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Design of Employee Payment Information System at PT Kawan Kita Mandiri

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Abstract

The payroll system is one of the things related to the management of workforce welfare so it must be given special attention by the company in order to achieve its goals. Salary has a very important meaning for employees because salary is a reflection of the value of their work and performance both for the company, society and themselves. Like other systems in companies, payroll systems are vulnerable to various forms of deviation and human error. Information can be obtained quickly, precisely and accurately if at any time it is needed as analysis material for the parties concerned. This application is also capable of printing salary recaps, salary lists and employee pay slips according to company needs.

Keywords: Planning, System, Payroll

1. Introduction

The payroll system is one of the things related to the management of workforce welfare so it must be given special attention by the company in order to achieve its goals. Salary has a very important meaning for employees because salary is a reflection of the value of their work and performance both for the company, society and themselves. Like other systems in companies, payroll systems are vulnerable to various forms of deviation and human error.

PT Kawan Kita Mandiri is a company engaged in the distribution of goods consisting of Mayora and ABC products whose address is Jalan Veteran Kelurahan Baru. PT Kawan Kita Mandiri was founded by Mr. Ashar Ang and Jhony Ang on May 10 2012. PT Kawan Kita Mandiri has 58 employees consisting of 1 leader, 7 staff and 50 employees.

PT Kawan Kita Mandiri does not yet have an information system that specifically handles employee payroll data processing. Where data processing and employee salaries are still manual, starting from employee data collection to calculating employee salaries which still use calculators and *Microsoft Excel* by the finance department. Thus, the process of searching for employee data, processing data, calculating salaries, collecting deposits and making reports still takes quite a long time, and there is data that is hidden due to lack of guaranteed data security and is still vulnerable to errors in salary calculations and inappropriate retainer payments. with those determined by the company and the preparation of payroll reports. So this often results in less accurate and effective results, and requires quite large storage media for the data.

Based on these conditions, it is therefore necessary to design an information system which aims to solve problems related to the payroll data processing process, and produce a computerized payroll information system design that is precise, accurate and relevant according to needs. helps and facilitates the processing of payroll data to improve employee performance so they can make the best use of working time. So with this the author took the title **"Designing of Employee Payroll Information System at PT Kawan Kita Mandiri".**

2. Research methods

2.1. Types Of Research

The method used in designing the employee payroll information system for PT Kawan Kita Mandiri is using the method *waterfall.* Because this method has clear, real and practical stages. And each stage must be completed first to avoid repetition in stages so that the system development carried out can obtain the desired results.

2.2. Time and Location of Research

The research carried out in obtaining data in preparing this final assignment was carried out for approximately three months, starting from the beginning of December 2022 to the third week of February 2023 where the location of this research was carried out at PT. Kawan Kita Mandiri whose address is Jalan Veteran Kelurahan Baru.

2.3. Research Instrument

Research instruments are tools used in research to collect and obtain data easily. The research instruments used by the author in this research are as follows.
Hardware (Hardware)

a. Asus VivoBook laptop with 8GB RAM specifications, Intel Core i5 Gen.11 Processor
b. Toshiba 32GB flash disk
c. Stationery
d. Hp Vivo Y12S 2.

Software (Software)

a. Windows 11 Home
b. Microsoft Word 2019
c. Microsoft Excel 2019
d. Application *visual basic* 2010
e. Visual studio code
f. Crystal Report

2.4. Research Stages

Data collection; This data collection will be used as material to create a system design plan. Data collection was carried out in several stages, namely:

a. **Observation** – the activity of paying attention and observing accurately, recording phenomena that arise, and considering the relationships and aspects of these phenomena
b. **Interview** - Activities are carried out for students and boarding house owners to collect information about existing problems and to get an idea of how to solve problems.
c. **Study Literature** - At this activity stage, study various reading sources such as journals, theses, previous research references and study supporting books that are related to solving the problems that will be faced as research reference materials.

System design; This system design includes design *user interface* system, *context diagram*, *data flow diagram* (DFD), *usechase diagram*, structure table *database*.
System planning; This system design is carried out to create a system from the data that has been obtained and the system design has been carried out, this system design uses a programming language *Visual Basic dan Ms Access* as *Database.*
Testing; This testing will be carried out after the system design has been completed, and testing will be carried out *Black Box*.

