PT. Indosurya Finance Solo Baru Employee Management Information System Analysis

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Abstract—Attendance is an important factor in maintaining the quality of an employee's performance in a company. With technological advances such as nowadays, the ease of attendance can also be carried out easily, the use of the old attendance system is also considered less effective in today's era, employees need efficiency in the absent process, as implemented by Indosurya Finance's Solo Baru branch which has left the old system attendance , where the previous abscess system used the signature system, the block card system, and the fingerprint system. In this old system, the majority of employees worked not only in the office having difficulty meeting clients outside the office at any time, because they had to come to the office if they wanted to be absent. Therefore the company replaced it with a new system, namely using an application called Great Day HR. With a modern employee attendance system like this, it can help companies make arrangements for existing human resources and the purpose of this research is to determine the feasibility of an attendance system using Great Day HR for the future. The method in this research is through observation, interview, documentation, and literature study. The system design is made with context diagrams, HIPO, DAD, input output design, hardware requirements analysis, software requirements analysis. By using this online attendance system employees can perform attendance efficiently and effectively according to the needs of each employee. The final result of this online attendance system is an attendance recap data from each user owned by Indosurya Finance employees.

Keywords: Information Systems, Attendance, Great Day HR.

I. INTRODUCTION

A company needs human resources as the executor of its operational activities, the company also needs a way to regulate existing human resources so that if it is not done properly it will cause irregularity in the resulting information relating to these human resources. Indosurya Finance is a company that requires an effective and efficient information system for all employees. The attendance system from the manual uses a signature that must be done on arrival and return at the office, card and fingerprint attendance has also been carried out and can only be done in the office. Therefore attendance is practical, easy to do anytime and anywhere is very necessary considering that work is not only only done in the office, but someone has to go into the field to meet clients anywhere and anytime.

Seeing this problem, the company is looking for a way out to simplify and simplify management related to employee attendance, namely providing an application that can be accessed by employees with the username and password that has been given by a company called Great Day HR, with this new attendance system employees can be absent using it regularly. easy. This system is the right solution for Indosurya Finance for the right decision-making process by providing timely and accurate employee data information and attendance data.

II. RESEARCH METHODS

To obtain information, the following methods are required: 1. Data Collection Methods, Interview : Is a method used by the author to find information about the running of attendance using the GreatDay HR application by means of questions and answers to one of the IndoSurya Finance employees. Observation : Namely data collection by the author directly by visiting the Indosurya Finance office. Literature study : Is a method used by the author to obtain references by visiting campus libraries. 2 Systems

Development Method : The following methods in system development are as follows: System Planning : Concept employee data, operate GreatDay HR application, recapitulate attendance results. System Analysis : Intelligent Stage, Design Stage, Implementation Stage. System Design : System design includes: Context Diagram, HIPO, DAD, Input Output Design. System Implementation : This system uses the JAVA programming language and SQLite database. System Testing : In this stage, the system testing used is functionality testing and questionnaire testing. 3. Management Information Systems, Management Information System is an integrated human or machine system to present information to support operations, management, and decision-making functions in an organization. 4. Attendance : Attendance means "absence", but it can also be said that attendance is the absence or presence of an object in this case is a person, where the person is involved in an organization that requires notification of his condition or presence or absence within the scope of the organization [2].

Brainware is a person who owns, builds, runs a management information system. The term people here is not just anyone in the sense that they are people but people who have competence (knowledge and skills or expertise). For example a programmer, namely the process of creating and distributing information [3] GreatDay HR Application Model GreatDay HR is an online application that provides features for companies to manage human resources accurately, GreadDay is here to make Human Resource tasks easier. GreatDay HR sees the importance of managing human resources in companies whose numbers continue to increase every year in Indonesia. GreatDay HR is at the forefront of a mobile-based HRIS application designed to answer all employee management problems for various types of companies. The need for an HR system is increasingly real because it sees HRD jobs that are

increasingly complicated, starting from managing attendance, paying salaries, arranging work shifts, to recruiting new employees.

