# Prototype Android Based Payroll Monitoring Application at PT. Anugrah Distributor Indonesia

**Nur Azizah[1], Sri Rahayu[2], Bekti Undari*[3]**
*correspondence
[1,2,3] Information Systems Study Program, Raharja University Faculty of Science and Technology
E-mail: [1]nur.azizah@raharja.info, [2]srirahayu@raharja.info, *[3]**bekti@raharja.info**

***Abstract***

*A Salary is a form of wages or rewards from rights granted by companies to employees. Usually, salaries are given to workers also differ according to position and class level. At PT Anugrah Distributor Indonesia is one of the companies engaged in retail sales. The amount of wages varies as well as determining commissions for each sales process from each unit. Become a complexity factor in determining the amount and salary for employees. In the process of recording and calculating salaries so far using Ms. Excel. Where accountants (finance) as data processors have a central role in processing them experiencing delays in displaying data. The results of the management process and salary reports are in the form of paper and files (softcopy). Delays in displaying data have an impact on the salary that must be reported by the leadership. From these problems, problem-solving is obtained by making an android-based payroll monitoring application prototype, can display salary data and make it easier for leaders to see the salary that has been reported anytime and anywhere. This research was made using observation methods, interview methods, SWOT analysts and literature studies. Using UML as a modeling design.*

***Keywords:*** *Salary, Android, Information Technology, Application*

## 1. INTRODUCTION

A salary is a form of wages or rewards from the rights granted by companies or agencies to employees or workers. Usually, salaries are given to workers also differ according to their position and class level. Employee salaries and benefits are very influential on employee performance. So it can be concluded that currently wages or salaries are the most influential factors on employee performance and employee productivity and even the performance of the company itself. On the other hand, each company was established to achieve certain goals and obtain profits from operations, have good growth, and maintain the survival of the company.

All of the goals to be achieved are certainly able to be achieved by the company by utilizing all human resources (*human resources*) obtained and owned by the company. Good human resources in the company must be well managed and systematically so that the goals expected by the company can be achieved.

PT Anugrah Distributor Indonesia is one of the companies engaged in retail sales. Whereat the end of each accounting period (months) payroll processes for its employees and the preparation of salary reports as a responsibility to the leadership of the company. The employees in this company consist of several employees with positions ranging from a manager, marketing, administration, sales and warehouse staff. The amount of wages varies and the commission determination for each sales process of each unit. Become a factor in the complexity of determining the amount and payment of salaries to employees. In the process of recording and calculating salaries so far using Ms. Excel. Where accountants (finance) as data processors who have a central role in processing it experience delays in displaying data. The results of the management process and salary reports are in the form of paper and files (softcopy). Delay in displaying data has an impact on the salary that the leadership must report.

The existence of a smartphone Android as one of the latest technology products in the field often help accountants (finance) cell phone is expected to display employee salary data effectively and efficiently. The smartphone's ability of Android to always connect to the internet can help leaders monitor (monitoring) incoming data in real-time. The notification feature of notifications the smartphone is Android expected to be able to provide when new data is available. The nature of a smartphone Android that is easy to carry can make it easier for leaders to access employee salary data information anywhere. Based on the description of the background above in this study the author takes the title "Prototype Android Based Payroll Monitoring Application at PT. Anugrah Distributor Indonesia".

## 2. RESEARCH METHODS

The research method used in the preparation of this research using data collection methods, design concepts, and analysis of data SWOT. collection conducted in this study using interviews and interviews, the data and information obtained from interviews and interviews were debriefing on ducted through direct with stakeholders namely Mr. Dendy as the part responsible for activities in the factory. Next, make observations by going directly to the research site at PT Anugrah Distributor Indonesia. Data and matters needed in making an Android Based Payroll Monitoring Application Prototype at PT. Anugrah Distributor Indonesia grace that will be made has been obtained from the observation method. The next step is to conduct a literature study by finding the data needed as a reference and reference material, the data is obtained from journals that have been published previously and that have been included in the literature review. In addition to a literature review, data collection is also carried out using a literature study, data obtained through literature study is material that is used as reference material and references from various sources.

