Design Model of Payroll System Integrated with Attendance System at PT. XYZ

Sulis Sandiwarno

Department of Information System, Faculty of Computer Science, Universitas Mercu Buana JL. Raya Meruya Selatan, Kembangan, Jakarta, 11650

Abstract –

Utilization of Information Technology (IT) is now entered in a very good condition that can be used in every aspect of life. Utilization of good IT will generate benefits for its users in utilizing IT. As well as in the field of employee payroll information systems are needed in every company, by utilizing IT media companies will be faster in processing data and generate payroll reports are also fast. However, although much work can be done by using computers, especially the internet at this time is not entirely the company still using the manual system. Thus, with the purpose of facilitating the application of IT media required a system to be integrated into the company level. In order for payroll data processing system employees can be done well, then the software development process is based on the correct software system and by going through the process of analysis and design of an object-oriented system. The hope of this study is to provide convenience for companies in performing payroll data processing employees.

I. INTRODUCTION

In the era of all-modern today technology is becoming increasingly sophisticated. The use of computers is one of the most important things in the life of the community extensively, not only in the world of work, health and government, but also in everyday life. The application of computer-based information becomes an absolute necessity and can provide a competitive advantage so that it gets high priority on corporate. hospital. or government environments. Therefore, the use of computers is very important especially for data processing, thus minimizing the error rate in inputting data or making reports. A company needs a system that can assist the work in processing employee payroll data. Actually, the company has been utilizing IT in performing payroll data processing employees, but the company is still not maximized in utilizing the IT media. The process runs from employee payroll system in the company by utilizing Microsoft Excel in data processing employees. Therefore in this study proposes to build model of employee payroll system integrated with employee absenteeism, so that later will easily get report about employee salary status.

II. RELATED WORK

Payroll is a compensation payment based on a position or position such as a Manager, Supervisor, Secretary, factory employee and others paid on time such as employees receiving daily, weekly or monthly wages [1, 2, 3, 4, 5]. The basic salary in an enterprise is arranged according to rank and rank level [6, 7, 8, 9]. Supplement to the basic wage or salary in its function is related to the implementation of the task, in the framework of social functions, and as an incentive. Benefits related to the performance of duties are job allowances, both structural positions and functional positions [10, 11, 12, 13]. In addition, the worker is entitled to JAMSOSTEK (Social Security of Workers) as a protection for the worker in the aid of compensation in the form of money as the replacement of a portion of lost or reduced income and services as a

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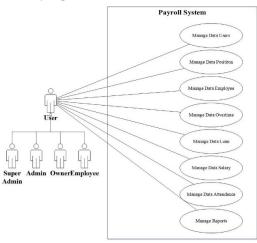
result of events or circumstances experienced by workers in the form of work accidents, sickness, pregnancy, childbirth, old age, and death, this is adjusted to the conditions of the company [14, 15, 16]. Overtime hours are working hours exceeding 8 hours a day and 40 hours a week for 5 working days a week or work time on weekly rest days and or on official public holidays set by the government [17, 18]. Or work time exceed 7 hours a day or 40 hours a week for 6 working days per week. Overtime work can only be 3 hours in 1 day and 14 hours in 1 week. This provision shall not apply to overtime work on rest days or public holidays.

Analysis of the current system starts from the employee performs absenteeism, HRD makes absentee recap and then given to finance to input to Ms. Excel is subsequently calculated and then printed after it is given to the chairperson for review and approval, once approved then given to finance to print the paycheck and give the salary to each employee. in this research used Unified Modeling Language (UML) program to describe current process and process, use use case diagram, and Activity diagram that is as follows: In the proposed system design, there is Login or permissions for Finance and Admin can enter into the system created. By filling out the Available forms, and calculations that can be directly known to the results. there are also payroll reports and live paychecks.