3. Results and Analysis

3.1. Research Result

Procedure design is the result of changes and corrections to the current system, where the proposed system can cover its shortcomings, so that it can provide convenience for users. Based on the results of the evaluation of the current system, the existing system needs to be developed, so a system can be proposed that can solve problems that will provide convenience and help in processing employee salary data at PT. Our Friends are Independent. System development is carried out by changing or improving systems that have not been computerized into computerized systems, by adding applications for data processing so that they are faster than previous applications and produce data that is accurate and easy to operate.
A. Proposed System Design
At the design stage, the proposed system will illustrate the system design that will be implemented. Some diagrams that are depicted using data flow diagrams include: context diagrams, HIPO diagrams, zero diagrams, detailed diagrams for levels 1 to 3

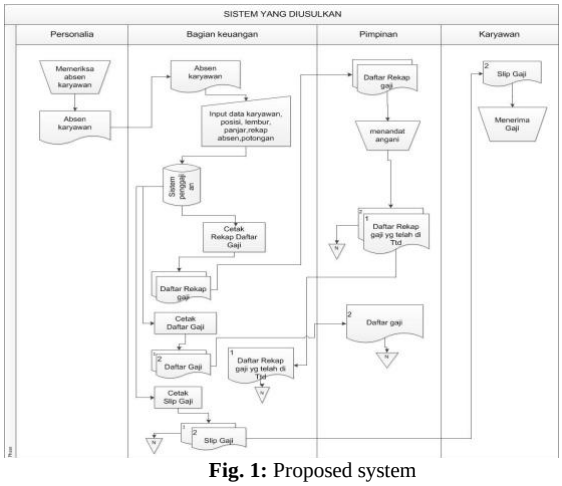

Fig. 1: Proposed system

1) The Context Diagram below will describe in general the flow of data entering the system and the data that will be produced as well as where the system sends the data or information.

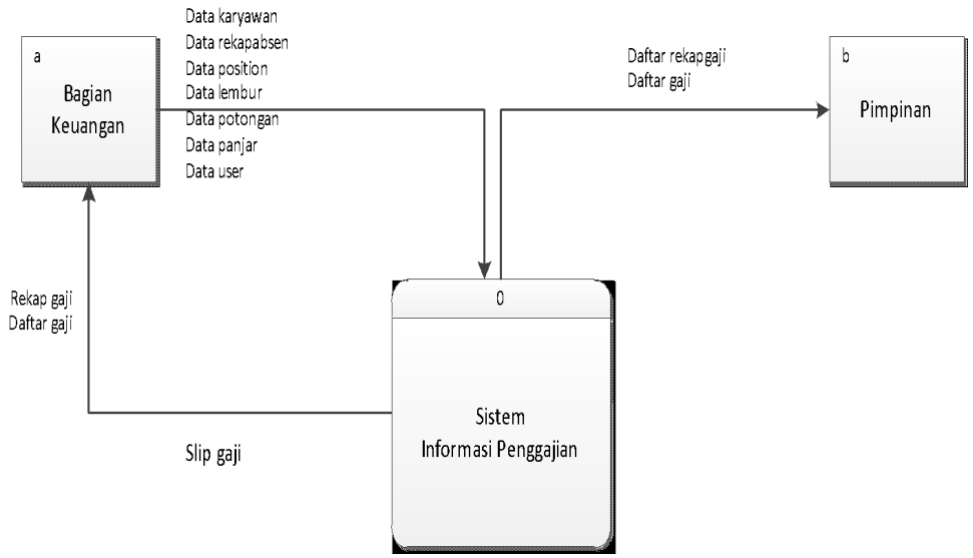

Fig. 2: Context Diagram

2) HIPO Diagram Diagram is a modeling that describes a diagram Hierarchy Input Proses Output (HIPO) is a diagram that describes the process sequences that exist or have been depicted in the system context diagram. The Information System HIPO diagram The proposed employee payroll at PT Kawan Kita Mandiri is as follows

