Abstract

Payroll systems in every company vary, most have used computer-based information systems, but there are still some companies that have not implemented it as in SD KUMNAMU SCHOOL. In this educational institution in the payroll information system is still using the calculation manually and using MS aids program. Excel. In this study using SWOT method as a method used to determine the strengths, weaknesses, opportunities, and system threats that run today through several stages of interview and literature study. Which produces a payroll information system that can manage computerized payroll, perform absentee calculations, automatically calculate monthly salary, allowances calculation, present salary slips and salary reports required every month or every year and others. System design using UML (Unified Modeling Language) tool, while in making system program using MySQL tool to design database and PHP (Hypertext Preprocessor) as programming language.

Keywords: Information System, Sawmill, SD Kumnamu School.
theories from books, papers, and lecture materials as a basis for employee payroll information systems [6], [7].

2.2. System Analysis Method
the analytical method used is by using a SWOT analysis based on logic that can maximize Strengths, Weaknesses, Opportunities and threats both internally and externally [8], [9].

2.3. Design Method
In making a system program using MySQL tools to design a database, PHP (Hypertext Preprocessor) as a programming language, and UML (Unified Modeling Language) is used to make a diagram-shaped design [10].

3.4. Research that has been done and has a correlation that has similarities with the research discussed in this journal, namely:
1. Research conducted by Oktaviani K, Joni Devitra (Journal of Information Systems Management Vol. 2, No.2, July 2017).
2. Research conducted by Zulnalis (JOURNAL OF INFORMATION SYSTEMS OF STMIK ANTAR BANGSA, [VOL.V NO.2 - AUGUST 2016].
3. Research conducted by Reza Arie Setiady, Kastaman, Sendi Gusnandar (Journal of Information Technology Vol. 1, No. 6, November 2013).
4. Research conducted by Devin Pratama, Toto Sugiharto (Proceedings of the National Computer and Intelligence System Scientific Seminar (KOMMIT2014) Vol. 8 October 2014 Gunadarma University - Depok - 14-15 October 2014 ISSN: 2302-3740).
5. Research conducted by Redi Mulyana, Mohamad Ridwan ([ISSN 20886969] Vol. 5 Edition 10, Mar 2017).
6. Research conducted by PROF. NANTA N. ELEKWA & EME, OKECHUKWU INNOCENT (International Journal of Accounting Research Vol. 1, No.3, 2013).
7. Research conducted by David J. Berri, Michael A. Leeds, and Peter von Allmen (International Journal of Sport Finance, 2015, 10, 5-25, © 2015 West Virginia University).
8. Research conducted by Dr. Mahesh C. Dabre (Volume: 3 | Issue: 6 | June 2014 • ISSN No 2277 - 8179 Research).

Based on the 8 review literature above which discusses payroll and its system, this payroll system is made to facilitate the payroll process of employees and salary reports needed, also can improve the performance of educational institutions. On that basis, the basis for this web-based employee payroll system was made.

3. Results and Analysis
3.1 Problems faced
The process of calculating employee salaries is still conventional with the tools in the form of Ms.Excel application that still requires a long time when the salary calculation is done, so that there is often a delay in making payroll reports to the chairman of the foundation [11-13]. Data storage is still in the form of archives, so data loss often occurs when needed. Making employee salary reports requires a relatively long time [14]. This causes delays in the management decision-making process or the chairman of the foundation.

3.2 Troubleshooting
It is necessary to make a web-based employee payroll information system application so that the work process can be done quickly, precisely and accurately [15]. It is necessary to create a database system for data storage that is safer than data loss and faster data retrieval when needed. The employee payroll information system application is also designed to make payroll reports so that reports that are made no longer need a long time, and payroll reports can be quickly submitted to the board of directors.
3.3 Procedure for employee payroll system

Image Use Case Diagram One system that covers all activities in the employee payroll system process. The picture has 22 Use Cases that are run on Actors that explain the flow in the system, which is as follows: The Admin Head logs in. After logging in, the page that is displayed is Home, and there are several features on the Home page [16], [17]. On this page, the Admin Head inputs employee data. After that the Admin head inputs and imports employee attendance. Coconut Admin who has finished inputting the previous data, then input the teaching load data, and basic salary. Then the Chief Admin inputs the salary slips and salary components. The Chief Admin can find out reports or reports from each employee. While the Chairperson of the Foundation can only check employee payroll reports.

