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Analyzing Pension Data Process and Proposing Solutions at the Regional Financial and Asset Management Agency Office

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Abstract

The Regional Financial and Asset Management Agency (BPKAD), where we conducted our investigation, is one of the organizations under the mayor's jurisdiction in Palembang. Due to its manual management of employee pension data using Microsoft Excel, this organization has considerable influence over the Palembang municipal government, especially in pension data gathering. Began by contacting employees when their designated retirement date was drawing near. The employee then finishes the dossier, which becomes a pension proposal. The fact that the management is still done using the Excel program presents several difficulties. For instance, when the head of finance requires pension data, the staff of the department must review each retiring employee file in the Microsoft Excel application individually, in addition to having to review multiple other files. Naturally, it takes a while because the necessary data must be manually searched individually. When the file is complete, it will be submitted to the department for approval. In this regard, we offer a solution by creating and deploying an application to streamline the pension administration procedure.

Keywords

System Application, Data Manager, Pension Data Management

Introduction

Regional Financial and Asset Management Agency (BPKAD) significantly impacts Palembang municipal administration, particularly pension data gathering (Putri et al., 2023). Since there are multiple employees in every corporate agency, both public and private, an application that can manage the employees' retirement data is required. The personnel branch of the Palembang City Regional Financial and Asset Management Agency oversees pension data and informs staff members about the need to compile retirement-related paperwork (Borbély-Pecze, 2015). Once the file is finished, it will be submitted to the service for approval. For civil servants, the age limit is 58.

Elucidated company assets are important and should be handled with extreme caution by existing laws or relevant government rules (Okeahalam & Akinboade, 2003). Regional governance of regional administration is necessary for a strong governance process.

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According to (Syed Mustapa & Jusoff, 2009), the following rules govern how regional property is managed for planning and budgetary purposes: acquisition, use, security and upkeep, assessment, transfer, destruction, elimination, administration, development, supervision, and control. Because it is a core problem that regularly develops in all government agencies owing to a lack of knowledge and improvement in correctly executing its usage, the process of using and employing regional property is the subject of various regional property management procedures.

This regulation aims to standardize the procedures and actions the government must take to manage regional property in compliance with statutory regulations (Butter & Hudson, 2008). It also seeks to clarify the property's ownership status, inventory of regional wealth, and lifespan, as well as to optimize use and utilization to increase PAD and predict the condition of restricted property on a large scale. Additionally, to improve government finances' effectiveness and manage responsibility, services, and risk, analyze asset failures' potential causes and effects (Fadun, 2013).

As a result, for the management of regional property to function well and benefit the growth of the government and the larger community, it must be adjusted to the technical guidelines for managing restricted property according to the applicable regulations in the office and office that works every asset and regional property that is available. The government office in charge of owning and managing restricted property and fixed assets is called the Regional Financial and Asset Management Agency.

The entire system and procedure the regulation enforces is frequently not carried out consistently. It includes the number of events where the assets of Palembang City can be separated from the region's ownership and cannot be controlled by the area, such as the seizure of regional property that lacks complete ownership evidence and could lead to a dispute. Thus, regional property management still does not comply with relevant legislation.

In this research, the Pension Data Manager Application at the Regional Financial and Asset Management Agency Office was proposed, implemented, and tested.

Methodology

Several methodological steps have been taken in our study. The explanation is carried out below.

Data Collection Steps

The data collection method used by the author in the study is:

Observation

Observation is a data collection method in which researchers record information as they witness it during research (Kumar, 2022). Observation involves two components: the observer, better known as the observer, and the object being observed, known as the watch.

Interview

In research, an interview is an oral question-and-answer procedure where two or more participants listen intently to remarks or information (Mathers et al., 2000). Interviewing respondents is one

method of gathering data to obtain verbal information. Making interview rules relevant to the issues utilized for debriefing respondents is how interview procedures are carried out. This interview supplements the information collected through the observation method earlier.

System Development Steps

In making this system, the author uses the system development method, namely the Waterfall method. According to Ian Sommerville, the Waterfall method has the main stages of the Waterfall model, reflecting basic development activities. There are 5 (five) stages in the Waterfall method, namely Requirement, Design, Implementation, Verification, and Maintenance. The following is a picture of the Waterfall Method.