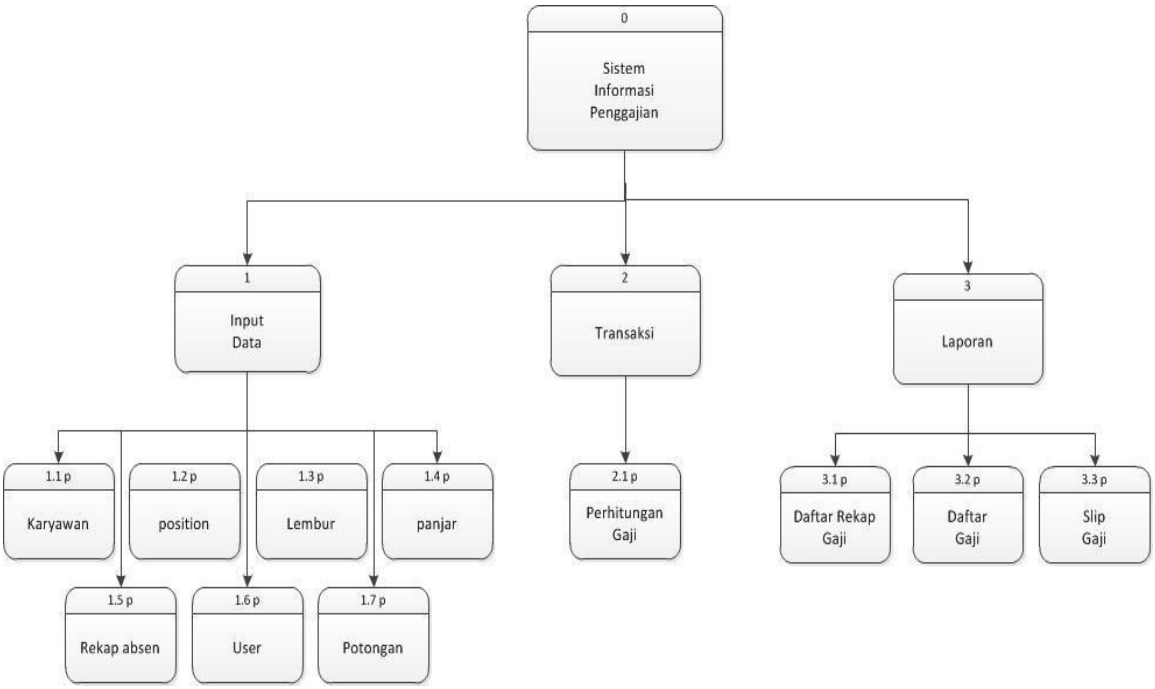

Fig. 3: HIPO diagram

3) Diagram Zero (Level 0)