Indosurya Finance is a company that uses this application for HR, one of which is managing online attendance, the main problem that arises for HR is recording and calculating employee attendance data, employee attendance data is time attendance and employee return data. Likewise, when an employee does not work, it can also be seen the status or reason for the employee not working on that day, the existence of clear attendance data makes it easier for HR to calculate the amount of attendance that affects the employee's salary. The online attendance feature on GreatDay HR employees can make it easier to record attendance by confirming photos and locations using their respective cellphones.

That way the HRD team can directly view employee data and minimize data falsification, coupled with the presence of two advanced technologies that support the attendance record feature in GreatDay HR. The first is Geo-Tagging technology, which is a location marker when taking attendance records. Both Face Recognition technologies can detect faces and verify the authenticity of employee attendance data.

Java is the most popular programming language developed by Sun Microsystems. One of the biggest uses of Java is in the creation of native and android applications. This programming language is multiplatform, that is, this language can be used on various platforms such as desktop, Android and even the Linux operating system. Some of the characteristics of this programming language are as follows: Object oriented language, Multithreading, Garbage collector support, Statically typedMultiplatform[4].

SQLite is one of the most popular embedded software, combination of SQL, interface, and uses very little memory with a very fast speed. With this SQLite database, it helps a lot in making various versions of android because SQLite is included in the android runtime. For its development in creating and opening databases, we use a library that we must import, namely android database sqlite SQLiteOpenHelper which provides three methods as follows : Constructor, provides a version of the database.

III. RESULT AND ANALYSIS

3.1 Computerized System Analysis

PT Indo Surya Finance, SoloBaru branch, has implemented various systems, starting with a manual attendance system using a signature where employees are present and return to carry out a signature session provided at the office and data recapitulation by HRD is still manual. After that the company replaces the attendance system by using a card provided by the company and then a stumbling machine is provided so employees do attendance by placing the engine card, so this attendance can only be done by employees at the office. After that the company switches to an attendance system using finger print come and go home doing absenteeism by placing a thumb that has previously been registered with the fingerprint, this attendance can only be done at the office because the finger print machine is only available in the office, if employees who have

appointments with outside clients have to return to the office if absent.

From the ineffectiveness of the attendance system, the company previously had an alternative to make it easier for employees to do attendance if they were not at the office or work from home, namely using the GreatDay HR online attendance system. This online application system can be accessed by employees by downloading the application via the Google Play Store or App Store, then logging in with the username and password that the company has given to each employee. This attendance can be done by employees while in the office or outside the office during working hours. This online attendance system is equipped with a description of the time, location, along with an image feature, if you don't activate the GPS, the employee cannot do this attendance, this is intended to find out the employee is outside for work, so it is very accurate and cannot manipulate attendance. By using the GreatDay HR application, it makes it easy for HRDs to easily see the final attendance data that is captured by this application.

3.2 System Design

This section contains an explanation of system design for building management information system applications.

1. Context Diagram

The context diagram (CD) for the online attendance system using the GreatDay HR application is as follows :
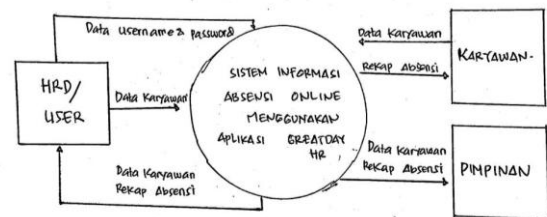

Figure 1. Context Diagram

2. HIPO

HIPO (Hierarchy plus Input-Process-Output) is a design tool and documentation technique in the system development cycle. The following is the HIPO of an online attendance information system using the GreatDay HR application.
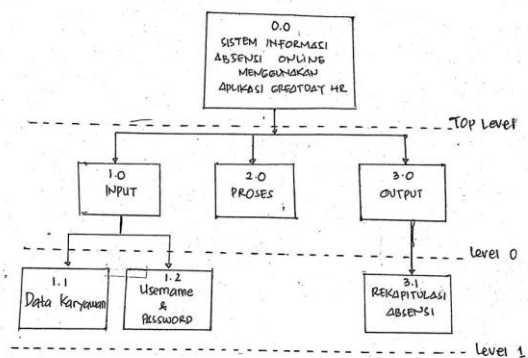

