



# THE DESIGN OF A SAVING AND LOAN APPLICATION USING A WEB-BASED PROGRAMMING LANGUAGE

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ARTICLE INFO	ABSTRACT
Date received : 18 Oct 2022 Revision date : 19 Nov 2022 Date received : 23 Nov 2022	<i>At the Kelambir Lima Village Head Office, the village government data processing process is currently not optimal because the village government data processing still uses Microsoft Office. Data processing like this can lead to data loss or insecure data in storage. Therefore, the research will create a data processing system with sufficient computerization. So that the report that will be needed can be processed appropriately by the office of the head of the village of Kelambir Lima. From the problems that have been obtained so that a solution is obtained from its handling by implementing a web-based village government application.</i>
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## INTRODUCTION

Along with technology that is developing rapidly and increasingly sophisticated, especially in the field of information, there have been many results that have been achieved by humans. Information today is already an inseparable part of human life. Educational institutions that utilize this technology are no exception as a means of conveying information and promotion (Eka Puspita Sari;2019).

Village Government is the administration of government affairs and the interests of local communities in the government system of the Unitary State of the Republic of Indonesia. Essentially as a fulfillment of the basic needs of its people or as an element of government that serves its people. The Village Government has affairs that are used as tasks for the government so that the form of village government organization must at least represent the affairs of the Village government. The village government is also a servant of the community and the community must be able to support the programs implemented by the village government. So that the village government and its communities must support each other in filling each other in every development activity that exists in the village.

The development of technology today is increasingly sophisticated, which from time to time the use of technology is very popularized among the public both in the private and public fields. Each institution, both formal and non-formal, strives to complement the existing facilities and to meet the needs of all village governments in Kelambir Lima. In an effort to complete the existing facilities, an institution is said to advance if the availability of adequate village government applications.

At the Kelambir Lima Village Head Office, the village government data processing process is currently not optimal because the village government data processing still uses Microsoft Office. Data processing like this can lead to data loss or insecure data in storage. Therefore, the research will create a data processing system with sufficient computerization. So that the report that will be needed can be processed appropriately by the office of the head of the village of Kelambir Lima. From the problems that have been obtained so that a solution is obtained from its handling by implementing a web-based village government application.

## LITERATURE REVIEW

### Design Definition

General design is designing a system with the aim of giving users a general idea of the new system (Ranti Eka Putri;2019)



## System Definitions

A system is a group of elements both physical and non-physical that denote a group of interconnected and interacting together towards one or more goals, objectives or ends of the system. While information is data that is processed into a more useful and more meaningful form for those who receive (Fandi Kurniawan;2019)

## Definition of Information

According to Jogiyanto, HM (2005), the definition of information is: "The data that is processed becomes formed that is more useful and more meaningful for those who receive and need it". Quality of Information In order for the information produced to have benefits for information users, the information should meet the requirements of True (Accurate), Timely, Relevant and Complete Information is data that is processed into a more useful and more meaningful form for those who receive it. (Eka Putra;2019) Information is the result of data processing so that it becomes an important form for the recipient and has a use as a basis for decision making that can be felt directly or indirectly at that time. To obtain information, data to be processed and processing units are needed.

The examples of information are as follows:

- a. List of employees by department
- b. List of employees by class
- c. Recapitulation of induction transactions at the end of the month
- d. And so on

## Definition of Web Application

At first the web application was built using only a language called HTML (HyperText Markup Language). In subsequent developments, a number of scripts and objects were developed to extend the capabilities of HTML such as PHP and ASP on scripts and Applets on objects. Web applications can be divided into two types namely static and dynamic web applications. Static web is formed by using HTML. The downside of an application like this lies in having to maintain the program continuously to keep up with every development that occurs. This drawback is addressed by the dynamic web application model.

In dynamic web applications, changes to information in web pages are performed without program changes but through data changes. As an implementation, the web application can be connected to the database so that changes to the information can be made by the operator and are not the responsibility of the webmaster. Web application architecture includes clients, web servers, middleware and databases. The client interacts with the web server. Internally, the web server communicates with the middleware and middleware that communicates with the database. Examples of middleware are PHP and ASP. In the dynamic web application mechanism, an additional process occurs, namely the server translates PHP code into HTML code. PHP code translated by the PHP engine that will be received by the client. The web is a service for presenting information on the internet using HTML. The web is synonymous with the internet, because of its popularity, the web has become an application interface for making transactions and presenting complete information throughout the world (Ika Devi Perwitasari;2019).

## METHOD

This research requires the methods used to conduct research so that it is able to answer the problems under study and the purpose of the research.