III. METHOD

Here is a system running on the company XYZ: (1). the absentee calculation process, every day the employee fills in the attendance list of the employee who subsequently corrected the financial section, attendance list of the absent employees due to illness, permission, leave, alpha, (2) salary calculation process, in this process the finance section takes the employee attendance register file, employee records, and allowances and deductions to be processed as inputs in salary calculations and outputs in the form of payrolls stored in the payroll file and (3). the process of making the report, in this process the financial section to take a salary file containing a payroll to be made a report that will be submitted to the leadership of the company. From the system running, then made a proposal system about the payroll system employees who are more utilizing the IT media. Proposed system created, there are actors involved in the system, such as employees, leaders, admin and super admin. They have different tasks, such as: super admin has the task of managing all the content or the contents that exist in the

system, the admin can manage the existing content in the system, but cannot manage in addition to wanting deletion of user data, all done by super admin, the owner or the leader



can only view the reports displayed in the system and the employee can see information about the attendance. The description of the proposed system can be seen in the use case diagram in Fig.1.

Fig 1. Use case diagram payroll system

III. RESULT AND DISCUSSION

After the analysis, then this is the stage to see the results in accordance with the analysis made in accordance with the needs.

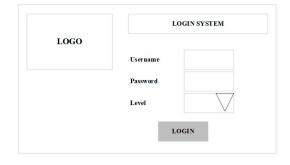


Fig 2. Form login users

In the picture above explains that, all users before entering into the system must login first by entering the username and password, if the username and password are correct, then users will enter into the system according to the activity.

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Fig 3. Page of super admin

LOGO	Payroll and Attendance System
Home	Welcome to Super
Users	
Position	
Employee	
Overtime	
Loan	
Payroll	
Attendance	
Report	

In the picture above, super admin has to login and succeed. In the page for super admin there is some content that can be used such as organize all activities.

	Payrol	I and Attenda	nce System		
				+ Ad	d Data
No Employee ID	Employee ID	Name	Posititon	Т	ools
				Edit	Delete
				Edit	Delete
				Edit	Delete
				Edit	Delete
				Edit	Delete
				Edit	Delete
	ee ID				
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Fig 4. Page of employee

In the picture above, admin can process employee data by entering employee data, change employee data and delete employee data.

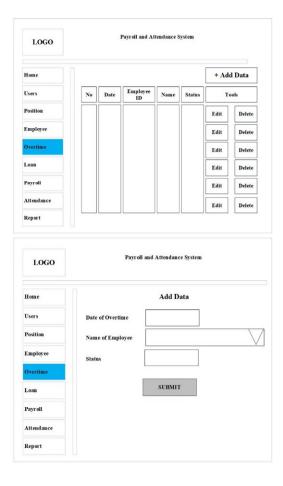


Fig. 5 Page of overtime

In the above view can be explained that the admin can manage employee overtime data, so that on the payroll process employees will get a salary according to what has been done. If employees often get or do work overtime, then the employee's income will be greater, but if employees do not do overtime, then the income is also not too much.

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LOGO	Payroll and Attendance System	
Home	Add Data	
Users	Code of Payroll	
Position	Periode	\bigtriangledown
Employee	Name of Employee	
Overtime	Salary	
Loan	Information	
Payroll Attendance	Transport Pay	
Report	Meal Allowance	
	Total of Overtime	
	Total of Bonus	
	Total of Loan	
	SUBMIT	

Fig 6. Page payroll employee

In the picture above explains that, admins have entered into the system and perform data management employee payroll is by entering some data into the data of employee name, meal money, transport money and others.

LOGO	Payroll and Attendance System						
Home							
Users							
Position	Users	Posititon	Employee	Overtime			
Employee							
Overtime	Loan	Payro	Payroll At				
Loan							
Payroll							
Attendance							
Report							

Fig 7. Page of payroll report

In the above view, explains that the leader can view reports on payroll data only, for other menus, the leadership cannot do it.

IV.CONCLUSION

Payroll processing system employees at XYZ company that runs at this time still not utilize the IT media optimally. And the security aspect, that system runs so far have more

deficiencies than the proposed system, such as the possibility for data to be corrupted, lost or altered. By using computerized payroll data processing application system is expected to assist in providing solutions to troubleshooting the current system. With digital storage such as using a database, excessive paper usage and archive storage can be resolved, so that faster work is done. With this payroll system, it can shorten the processing time of payroll data and reduce the problem of human error in the calculation of the salary of employees, can produce payroll reports quickly and accurately, expected payments can be accelerated, and there are restrictions on access rights to each user for avoiding unauthorized parties to access data freely.