Figure 2. HIPO

3. DAD (Data Flow Diagram)

Data Flow Diagram (DAD) is a diagram that uses notation notation to describe the flow of system data, the

use of which can help to understand a system in a clear and structured manner. The following is DAD level 0 from an online attendance information system using the GreatDay HR application which is an explanation of context diagrams and HIPO.
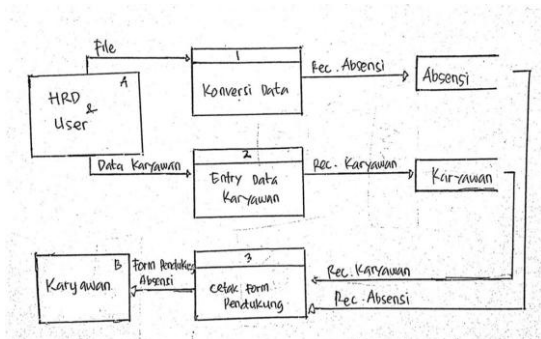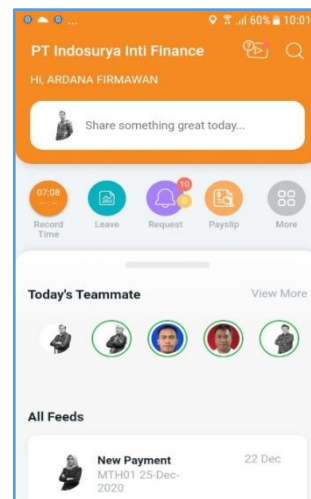

Figure 3. DAD

3.3 System Implementation

The online attendance system using the GreatDay HR application has steps that can be used to run it properly.

1. Login menu
This section is the first step to enter the application, which is to display the company name, username, and password which are usually created by the company and given to each employee to be able to do attendance online using the GreatDay HR application.

Figure 4. Login Menu

2. Main Menu Display
This section contains a display of the main menu of the GreatDay HR application, which contains a record time to start. attendance, leave, request, payslip, and others. But to start this attendance, you do it by pressing the record time button which will later enter the attendance process with the time and time that matches the company's schedule.

Figure 5. Main Menu Display

3. Attendance Process
This section is a process for doing attendance, by pressing the record time button, a display will appear to set an accurate location according to the location where the employee is, and the smartphone used must activate the existing GPS. In the next process, after setting the right location, a feature to take pictures will appear to ensure accuracy in attendance, that is, employees can take photos during working hours.
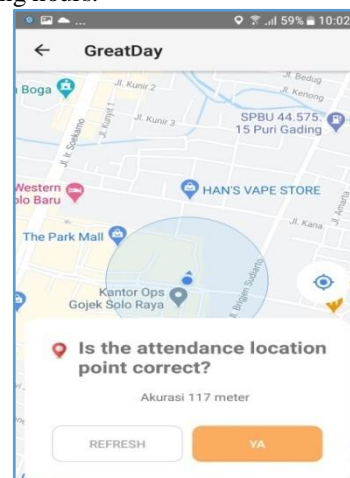

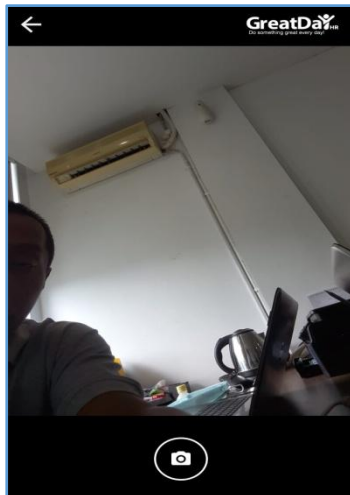Figure 6. Setting the Attendance Process Location

Figure 7. Image Capture Feature

4. Attendance Recapitulation Results

This section is the result of the attendance process that has been carried out by each employee, namely the recapitulation of attendance data to make it easier for HRD to conduct monthly evaluations of employee attendance and return hours which can be used to determine the amount of salary according to the attendance of each employee.