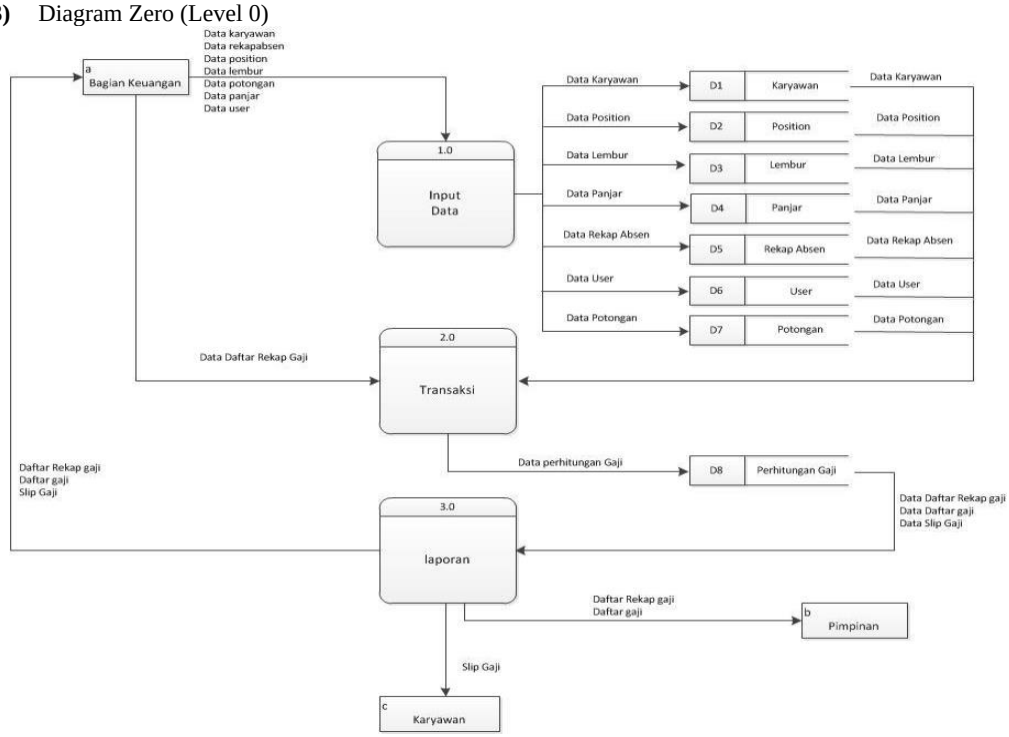

Fig. 4: Zero Diagram

4) Detailed Process Level Diagram 1 Data Input

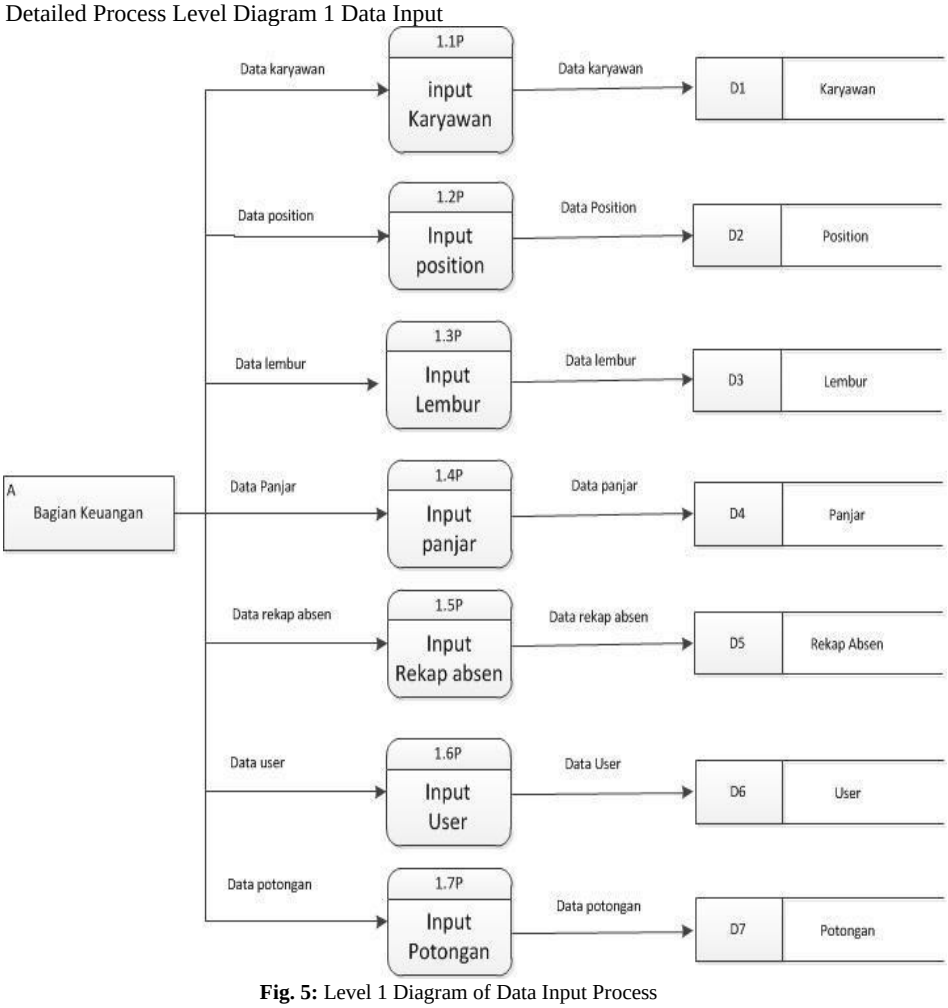

Fig. 5: Level 1 Diagram of Data Input Process

5) Detailed Level Diagram of Process 2 Transactions

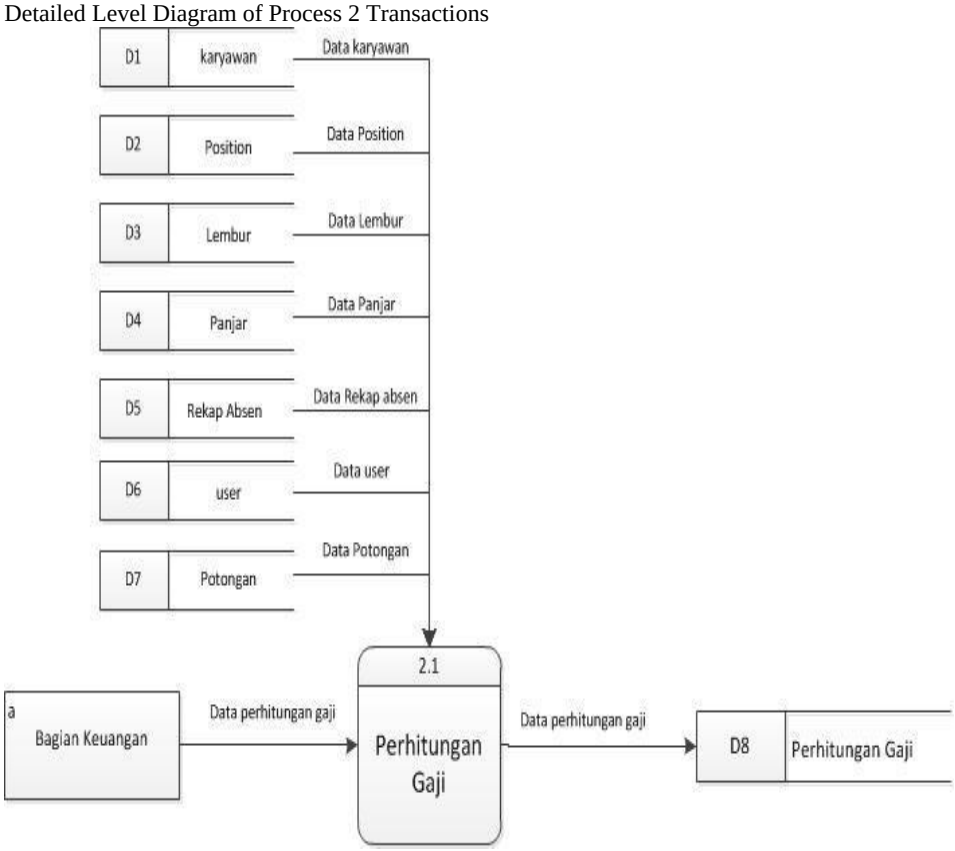

Fig. 6: Level 2 Transaction Process diagram