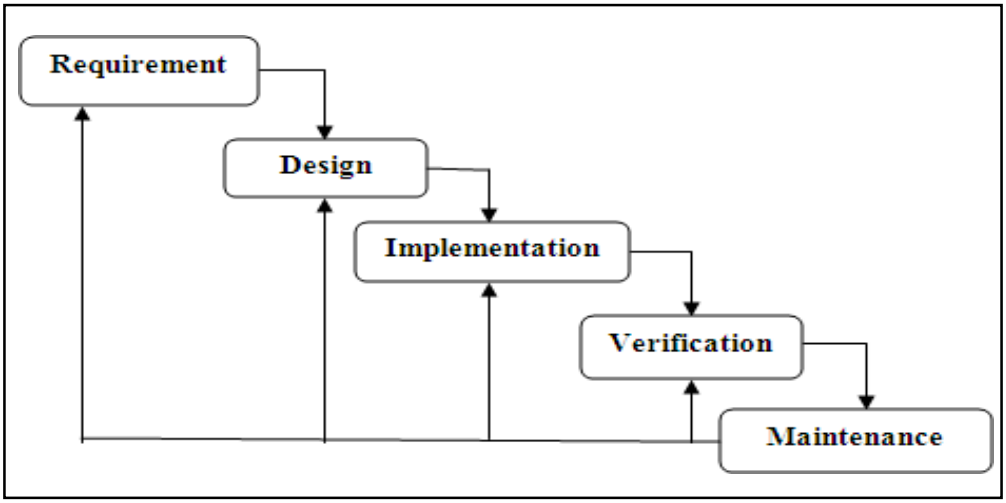

Figure 1. Waterfall Model illustration

The stages of system development in this waterfall model include:

Analysis of software requirements

Extensive requirements gathering is done to define software needs and make them understandable to users. Software requirements specifications need to be recorded (S. M. Khan, 2023).

Design

Various design formats, including case diagrams, activities, table designs, input designs, and output designs, are used in the system design process that will be developed (Waykar, 2015).

Generating Program Code

It is necessary to convert the design into a software application. A computer program that adheres to the design stage's creation is the product of this phase (Gill & Tomar, 2010).

Testing

Testing ensures that every program component has been tested and concentrates on it from a logical and functional standpoint (M. Khan, 2010). It is carried out to reduce errors and guarantee that the final product meets expectations.

Support or maintenance
Software may undergo modifications after it has been provided to the user. Errors that arise but are not discovered during testing may require changes, or the program may need to adjust to a new setting (Uddin & Anand, 2019). The development process may be repeated in the support or maintenance phase, beginning with specification analysis for modifications to existing software rather than creating new software.

Results and Discussion

Current System Analysis
Based on the results of observations and interviews that have been conducted by the author at the BPKAD Office in Palembang City, the pension data collection process is still done manually so that when the Head of Finance needs pension data, the staffing department must check the retired employee files one by one in Microsoft Excel and several other files. It takes quite a long time because the required data must be searched manually one by one. Therefore, the author intends to build an application for processing employee retirement data, which is expected to overcome the problems agencies face (Panjaitan, 2023).

Hardware Requirements
The hardware requirements used in building this system are shown in Table 1.

Table 1. Hardware Requirements

No.	Hardware	Specifications
1	Laptop	Toshiba Intel Celeron N4000 1.1 GHz
2	Ram	4GB DDR4
3	Hard drive	1 TB
4	Screen	14' LCD

System Design
After system analysis, this system's design is the next step. It explains the work done in system analysis and then considers how to create the design (Nwakanma et al., 2018).

Use Cases
Use Case is a relationship between one or more actors with the information system to be created. Use cases determine what functions are in an information system and who has the right to use those functions, as shown in Figure 2.