Figure 8. Attendance Recapitulation Results

3.4 System Testing

Testing is a system test process at the end which is also useful for testing the system. There are two system tests, namely the functionality test and the validity test. following the test:

3.4.1. Functionality Testing

In this section, the author will test the functionality of the GreatDay HR application. The functionality test is to test whether this application is running well or not. To The author tests using the black box testing method in table form as follows.

Table 1. Testing System

No	Jenis uji	Komponen sistem yang diuji	Skenario uji	Hasil yang diharapkan	Hasil yang dihasilkan	Status uji	Hasil pengujia
1	Uji normal	Form input data	Masukan data secara lengkap dan benar	Data tersimpan dengan baik dan benar	Muncul pesan berhasil	Normal	Diterima
2	Uji salah	Form input data	Masukan data secara tidak lengkap dan benar	Tidak bisa menyimpan	Tidak bisa disimnpan	Normal	Diterima
3	Uji normal	Form login	Masukkan nama perusahaan,usename,pass word dengan benar lalu klik login	Tampil halaman menu utama	Tampil halaman menu utama	Normal	Diterima
4	Uji salah	Form login	Masukkan nama perusahaan,usename,pass word dengan salah lalu klik login	Muncul pesan kesalahan	Muncul pesan terjadi kesalahan silahkan coba lagi	Normal	Diterima
5	Uji normal	Fitur lokasi	Atur lokasi yang akurat dan tekan ya	Tampil fitur selanjutnya yaitu ambil gambar	Masuk ke halaman selanjutnya	Normal	Diterima
6	Uji salah	Fitur lokasi	Atur lokasi secara tidak akurat dan tekan ya	Tidak bisa kehalaman selanjutnya	Refresh lokasi	Normal	Diterima

3.4.2. Quizoner Testing

This test contains the responses of online attendance users using the GreatDay HR application, which involves Branch Manager, Marketing, and Sales. The author uses the google form to find out the feasibility of this application, which is as follows.

Figure 9. Application Due Diligence Questionnaire

Figure 10. Result Quizoner Testing

From the SWOT analysis above, the online attendance system using the GreatDay HR application can be used and optimized properly because it is effective and efficient to facilitate companies in the attendance process and is suitable for use for the next period.

IV. CONCLUSION

Based on the results of the analysis, the following conclusions can be drawn:

1. The existence of an online attendance system that uses the GreatDay HR application at PT Indosurya Finance makes it easy for employees to do attendance which can be accessed anywhere and anytime if they work from home or meet clients outside the office, they don't have to go to the office to do attendance.
2. The mobile application is equipped with GPS and image capture features to provide access to monitoring of delays, hours of rest and absences during the application of working hours.
3. This system also makes it easier for HRD to see the results of the attendance summary of each employee without having to manually record data.
4. This analysis process also makes it easier for the company to determine whether this system is effective for the following years.
5. From the functionality testing, it can be concluded that the application runs well if it is operated in accordance with the instructions.
6. From the questionnaire testing of several employees above, it can be concluded that the online attendance system testing using the GreatDay HR application is an effective system for employees because it can help the attendance process anytime anywhere through their respective cellphones. Therefore the internet network when doing attendance must be stable so that it can proceed properly. And employees also agree if this system is used in the next period.

Based on the above conclusions, the authors propose several suggestions that can be considered:

1. It is recommended to conduct regular monitoring and evaluation of this attendance system so that the objectives and functions in the system can be implemented optimally.
2. With this new attendance system, it is hoped that it can trigger other developers to innovate more in designing the next system.
3. There must be maintenance of the current system so that the efficiency and effectiveness of the system continues to run properly and optimally.

REFERENCES

[1] Davis. 2010. Definition of Management Information Systems.

[2] Husain, Al, Jaka Prima Maulana and Yuli Widiastuti. 2016. Application System Design for Technical Maintenance Request at Raharja College. Tangerang: Raharja College

[3] Sidh, Rahmawati. 2013. The Role of Brainware in Management Information Systems. Journal of Computech & Business, Vol. 7, No.1, pp. 19-29.

[4] Niko Sumanda Sibarani. 2018. Analysis of Android Application Performance in Java and Kotlin Programming Languages.

