make some improvements or modifications to the system if needed. Other than that, we also identify bug and fix any error that may occur.

1.6 Expected Outcomes

The outcome of this project is expected to be a fully functional Pejabat Daerah Setiu Letter and File Management System. The main features of this web-based system are the staff able to track the location of the file easily and able to register incoming letter quickly via online. The outcome of this project, the system should be able to ease the staff work and reduce time so that they can deliver their work efficiently and effectively by replacing the old system (Excel file and manual book) with an online web-based system.

1.7 Significance of Project

The significance of this project is *PDS* staff able to register incoming letter quickly via online. Next, *PDS* staff able to track the location of the file easily and lastly *PDS* staff able to work efficiently as all their task can be done without hassle.

1.8 Project Schedule

Please refer to Appendix A.

1.9 Summary

Pejabat Daerah Setiu Letter and File Management System is a web-based system that will be used by *Pejabat Daerah Setiu (PDS)* to manage letter registration and file tracking. Throughout this project, the Waterfall methodology will be implemented. The current system *PDS* staffs used is quite inefficient especially when they need to carry out their task quickly. So, the system will provide two main functions which is letter registration and file tracking. Thus, with the help of the Pejabat Daerah Setiu Letter and File Management System, the staff would be able to perform their task efficiently.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter will cover about the details of the existing system available on the website. The similar systems have been evaluated and will be compared between each system. There are three existing systems that are related to this project. The three existing are SIPAS, efail, and eSurat. Explanations of these systems with their functions and screenshots are also included here.

2.2 Existing Systems

2.2.1 SIPAS

Sistem Informasi Pengelolaan Arsip Surat (SIPAS) is a web-based incoming and outgoing letter registration system based in Indonesia. This system is suitable to use as an administrative tool for managing incoming and outgoing letter in every process of the correspondence information system (Raja Putra Media, n.d).

Figure 2.1 shows the dashboard of the SIPAS. The dashboard displays the statistic of the total of units/sections, a total of incoming letters, and total of outgoing letters.

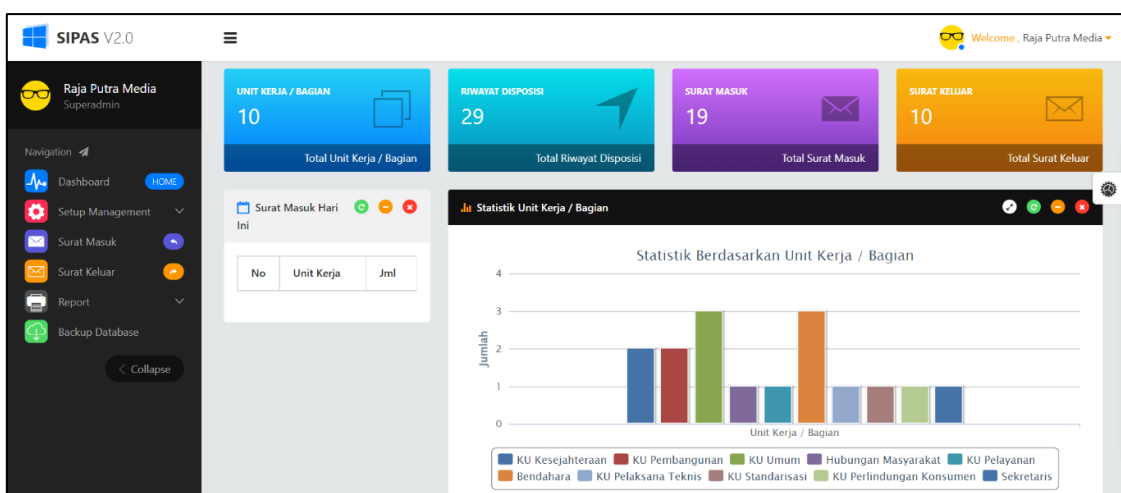


Figure 2.1 SIPAS dashboard

Figure 2.2 shows that SIPAS can perform CRUD functions on letter details. The letter details consist of date and time, letter series, letter type, sender, and status.

