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Information System Design Reminder Inventory Control At PT Nuansa Timur Lestari

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Abstract

The current information needs in the business world to be very important in determining the progress of a company. A good activity on a single company or technology is also determined by the available information. PT Lestari Eastern Nuances is a company engaged in the restaurant. The logging system supplies the raw materials of food are running currently still using Microsoft Excel to record incoming and outgoing raw food. The current running system still has many flaws and weaknesses as it takes quite a long time to figure out the amount of supplies of goods raw materials because an admin shed have to calculate the physical stock quantities directly, the occurrence of the difference in the number of requests the raw material with raw material expenses due to miscalculations by admin warehouse, takes a long time to make a request and expense report raw materials causing the company's performance be hampered, the absence of a reminder to remind Admins about the number of warehouse stock of raw materials so that when the raw materials needed by the chef stock no. Based on existing problems then needed a system to help the admin staff stock in managing demand and pengeluaran raw material so that it doesn't happen the difference in stocks of raw materials. The system will be created using the PHP programming language and the Mysql database, the method of analysis PIECES and using a systems development method in System Development Life Cycle (SDLC).

Keywords: PHP, MySQL, Query, Expenses, Raw, Restaurant

1. Introduction

Nowadays information needs in the business world become very important in determining the progress of a company. Good activity in a company or technology is very much determined by the information available. To manage the available information, information technology is needed that can properly organize company data in a structured and easily understood manner.

A company or organization must have the main goal of being developed and developing. An important key in advancing a company or organization is with a fast and precise information system. These goals make companies continue to update information systems technology in the current era of globalization. Seeing the increasingly rapid technological development, the company needs a system that is reliable in collecting, storing and processing data into useful information so that work gets better.

PT Nuansa Timur Lestari is a company engaged in restaurants. The current food raw material inventory system is still using Microsoft Excel to collect data in and out of food raw materials. The current system still has many shortcomings and weaknesses such as requiring a long time to find out the amount of inventory of raw materials because the warehouse admin must calculate directly the amount of physical stock, the difference in the number of requests for raw materials with the expenditure of raw materials due to calculation errors by the admin warehouse,

it takes a long time to make a report on the demand and expenditure of raw materials, causing the company's performance to be hampered, there is no Reminder to remind the warehouse admin about the amount of raw material stock so that when raw materials are needed by the stock chef is not available.

2. Research Method

Data collection methods used in this study include:

2.1. Observation

Observe and carry out systematic recording of the elements studied, and researchers conduct a direct review of PT Nuansa Timur Lestari located in the EASTERN COFFEE TM Summarecon Mall Serpong restaurant. In this way, the writer can see clearly what the problems are.

2.2. Interview

Researchers conduct interview or question and answer methods to obtain data. The researcher also conducted question and answer verbally to the admin division with the speaker Mr. Steven Wijaya.

2.3. Literature Study

Conduct library studies to obtain more accurate data by collecting theoretical data sourced from lecture results, literature from library book collections, and other sources related to the preparation of this thesis.

3. Results and Analysis

3.1. Analysis Method

In this method the authors use PIECES analysis (Performance, Information, Economic, Control, Efficiency, Service). From this analysis can usually be seen several major problems. This is important because usually what appears on the surface is not a main problem, but only a symptom of the main problem.

3.2. Design Method

The system design method used in this study is the SDLC (System Development Life Cycle) method which is a whole of a system change process, this method has 5 stages, namely planning, analysis, design, testing and implementation, maintenance.

3.3. Discussion

In this research, we will explain the inventory control reminder system design at PT Nuansa Timur Lestari. Judging from the problems that exist in the running system, alternative solutions to problems that can help the system work the admin stock is to make a new web-based system design, so that the data input is faster, more precise and accurate and up to date, and can maximize resources computers in the form of hardware or software so as to increase the productivity of the stock admin section.

3.4. PIECES Analysis

Researchers use the PIECES method to evaluate performance, information, economy, control, efficiency, and service on a running system. The following results of the analysis of the PIECES system running.