References:

- Andi Nugroho1, Retno Setya Wulandary2. (2016). Pengelolaan Presensi Dan Gaji Asisten Lab Berbasis Web Di Fasilkom Universitas Mercu Buana. Jurnal Ilmiah FIFO, 1-8.
- [2] Raka Yusuf¹, Yossi Susanto². (2010). Pemanfaatan SMS Gateway untuk Absensi Sekolah Siswa. Seminar Nasional Pengaplikasian Telematika SINAPTIKA, 1-4.
- [3] Raka Yusuf¹, Gilang Widi Darmawan². (2016). Aplikasi Berbasis Web Dengan Menggunakan Pustaka Javascript Fabricjs Untuk Pembuatan Komik Strip Punakawan. Seminar Nasional Teknologi Informasi dan Multimedia, STMIK AMIKOM Yogyakarta, 1-6.
- [4] Carolyn Mackintosh-Franklin. (2018). An evaluation into the impact of undergraduate nursingstudents classroom attendance and engagement with online tasks on overall academic achievement. Nurse Education Today, 61, 89-93.
- [5] Harry J. Paarsch^a, Bruce S. Shearer^{b,*}. (2007). Do women react differently to incentives? Evidence from experimental data and payroll records. European Economic Review 51, 1682-1707.
- [6] Joseph C. Rode^{a,}, Marne Arthaud-Day^b, Aarti Ramaswami^c, Satoris Howesd' (2017). A time-lagged study of emotional intelligence and salary. Journal of Vocational Behavior, 101, 77-89.
- [7] James B. McDonalda^{a,*}, Jeff Sorensen^b.
 (2017). Academic salary compression across disciplines and over time.

Economics of Education Review, 59, 87-104.

- [8] Matthew D. Hendricks. (2015). Towards an optimal teacher salary schedule: Designing base salary to attract and retain effective teachers. Economics of Education Review, 47, 143-167.
- [9] Yu-Li Tao^{a,}, Hwei-Lin Chuang^{b,1}, Eric S. Lin^{b,2.} (2016). Compensation and performance in Major League Baseball: Evidence from salary dispersion and team performance. International Review of Economics and Finance, 43, 151-159.
- [10] Jan ChristophSchlegel. (2015). Contracts versus salaries in matching: Ageneral result. Journal ofEconomicTheory, 552-573.
- JohnJ. Cheslock^{a,*}, TrinaM.Callie^{b,1.} (2015). Hanging salary structure and faculty composition within business schools: Differences across sectors and state funding levels. Economics of Education Review, 49, 42-54.
- [12] Krenare R. Pireva*, Jeton Siqeca **, Shkelqim Berisha***. (2013). RFID: Management System for students' attendance. Workshop on International Stability, Technology, and Culture, 1-4.
- [13] Zhang Hao, Xu Guangli, Zhang Yuhuan, Lei Yilong. (2012). Salary Management System for Small and Medium Sized Enterprises. Physics Procedia, 24, 2255-2260.
- [14] Georgios N. Kouziokas. (2014). Technology-based management of environmental organizations using an Environmental Management Information System (EMIS): Design and development. Environmental Technology & Innovation, 5, 106-116.
- [15] Bader.A.Alyoubi. (2015). Decision support system and knowledge-based strategic management. Procedia Computer Science, 65, 278-284.
- [16] Riya Lodha^a, Suruchi Gupta^a, Harshil Jain^a, Harish Narula^a. (2015). Bluetooth Smart based Attendance Management System. Procedia Computer Science, 45, 524-527.
- [17] Anna Lukkarinen^{a,*}, Paula Koivukangas^a, Tomi Seppälä^{a.} (2016). Relationship between class attendance and student performance. Procedia - Social and Behavioral Sciences, 228, 341-347.
- [18] Mahendra Adhi Nugroho*, M. Andryzal Fajar. (2017). Effects of Technology Readiness Towards Acceptance of Mandatory Web-Based Attendance

System. Procedia Computer Science, 124, 319-328.