6) Detailed Process Level Diagram 2 Report

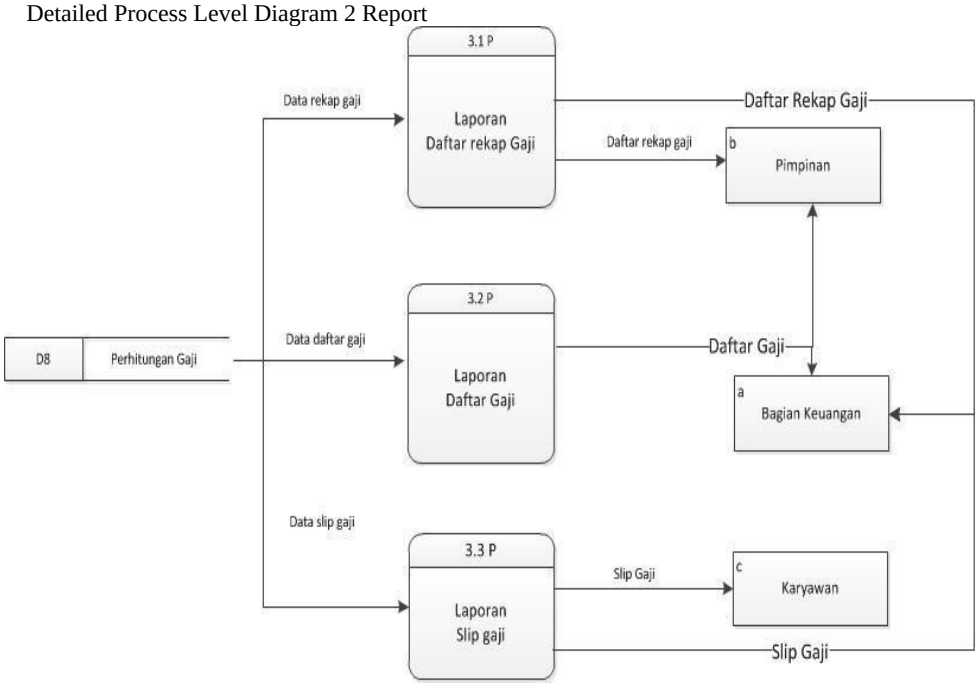

Fig. 7: Level 2 diagram of Report Process

4. System Implementation

The implementation stage is the stage of translating the design into language that can be understood by machines and implementing the software in real situations.