3.4 Database Design

Database Specifications

The database specifications used in the proposed system are as follows:

1. File Name : User
   Media : Hard drive
   Fill in : id_user + username + password + name + level + photo + email
   Record length : 172 characters
   Primary Key id_user

Table 1. Table User

| No | Field Name | Type Data | Length | Description |
|----|------------|-----------|--------|-------------|
| 1  | id_user    | Int       | 10     | Id user     |

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2. File Name : Employee  
Media : Hardisk  
Fill in : NIP+Name+Position code +Date of Birth + Address + Email  
Record Length : 295 character  
Primary Key : NIP  
Foreign Key : Position code

| No | Nama Field        | Tipe Data  | Length | Description                  |
|----|-------------------|------------|--------|------------------------------|
| 1  | NIP               | Varchar    | 5      | Employee id number           |
| 2  | Name              | Varchar    | 30     | Name                         |
| 3  | Position Code     | Varchar    | 10     | Position Code                |
| 4  | Date of birth     | Date       |         | Date of Birth                |
| 5  | Address           | Varchar    | 200    | Address                      |
| 6  | Email             | Varchar    | 50     | Email                        |

3. File Name : Attendance  
Media : Hardisk  
Isi : attendance code + month + NIP + total attendance  
Record length : 34 character  
Primary Key : Id Attendance  
Foreign Key : NIP

| No | Nama Field      | Tipe Data | Panjang | Keterangan                     |
|----|-----------------|-----------|---------|--------------------------------|
| 1  | Id Attendance   | Int       | 11      | Attendance Code               |
| 2  | Month           | Varchar   | 7       | Month                          |
| 3  | NIP             | Varchar   | 5       | NIP                            |
| 4  | Attendance Duration | Int | 11  | Attendance Duration |

4. Name File : Salary basic  
Media : Hardisk  
Fill in : Position Name+Salary basic  
Record length : 21 character  
Primary Key : Position Code

| No | Field Name      | Type Data | Length | Description |
|----|-----------------|-----------|--------|-------------|
| 1  | Position Name   | Varchar   | 10     | Basic salary|
| 2  | Salary Basic    | Int       | 11     | Basic Salary|
5. File Name : Salary component master data
Media : Hardisk
fill in : Component Name + Status
Panjang Record : 40 character
Primary Key : Component Name

Table 5. Master Data Table of Salary Components

| No | Field Name    | Type Data | Long | Description       |
|----|---------------|-----------|------|-------------------|
| 1  | Component Name| Varchar   | 30   | Component Name    |
| 2  | Status        | Varchar   | 10   | Status            |

6. File Name : Detail Komponen Gaji
Media : Hardisk
Isi : Kode Detail+Komponen Gaji+Kode Jabatan+Gaji
Panjang Record : 62 karakter
Primary Key : Id Detail
Foreign Key : Kode Komponen+Kode Jabatan

Table 6. Salary Component Detail Table

| No | Field Name           | Type Data | Length | Description         |
|----|----------------------|-----------|--------|---------------------|
| 1  | Details id           | Int       | 11     | Detail Code         |
| 2  | Component Code       | Varchar   | 30     | Component Code      |
| 3  | Position Code        | Varchar   | 20     | Position Code       |
| 4  | Salary               | Int       | 11     | Salary              |

7. File Name : The burden of teaching
Media : Hardisk
Fill in : Id the burden of teaching+NIP+Component code+the amount of load
Panjang Record : 57 character
Primary Key : Id the burden of teaching
Foreign Key : NIP+Component Code

Table 7. Teaching Load Table

| No | Field Name              | Type Data | Length | Description          |
|----|-------------------------|-----------|--------|----------------------|
| 1  | Id the burden of teaching| Int       | 11     | Id the burden of teaching |
| 2  | NIP                     | Varchar   | 5      | NIP                  |
| 3  | Component code          | Varchar   | 30     | Component Code       |
| 4  | The amount of load      | Int       | 11     | The amount of load   |

4. Conclusion
As the end of writing this thesis report, the writer gives conclusions based on the discussion and research results in the previous chapter as follows:
1. Payroll information systems of employees who are running still use the Ms.excel application in which data processing takes a long time and in the presentation of reports is less accurate.
2. With a computerized system that provides absent access collaboration that will simplify and speed up the employee payroll process.
The new system is designed with web-based as an employee payroll application designed to produce payroll reports that are fast and accurate, so that there are no more delays or errors in inputting employee salary data or completion of payroll reports.

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