After the data collection method has been completed, what will be done next is the design concept stage using UML (*Unified Modeling Language*). Below is an elaboration of the design method using the UML system that is running:
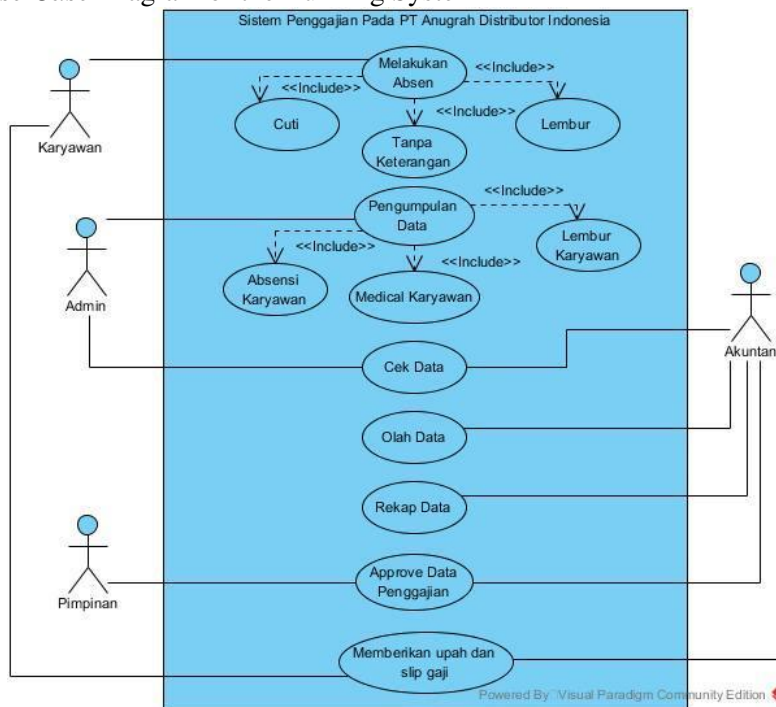
a) *Use Case* Diagram of the Running System



Figure 1. Use Case Running System

*Use case* diagram in Figure 1the process of the Karawaci Medika Medical Clinic Medical Record Process that is currently running, consisting of:

1. There is a system covering the process of running activities
2. There are 4 *actors* in the process of running activities, namely employees, accountants, admin and leadership
3. 8 *use case* activities by *actors*
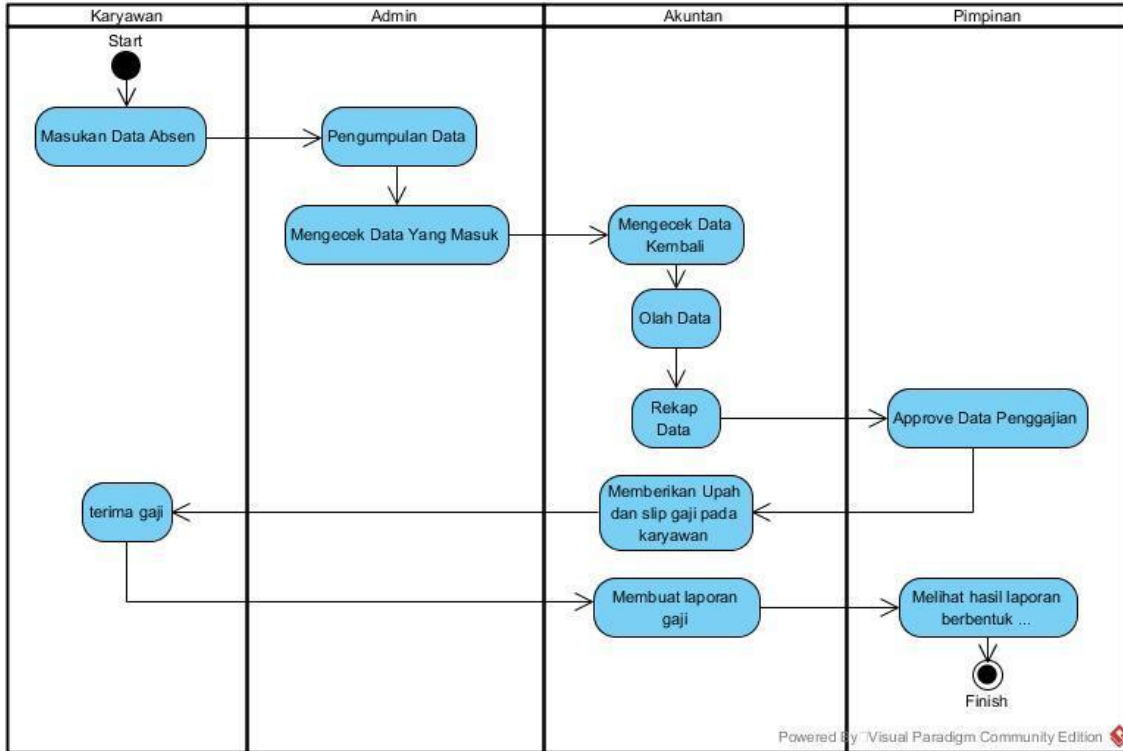
b) *Activity* Diagram Current Systemdiagram system