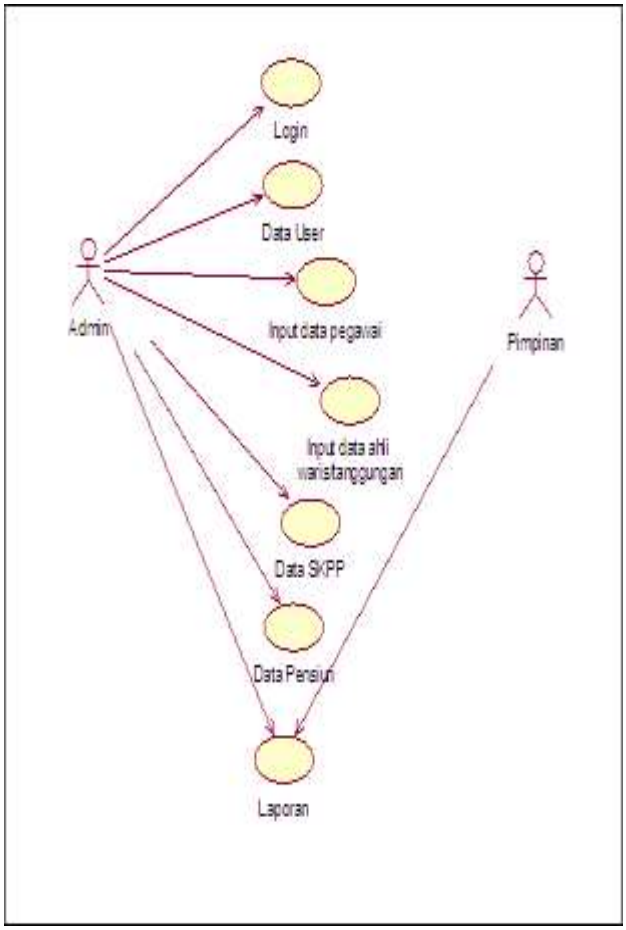

Figure 2. Use Cases

Login Page Menu

The user is expected to enter the registered username and password on the login page correctly. The login page display can be seen in Figure 3.

Figure 3. Login Page

Main Page Menu

The main admin page provides menus for employees, heirs, users, SKPP, retirement, and reports. The main menu display can be seen in Figure 4.

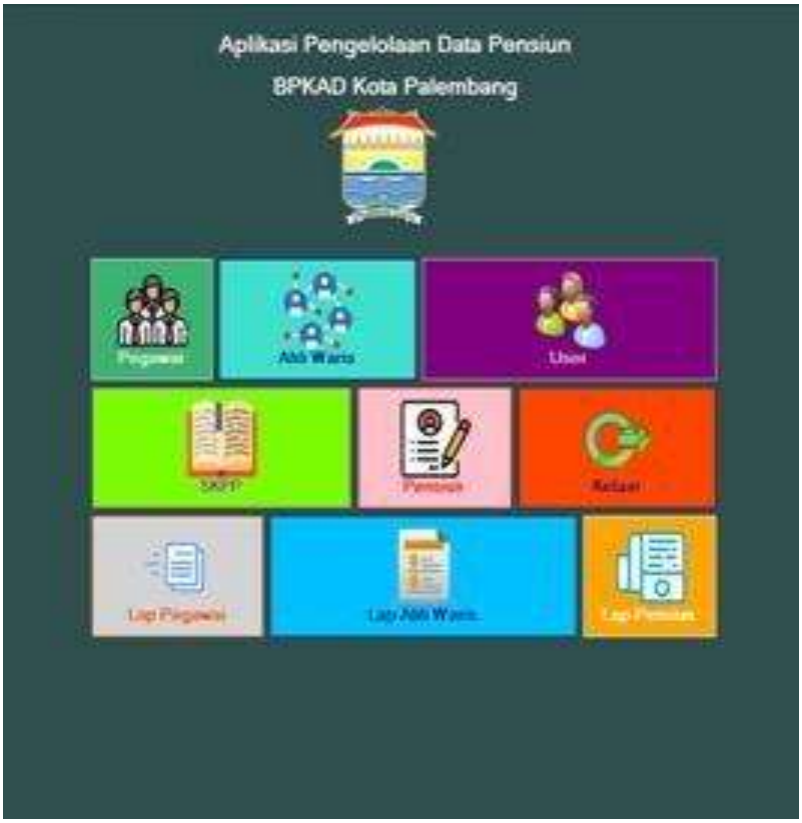

Figure 4. Main Page

User Page Menu

The admin can add, change, and delete users from existing users on the user page. The user page display can be seen in Figure 5.