[5] Safaat Nazaruddin. 2012. Mobile Smartphone Application Programming Concept and Digital Image Processing Theory. Yogyakarta: Publisher Andi.

[6] Muqorobin, M., & Rais, N. A. R. (2020). Analysis of the Role of Information Systems Technology in Lecture Learning during the Corona Virus Pandemic. International Journal of Computer and Information System (IJCIS), 1(2).

[7] Muqorobin, M., Kusrini, K., Rokhmah, S., & Muslihah, I. (2020). Estimation System For Late Payment Of School Tuition Fees. *International Journal of Computer and Information System (IJCIS)*, *1*(1).

[8] Solihin, Ahmad, MySQL 5 From Beginner to Advanced, Achmatim. net. Jakarta. https://www.firebase.com/features.html, accessed September 26, 2015.

[9] Muqorobin, M., Rokhmah, S., Muslihah, I., & Rais, N. A. R. (2020). Classification of Community Complaints Against Public Services on Twitter. International Journal of Computer and Information System (IJCIS), 1(1).

[10] Muqorobin, M., & Rais, N. A. R. (2020, November). ANALISIS PERAN TEKNOLOGI SISTEM INFORMASI DALAM PEMBELAJARAN KULIAH DIMASA PANDEMI VIRUS CORONA. In *Prosiding Seminar Nasional & Call for Paper STIE AAS* (pp. 157-168).

[11] Utomo, I. C., Rokhmah, S., & Muslihah, I. (2020). Web Based Distribution of Zakat, Infaq, and shodaqoh (Case Study Of Surakarta City Region). International Journal of Computer and Information System (IJCIS), 1(1).

[12] K. Kusrini, E. T. Luthfi, M. Muqorobin and R. W. Abdullah, "Comparison of Naive Bayes and K-NN Method on Tuition

Fee Payment Overdue Prediction," 2019 4th International Conference on Information Technology, Information Systems and Electrical Engineering (ICITISEE), Yogyakarta, Indonesia, 2019, pp. 125-130, doi: 10.1109/ICITISEE48480.2019.9003782.

[13] Muqorobin, M., Hisyam, Z., Mashuri, M., Hanafi, H., & Setiyantara, Y. (2019). Implementasi Network Intrusion Detection System (NIDS) Dalam Sistem Keamanan Open Cloud Computing. Majalah Ilmiah Bahari Jogja, 17(2), 1-9.

[14] Muqorobin, M., Apriliyani, A., & Kusrini, K. (2019). Sistem Pendukung Keputusan Penerimaan Beasiswa dengan Metode SAW. Respati, 14(1).

[15] Abdullah, Robi W., et al. "Keamanan Basis Data pada Perancangan Sistem Kepakaran Prestasi Sman Dikota Surakarta." Creative Communication and Innovative Technology Journal, vol. 12, no. 1, 2019, pp. 13-21.

[16] Saputra, R., & Rais, N. A. R. (2020). Online Sales System Analysis of PT. Nutrifood Indonesia through the distributor CV. Trio Sukses Mandiri Solo With Nutrimart Home Delivery (NHD) Application. International Journal of Computer and Information System (IJCIS), 1(2).

[17] Muslihah, I., Muqorobin, M., Rokhmah, S., & Rais, N. A. R. (2020). Texture Characteristic of Local Binary Pattern on Face Recognition with PROBABILISTIC LINEAR DISCRIMINANT ANALYSIS. *International Journal of Computer and Information System (IJCIS)*, *1*(1).

[18] Hikmah, I. N., & Muqorobin, M. (2020). Employee Payroll Information System On Company Web-Based Consultant Engineering Services. *International Journal of Computer and Information System (IJCIS)*, *1*(2).

[19] Nastura, S. A., & Muqorobin, M. (2020). Transaction Processing System Analysis Using The Distribution Management System (DMS) Nexsoft Distribution 6 (ND6). *International Journal of Computer and Information System (IJCIS)*, *1*(2).

[20] Muqorobin, M., & Rais, N. A. R. (2020). Analysis of the Role of Information Systems Technology in Lecture Learning during the Corona Virus Pandemic. *International Journal of Computer and Information System (IJCIS)*, *1*(2).