Figure 2 *activity* that runs

*Activity* diagram in Figure 2 medical record registration process Karawaci Medika Clinic that is currently running, consists of:

1. There is 1 *initial node*
2. There is 1 *final node*
3. There are 4*swimline* (employees, admins, accountants and leaders)
4. There are 11*actions* that explain the storyline *activity* diagram

In addition to the data collection methods and design concept methods, the next is to conduct a SWOT analysis method. According to Rangkuti (2013: 14-15) argues that the SWOT analysis is the systematic identification of various factors to formulate a company's strategy. An analysis is based on the logic that maximizes strength(Strength)and opportunities(Opportunities), but simultaneously can minimize your weaknesses(Weaknesses) and threats(Threats). The strategic decision-making process is always related to the development of the company's mission, goals, strategies, and policies. Thus, strategic planning (strategic planner) must analyze the factors of the company's strategy (strengths, weaknesses, opportunities, and threats) in the current conditions. This is called Situation Analysis. The most popular model for situation analysis is the SWOT Analysis[1].

Table 1. SWOT Analysis

| | Strength(Strength) | Weakness(Weakness) |
|---|---|---|
| SWOT MATRIX Indonesia PT Anugrah Distributor | 1. In the process, data is already using computers 2. Have many parts are clear and do not double post | 1. Using paper in reporting. 2. Storage piled be arranged neatly |

| Opportunity(Opportunity) | Threat(Threat)) |
|---|---|
| 1. Allowing students to observation and interviews to develop clinical facilities | 1. Advancement of Computer Technology and Information |

Literature Review

Benefits of Literature review according to Khanna Tiara et al namely to identify gaps, avoid remakes, identify methods that have been done and continue the previous research.[2] Some Literature Review in this research, among:

1. Other research made by Lisa Kurnia and Noor Ageng Setiyanto, entitled "Devices for Detecting Damage Detecting Android 3G Network Smartphones using method Forward Chaining". In this study describes a system helping users or smartphone technicians to diagnose smartphone damage in a relatively short time.[3]

2. Research conducted by Leo Ade Putra and Arif Rahman Hakim entitled "Smart Light Control System on Android-Based Smarthome using Fuzzy Logic Control Method". In that study, explaining a system can overcome the problem of turning on, turning off, explaining and dimming house lights.[4]

3. Research by conducted Ketut Dedy Suryawan & GAI Mirah Gressia M , entitled "Technology Near-Field Communication (NFC) for Media Promotion". In that study, explaining a system can help companies that do promotions more attractively and efficiently by utilizing NFC technology on mobile phones.[5]

4. The study prepared by green Ferry Mandias and Devid Runtuwene entitled Application "Progress Student Notifier Android Based at the University ofKlabat".The study describes a system can help students in monitoring the progress of learning, and a lecturer or teacher in informing class value.[6]

5. Research by conducted Edson Yahuda Putra, Andria Wahyudi and Andrew Tumilaar entitled "Virtual Reality 360 Interactive Digital Tourism of Tomohon City with Stereoscopic Display". In this study explaining about a system, technology allows users to visit virtual tourist sites[7]