Table 1. Analysis of PIECES

No.	Type of analysis	Weaknesses of the current system	Proposed system
1.	<i>Performance</i>	1. Data collection of requests and expenditures for foodstuffs is still done by recording in the book so that there are still errors when data collection and expenditure of food is collected.	1. The proposed system consists of 4 (four) users, namely admin stock, f & b, warehouse admin and chief admin. Each user is given access rights in accordance with their duties.

		<p>2. The system has not been able to provide real-time information on food demand and expenditure reports to the admin head.</p> <p>3. 3. It takes a long time to search data on food demand and expenditure.</p>	<p>2. The system can provide information on food demand and expenditure reports in real time to the head admin.</p> <p>3. The system does not require a long time to search data on demand and material expenditure</p>
2.	<i>Information</i>	<p>1. The information generated about the food demand and expenditure report is less well organized, making it difficult for the stock admin to submit information on food demand and expenditure.</p> <p>2. Information requests and expenditure reports for groceries to the head admin sometimes experience delays.</p>	<p>1. The information generated is neatly organized, making it easier for admin stock in making reports on requests and expenditure of foodstuffs to the head of the admin.</p> <p>2. There is a page that can be accessed by the head of the admin to check the food demand and expenditure reports themselves.</p>
3.	<i>Economics</i>	<p>1. Requires a lot of employees to do activities.</p> <p>2. Requires operational funding expenses such as telephone payments.</p>	<p>1. Does not require a lot of employees to do activities.</p> <p>2. No need to spend operational funds because the stock admin can directly access the transaction history of food demand and expenditure.</p>
4.	<i>Control</i> (kontrol atau keamanan)	<p>1. System security is still not optimal</p> <p>2. Officers who are not concerned can open or change data.</p>	<p>1. Security in the proposed system becomes more optimal.</p> <p>2. The existence of the login menu makes unauthorized employees unable to access data.</p>
5.	<i>Efficiency</i> (efisiensi)	<p>1. Still takes a long time to make a report on the demand and expenditure for food.</p> <p>2. The absence of a search menu, making it difficult for stock administrators to search for the history of demand and food transaction transactions made in the previous month.</p>	<p>1. The proposed system is more efficient because it can provide information on demand and food expenditure reports on a daily, monthly and annual basis.</p> <p>2. The search menu makes it easier for stock administrators to search the transaction history of requests and expenditures for food items in the previous month.</p>
6.	<i>Service</i> (pelayanan)	<p>1. The system is experiencing delays in delivering information about food demand and expenditure reports.</p>	<p>1. The proposed system can reduce service delays so that information on food demand and expenditure reports can be quickly received and processed immediately.</p>

		2. It takes a long time to search the transaction history of food demand and expenditure.	2. Does not require a long time to search the transaction history of requests and expenditure for groceries.
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3.5. Use Case Diagram Inventory Control Information System Running

Figure 1 below is a Use Case Diagram to generally describe the system in the current Inventory Control that illustrates the flow of the system with the use case and the actors (users) involved. Based on the diagram, 4 actors are carrying out activities, namely F&B, stock admin, warehouse admin, chief admin. Then there are 11 use cases that are in the system.