Interface implementation (interface) of the software based on the design that has been carried out. Implementation is carried out from Screenshoot from the page Application which are used as research tools and materials that have been detailed.

Main page interface

Fig. 8: Form Login

In Figure 8 above, namely This application has a menu *login* before entering the main program, where the login menu is divided into 3 access rights including:

1. Leader
   The function of the leader is to print salary summary reports and payroll.
2. Administrator
   The function of the administrator covers all programs including inputting or changing new users, inputting data *master* and managing payroll transaction processes and reports.
3. Treasurer
   The function of the treasurer includes processing salary transactions, deposits, absence recaps and reports.

Main interface

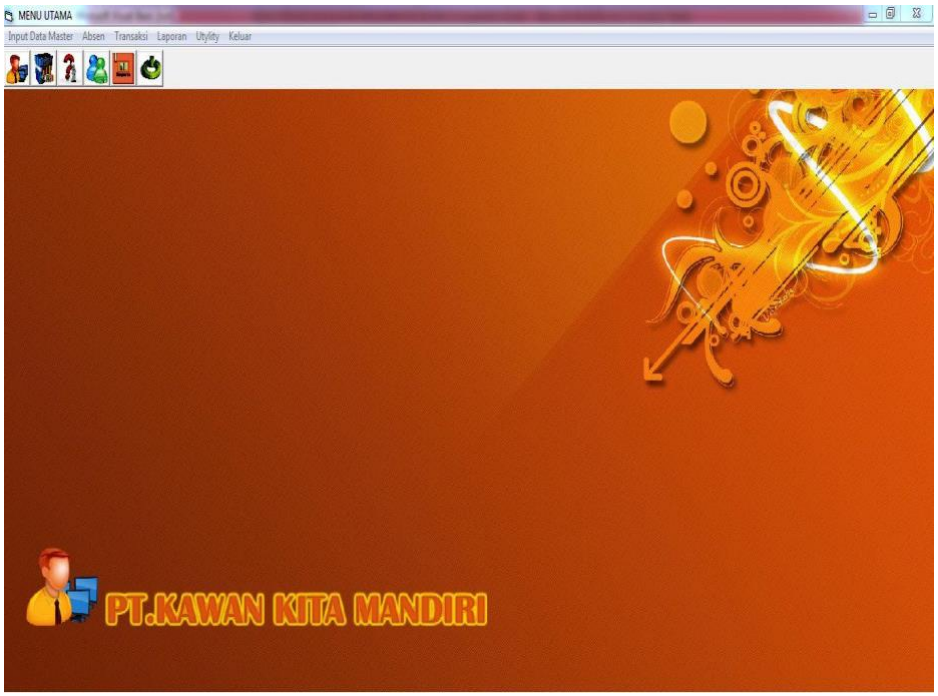

Fig. 9: Interface

In Figure 9 above, namely the main page in figure 9 the name of the page in the figure above shows that the user has pressed the login button and the modal options appear, namely logging in as leader, administrator or logging in as treasurer to take each user to their respective positions and roles. .