## 3. RESULTS AND DISCUSSION

Final results obtained from the research method, the Android Based Payroll Monitoring Application Prototype was made at PT. Anugrah Indonesian Distributor will be used to support the payroll report activities that have been processed by the admin and can be seen easily by the leadership. This prototype is in the form of ideas/ideas taken from problems that arise in PT. Anugrah Distributor Indonesia. This prototype is also designed so that payroll reports are kept neatly and well regularly. Can provide convenience to leaders in seeing payroll reports anywhere and anytime and other benefits for the company, namely the use of technology that develops very quickly can also be applied to problems existing in the company, Below is a translation of the design method using the proposed UML system: Proposed
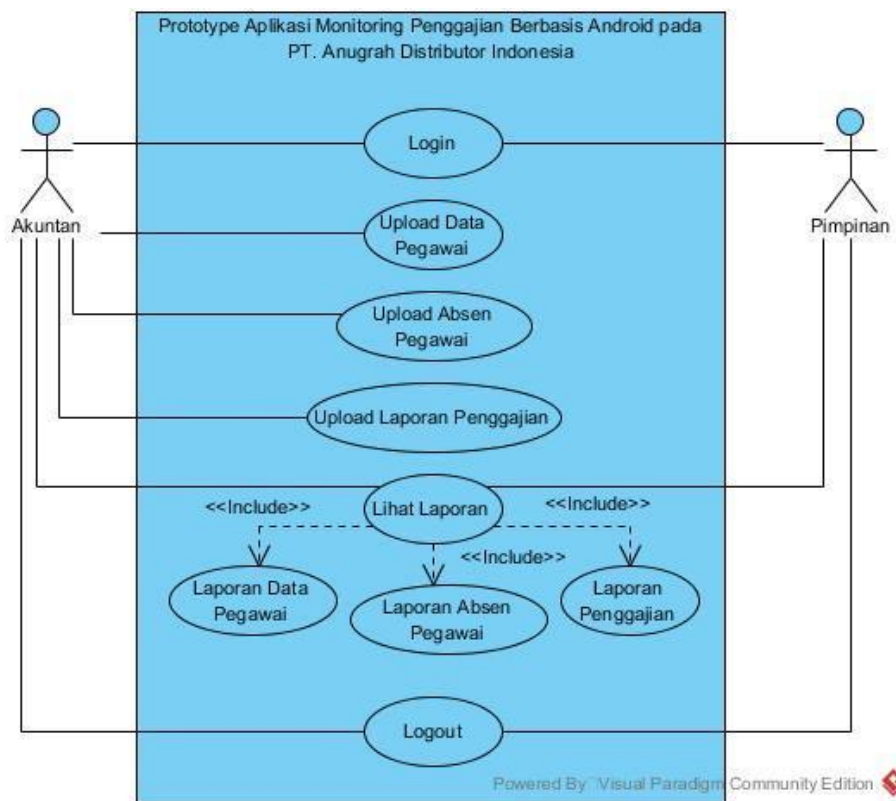
1. *Use* diagram diagram

Figure 3*use case* proposed systemdiagram

In Figure 3 the process of Prototype Android Payroll Monitoring Application Prototype process at PT. The grace of the Indonesian Distributor that is being proposed, consists of:

1. There is 1 system covering the process of ongoing activities
2. There are 2 actors in the process of ongoing activities, namely accountants and leaders
3. 9 use case activities by actors

2. Program design



Figure 4*Register page*

In Figure 4 the user registers and acts as who is on this application.
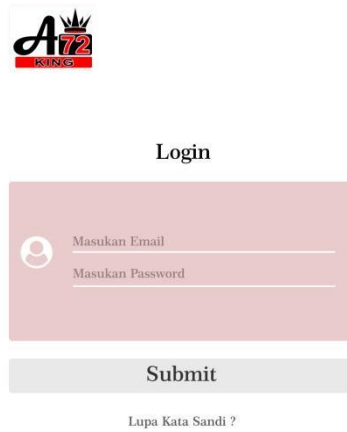
Figure 5*Login page*

In picture 5 if you have registered, then enter your email and password that were previously registered in the application.
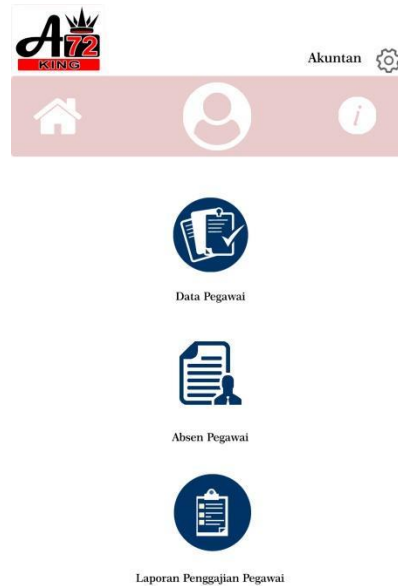


Figure 6 The Accountant Log

In page 6 if successful login will display the home page like the picture above, the user enters the application as an accountant.
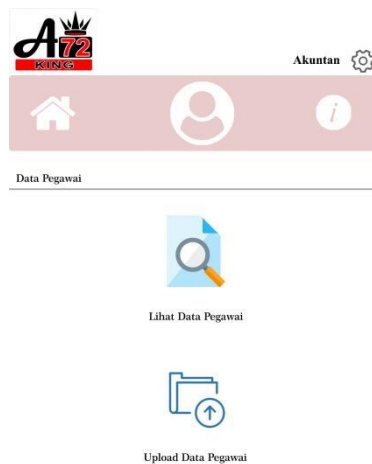