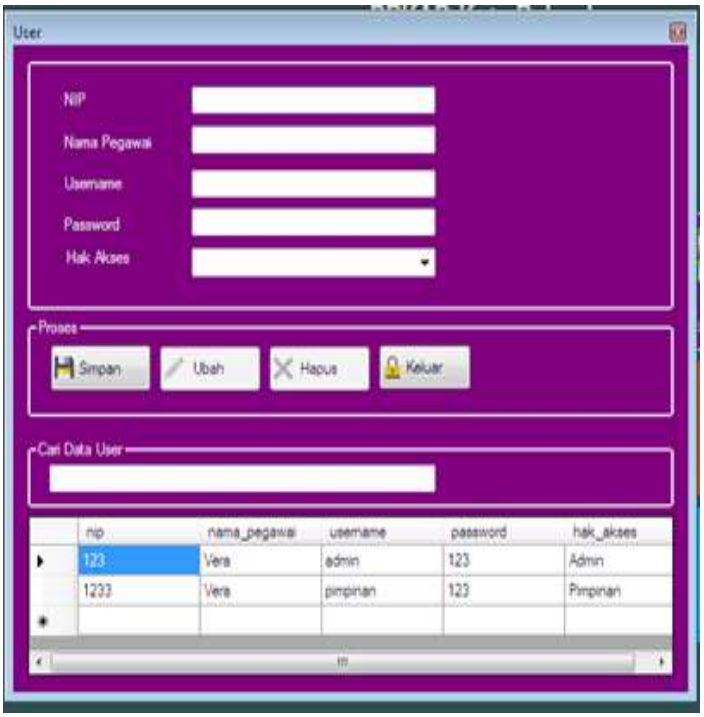

Figure 5. User page

Employee Page Menu

The admin uses the employee page menu to record and search for the names of employees who wish to apply for retirement. The employee page display can be seen in Figure 6 below.

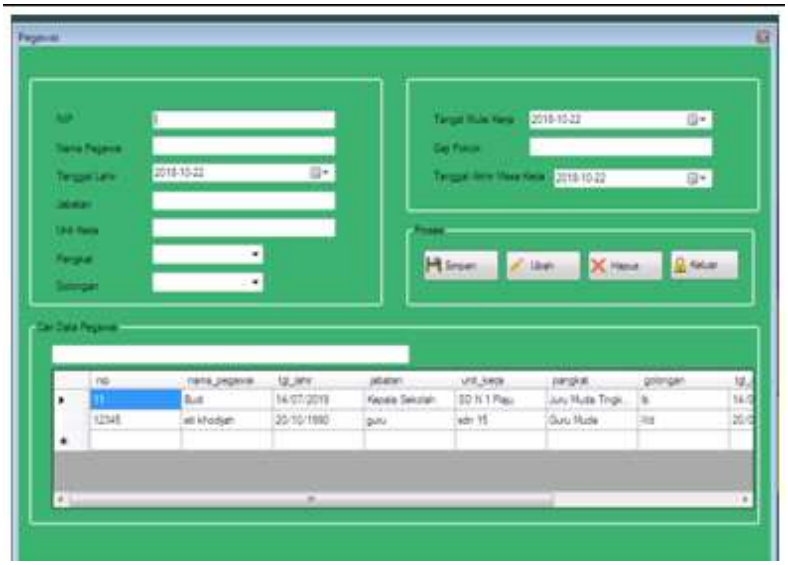

Figure 6. Employee page

SKPP Page Menu

The SKPP page menu functions to view the benefits received as a civil servant employee. The SKPP page menu can be seen in Figure 7.

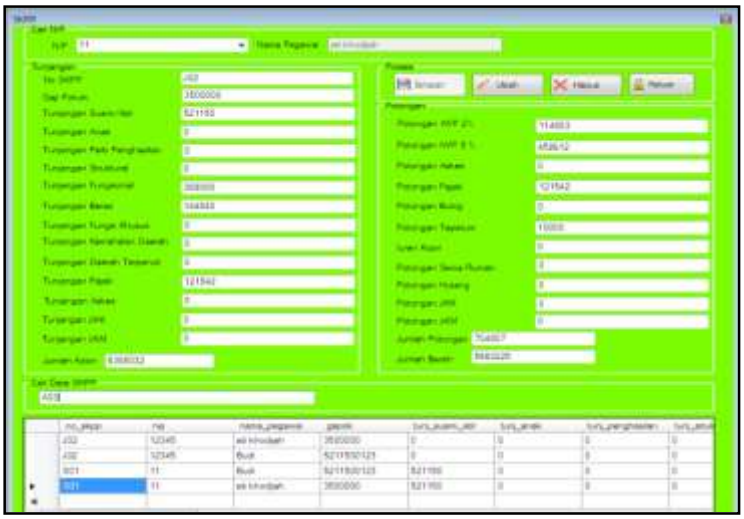

Figure 7. SKPP page

Heir Page Menu

The beneficiary menu replaces data on pensioners who have died before their retirement date. The following is the heir menu, which can be seen in Figure 8.