No	Tanggal dan Jam	Nomor Surat	Sifat Surat	Pengirim	Disposisi Saat Ini	Action
1	2020-05-14 / 22:05:48	DPU.13/2020/IV/762-1	Penting	Dinas PU	Wait disposisi	[Add] [Edit] [Delete]
2	2020-05-14 / 22:05:52	KCV.13/2020/14-14	Penting	CV Karya	Wait disposisi	[Add] [Edit] [Delete]
3	2020-05-15 / 18:05:21	PRA.13/2020/14-22	Biasa	UPT Karang Sari 1	KU Umum	[Add] [Edit] [Delete]
4	2020-05-14 / 16:05:49	HTM.13/2020/16-4	Penting	CV HTM Bangun	Bendahara	[Add] [Edit] [Delete]
5	2020-05-13 / 18:05:58	NAC.11/2020/14-9	Rahasia	NAC Daily	Wait disposisi	[Add] [Edit] [Delete]
6	2018-03-05 / 12:03:40	201803/MAS/11-001	Biasa	PRO Gunung Simpang	KU Kesejahteraan	[Add] [Edit] [Delete]
7	2018-03-05 / 12:03:02	201803/MAS/10-001	Segera	CV Karya	Bendahara	[Add] [Edit] [Delete]
8	2018-03-05 / 12:03:29	201803/MAS/08-001	Penting	RED Community	Hubungan Masyarakat	[Add] [Edit] [Delete]

Figure 2.2 Interface for CRUD function

Figure 2.3 shows one of the functions of this system which is adding new letter. Users need to key in all the details needed and save them.

Form master surat masuk

Nomor Surat:

Tanggal Surat:

Sifat Surat:

Pengirim:

Perihal:

Isi Surat Ringkas:

Figure 2.3 Interface for adding incoming letter

Figure 2.4 shows the Report webpage for SIPAS. Here, the user needs to set when the letter's date is, and the system will display it in a list.

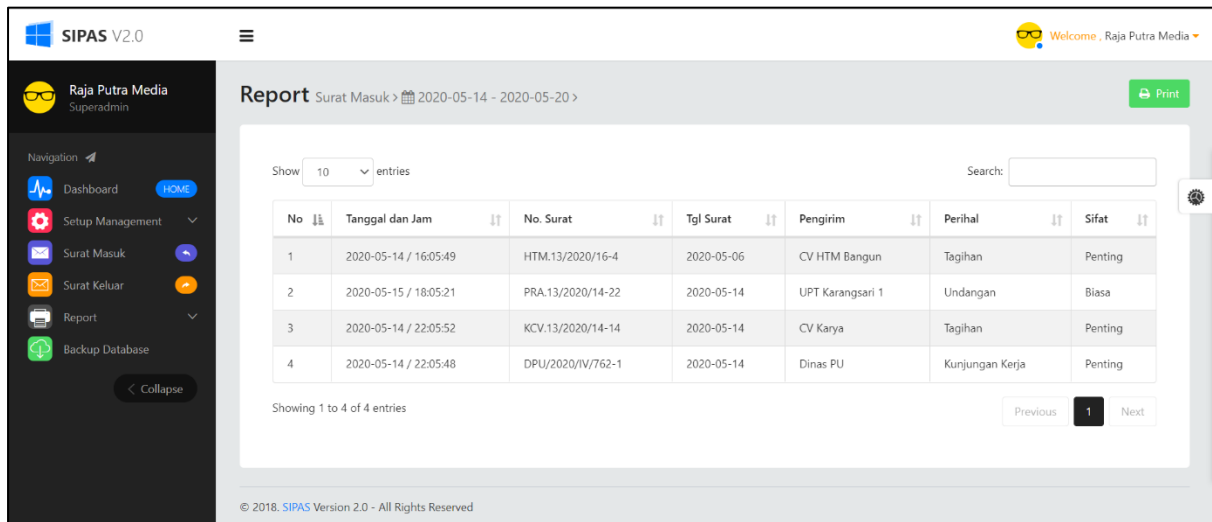


Figure 2.4 Interface for report

2.2.2 efail

efail is a web-based file management system based in Malaysia. This system can store files that can be sorted by cabinet (Kabinet) and level (Aras). Each cabinet and level have a different category of the store's file. Figure 2.5 show the list of the cabinet and level. efail system will ask the user to choose which level of cabinet they want to see and edit.



Figure 2.5 List of cabinet and level