Figure 7 Menu Employee Data on Accountants

In Figure 7 users as accountants have more access rights and flexibility because they can upload employee data, employee absences and employee payroll reports on the application.
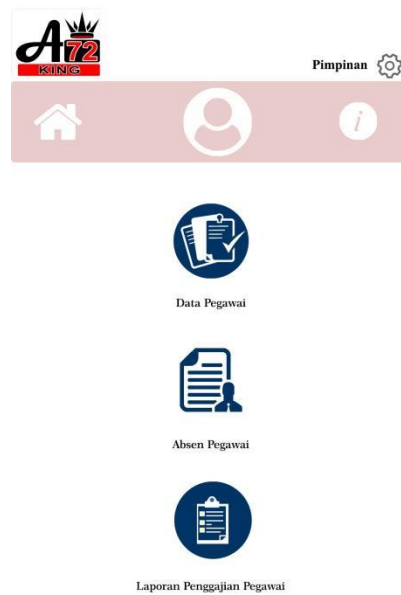


Figure 8 Leader Login Page

In figure 8 if the user is logged in as a leader, the same appearance as the accountant will remain limited to the features of the application.
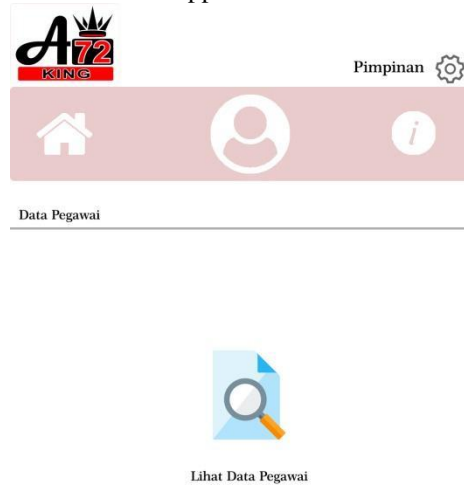


Figure 9 Employee Data Menu At Lead

Figure 9, if the leader select employee data menu and the display appears as above. The feature that appears in the application is that it only sees the final data that has been uploaded by the accountant.

## 4. CONCLUSION

Based on the results and discussion as well as the results of the analysis and design carried out, concerning the Android Based Payroll Monitoring Application Prototype at PT. Anugrah Distributor Indonesia presented the following conclusions:

1. Facilitating leadership in seeing employee data reports, employee absences, and employee payroll reports anywhere and anytime.
2. Minimize data delays reported because if the accountant finishes processing the data there is no need to print and wait for the leadership to come to the office. Simply upload on the application and the leader will see.

## 5. SUGGESTION

Suggestions for the development of the Android-Based Payroll Monitoring Application Prototype at PT. Indonesian Distributor Award to be better, among others:

1. It can maximize the system that has been made, it is necessary to have training for accountants and leaders on how to use the system to be more understood and understood and the system can improve performance and can be useful for pharmacies.
2. The system needs to be evaluated periodically so that further improvements are made following company changes and developments.

## REFERENCES

[1] Rangkuti, Freddy. 2013. *Technique of Dissecting Business Case SWOT Analysis How to Calculate Weight, Rating, and OCAI*. PT. Gramedia Library Main. Jakarta.

[2] Tiara, Khanna, Mukti Budiarto, Olis rosmawati, 2017, "Optimizing MIBEW Messenger to improve iDu Help services! Online at Higher Education ". STMIK Raharja: ICIT Journal. Vol.3 No.1.

[3] Kurnia, Lisa Kurnia &Noor Ageng Setiyanto, 2017,"ADevice to Detect Damage of Android Smartphone 3G Network Using Method *Forward Chaining*". CSRID Journal. Vol.9 No.1.

[4] Putra, Leo Ade Putra,Arif Rahman Hakim, 2018,"Smart Light Control System on Android-Based SmarthomeFuzzy Logic Control MethodUsing". CSRID Journal. Vol.10 No.1.

[5] Suryawan, I Ketut Dedy Suryawan, GAI Mirah Gressia M, 2018,"Technology *Near-Field Communication* (NFC) for Media Promotion". CSRID Journal. Vol.10 No.1.

[6] Mandias, Green Ferry Mandias, Devid Runtuwene, 2019,"Application-Based *Notifier Student Progress* Androidat the University Klabat"Smart .Cogito Journal. Vol. 5 No.1

[7] Putra, Edson Yahuda Putra, Andria Wahyudi, Andre Tumilaar, 2018,"Virtual Reality 360 Interactive Digital Tourism of Tomohon City with Stereoscopic Views" .Cogito Smart Journal. Vol. 4 No.1