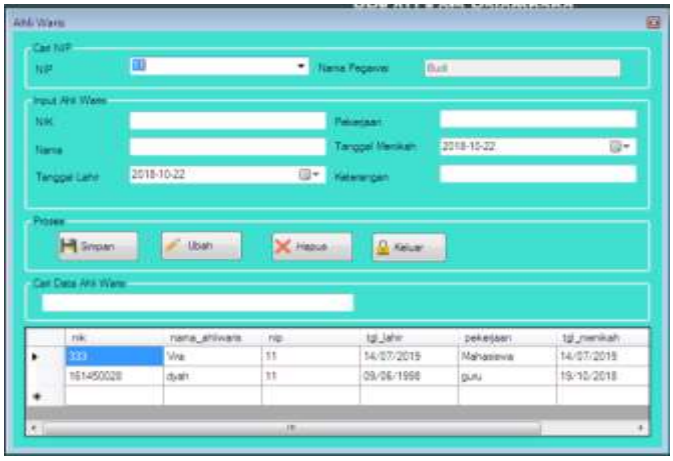

Figure 8. Page heirs

Retirement Page Menu

The pension page is the main menu to search employee data to determine the total salary and deductions obtained. The following pension page menu can be seen in Figure 9.

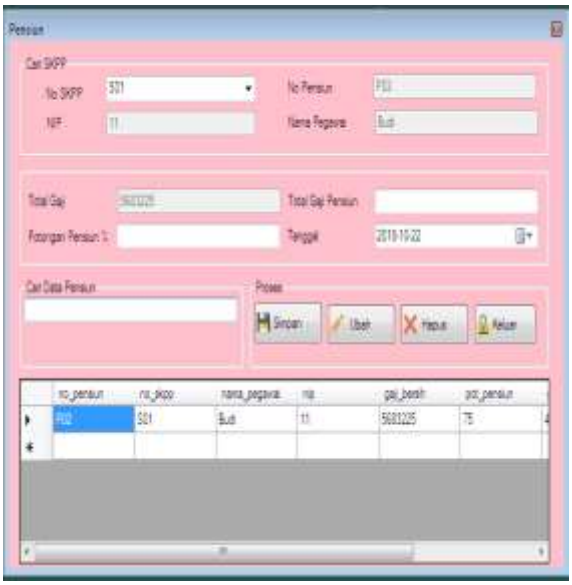

Figure 9. Retirement page

Report Page Menu

The report page menu functions to display reports that BPKAD leaders can access. This page is also created for employee reports, their reports, and pension reports. The report page menu can be seen in Figure 10.

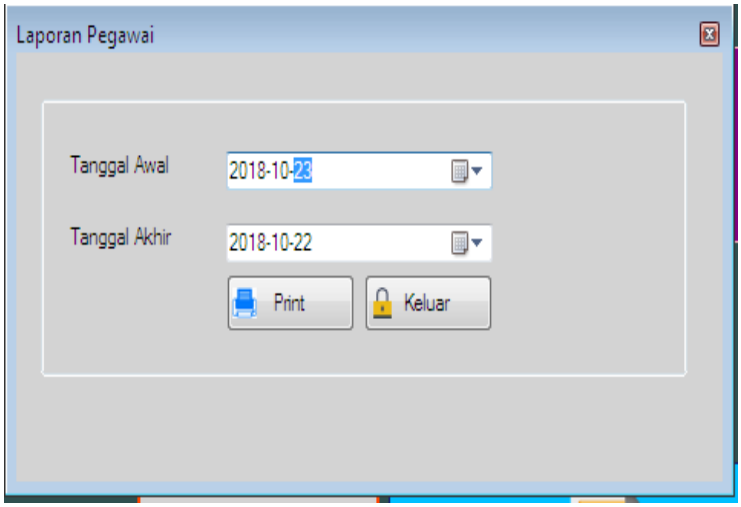

Figure 10. Report page

Conclusion

It can be inferred from the findings of the pension data management application research done at the Palembang City BPKAD office; that this research results in a pension data management application that can assist in making pension data management easier. The regional work units (SKPD) and BPKAD can operate the pension data management application more productively and successfully now. Data storage can be effectively managed with the use of a database. The BPKAD office's application for handling pension data generates a report that is visible to the senior management.

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