Data Input form interface

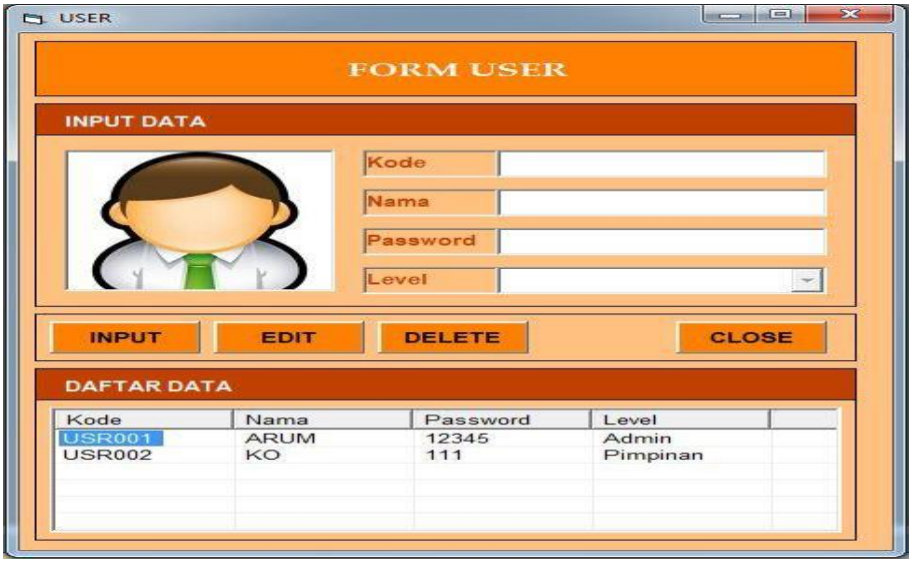

Fig. 10: User Data Input Interface

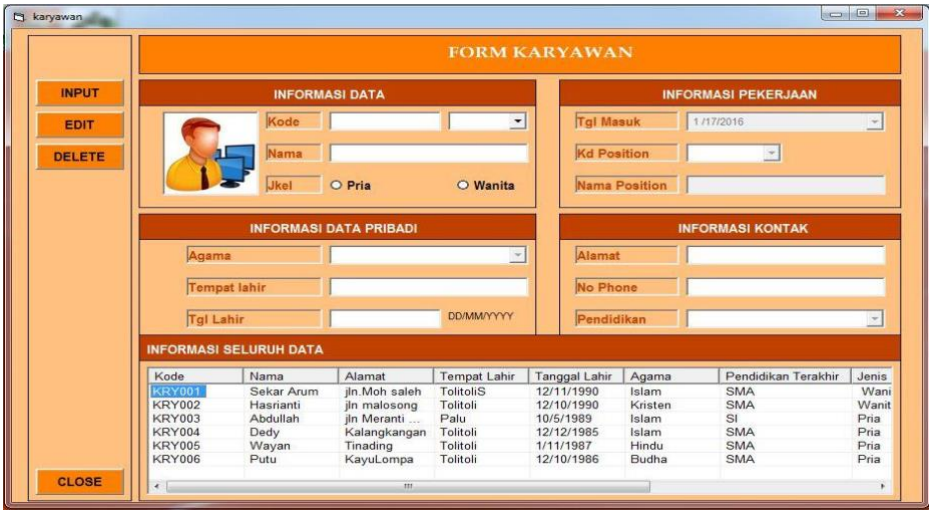

Fig. 11: Employee Data Input Interface

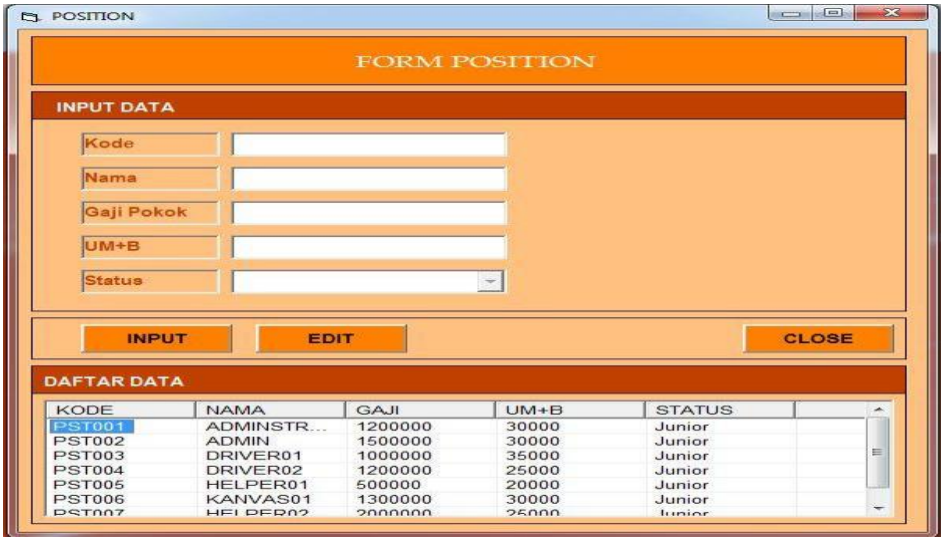

Fig. 12: Position Data Input Interface

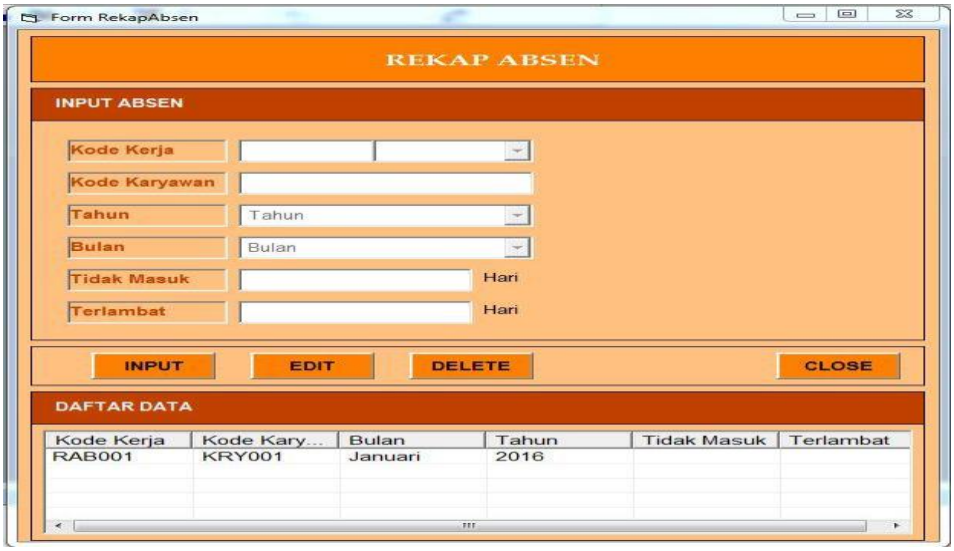

Fig. 13: Absence recap interface

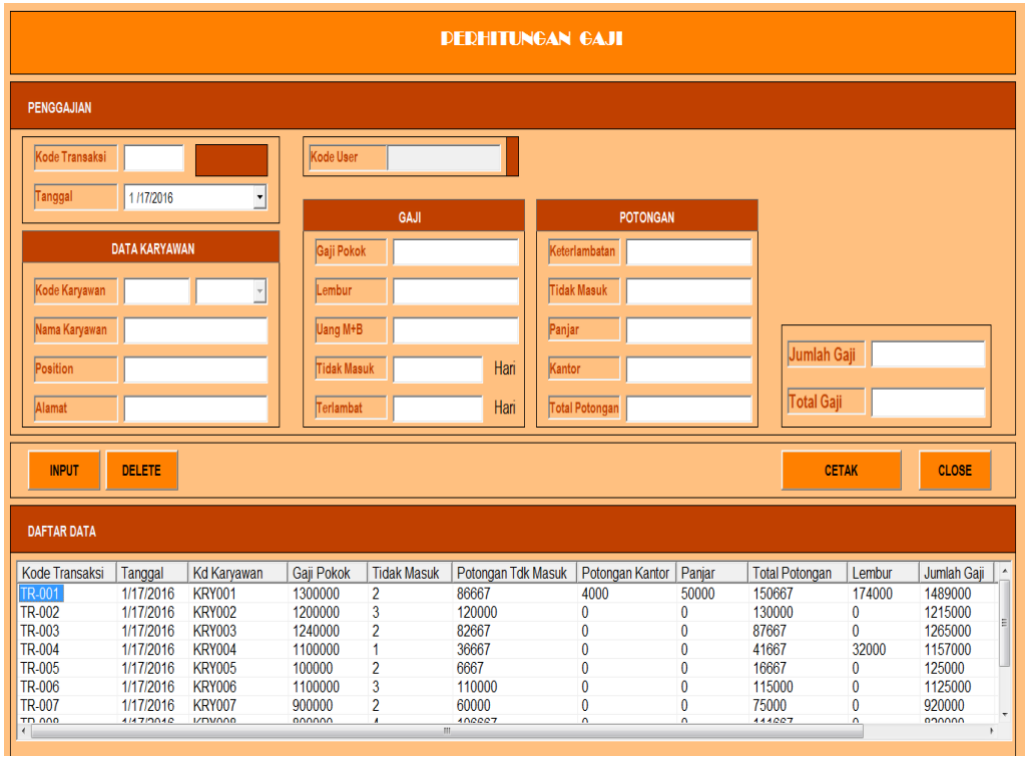

Fig. 14: Transaction interface

In Figure 14 Payroll transactions are used to carry out the process of calculating the salary amount for each employee, which includes employee data, salaries and deductions.

4. Conclusion

The employee payroll application at PT Kawan Kita Mandiri is an application designed to meet the needs of the company's financial department. The results of the application are based *visual*, with a programming language *Visual Basic* which produce *output* in the form of salary summary reports, salary lists and pay slips. Information can be obtained quickly, precisely and accurately if at any time it is needed as analysis material for the parties concerned. This application is also capable of printing salary recaps, salary lists and employee pay slips according to company needs.

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