## Research Flow

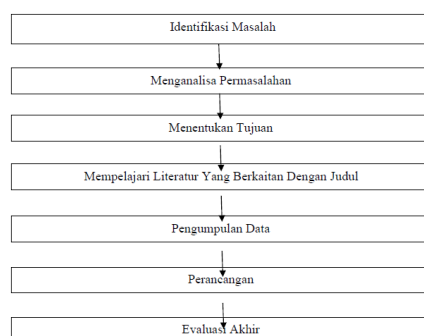


Figure 1. Research Flow



Based on the framework in figure 1, each step can be described as follows:

1. Identify the Problem  
Problem Identification is the first step taken in this study. At the stage of identifying the problem, it is intended to be able to understand the problem to be studied, so that in the analysis and design stage it does not come out of the problem under study
2. Problem Analysis  
The problem analysis step is a step to understand a problem that has been determined by its scope or limitations. By analyzing the predetermined problem, it is hoped that the problem can be understood properly.
3. Define Goals  
Based on understanding the problem of the problem, the objectives to be achieved in this study are determined. In this goal, targets are determined to be achieved, especially those that can overcome existing problems.
4. Studying literature related to titles  
To achieve the goal, some literature is studied that is expected to be used. Then the literature studied is selected to be able to determine which literature will be used in this study. Literature sources are obtained from the library of Universitas Pembangunan Pancabudi, books that explore web-based Information Systems.
5. Data Collection  
The data needed are book and history data along with photo photos in the Kelambir Lima Village Head Office where the data taken is manual data.
6. System design  
At this stage the author will design a new system proposal, the author uses a system design method with a mobile responsive model is a software design method that is widely used by developers to interact with each other during the system creation process and consists of 5 interrelated stages
7. Final evaluation  
Make a report from the research containing a research report on the problems and solutions that exist on the object studied by the author

### Observed parameters

The parameters observed are in the form of a library system that runs manually at the Kelambir Lima Village Head Office where complaints that occur in terms of village government data storage are still not efficient or still use the manual system.

### Types and scope of research

The importance of a website-based village government data processing system in improving data storage so that it can provide convenience to the Village Head's Office in the process of storing village government data. With the system created, it can reduce the time in data storage.

## RESULTS AND DISCUSSION

### Login

In this picture is a login menu where the village head office admin can enter the username and password

**LOGIN**

USERNAME


PASSWORD  

Figure 2. Login Menu



### Input Menu

This input menu is a menu to input PPE and BPD data where the admin here can input data on who are the names of PPE and BPD in the village head's office

A screenshot of a web application interface titled "MENU INPUT". It contains two rectangular buttons stacked vertically. The top button is labeled "APD" and the bottom button is labeled "BPD".

Figure 3. Input Menu

### APD and BPD Data Input Display

This is a display of PPE and BPD data input where in this display the village head's office will input PPE and BPD data

A screenshot of a web application form titled "INPUT DATA APD". The form contains ten input fields, each with a label to its left: NAMA, JENIS KELAMIN, TEMPAT LAHIR, TANGGAL LAHIR, ALAMAT, JABATAN, PENDIDIKAN, STATUS, SK, and TMT. Below the input fields are three buttons labeled "EDIT", "DELETE", and "SIMPAN".

Figure 4. APD Data Input

A screenshot of a web application form titled "INPUT DATA BPD". The form contains ten input fields, each with a label to its left: NAMA, JENIS KELAMIN, TEMPAT LAHIR, TANGGAL LAHIR, ALAMAT, PEKERJAAN, JABATAN, PENDIDIKAN, STATUS, SK, and TMT. Below the input fields are three buttons labeled "EDIT", "DELETE", and "SIMPAN".

Figure 5. BPD Input



## Output

In this figure is a form of output design whose data is from the input results

OUTPUT APD

NAMA	JENIS KELAMIN	TEMPAT TANGGAL LAHIR	TANGGAL LAHIR	ALAMAT	JABATAN	PENDIDIKAN	STATUS	SK	TMT

**Figure 6.** Output APD

OUTPUT BPD

NAMA	JENIS KELAMIN	TEMPAT TANGGAL LAHIR	TANGGAL LAHIR	ALAMAT	PEKERJAAN	JABATAN	PENDIDIKAN	STATUS	SK	TMT

**Figure 7.** Output BPD

## CONCLUSION

The existence of this research can be a guideline for those in need, especially in the field of computer science related to web-based applications and hopefully with the results of this web-based application research can help the data processing process and facilitate the performance of the village head's office in inputting government data in the village head's office

## REFERENCES

- Eka Puspita Sari, Asri Wahyuni & Narti. (2019). Web - Based School Information System. *Journal of Software Engineering*, 5(1), 87-94
- Ranti Eka Princess. (2019). Designing a Web-Based Sales Information System in UD Stores. *Blessings. Journal of Ilimah Community Research Informatio Technology*, 7(2), 10-21
- Fandi Kurniawan, Ruliyansyah & Muhammad Kadafi. (2019). Course Service Provider Information System in Medan City. *Journal of Information Systems*. 5(1), 39-50
- Eka Son. (2019). Designing an Information System for Electronic Sales Data Processing of Goods PT. Maxcom Padang City. *Journal of Ilimah Community Research Informatio Technology*. 7(2), 10-21.
- Ika Devi Perwitasari, Jodi Hendrawan & Novira Alfiana. (2 019). Prototype Design of Web-Based Mail Archiving System on PD. Medan City Development. *Journal of Ilimah Community Research Informatio Technology*. 7(20) 69-77