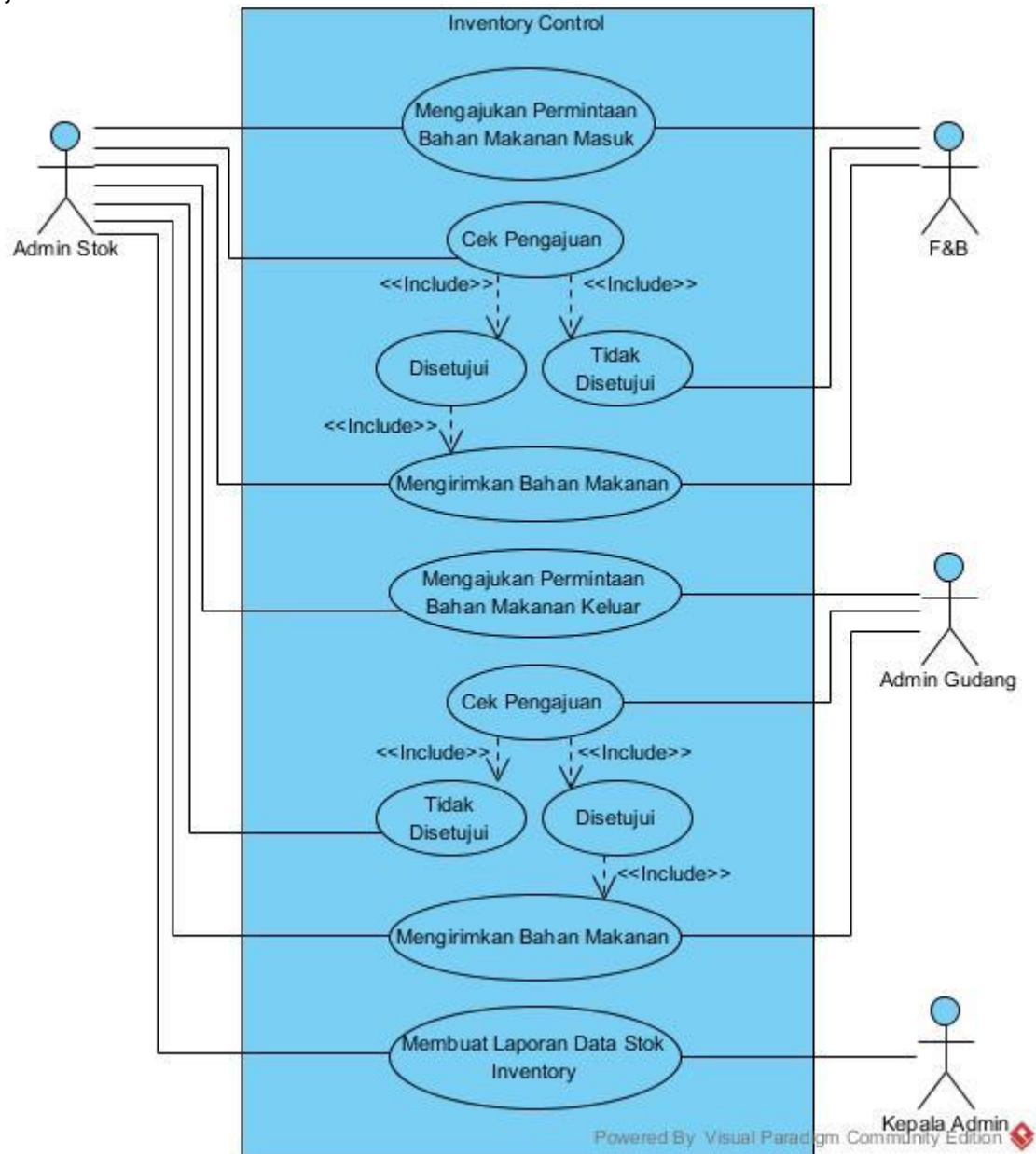


Figure 1. Use Case Diagram of Inventory Control Information System

3.6. Proposed System Design

After analyzing and researching the system that runs in the inventory control section at PT Nuansa Timur Lestari, the next step is to discuss the proposed system design to be

built. The proposed procedure aims to simplify the current system, which is to propose an inventory control reminder system. The design or design of a proposed system that aims to perfect the old system by giving a clear picture or view according to the system design process from the beginning to the end of the study. In analyzing the proposed new procedures in this study the Visual Paradigm for UML Enterprise Edition Ver program was used. 12.1 to illustrate use case diagrams, activity diagrams, sequence diagrams, class diagrams and state machine diagrams.

3.7. Use Case Diagram

Below this is the proposed Use Case Diagram.

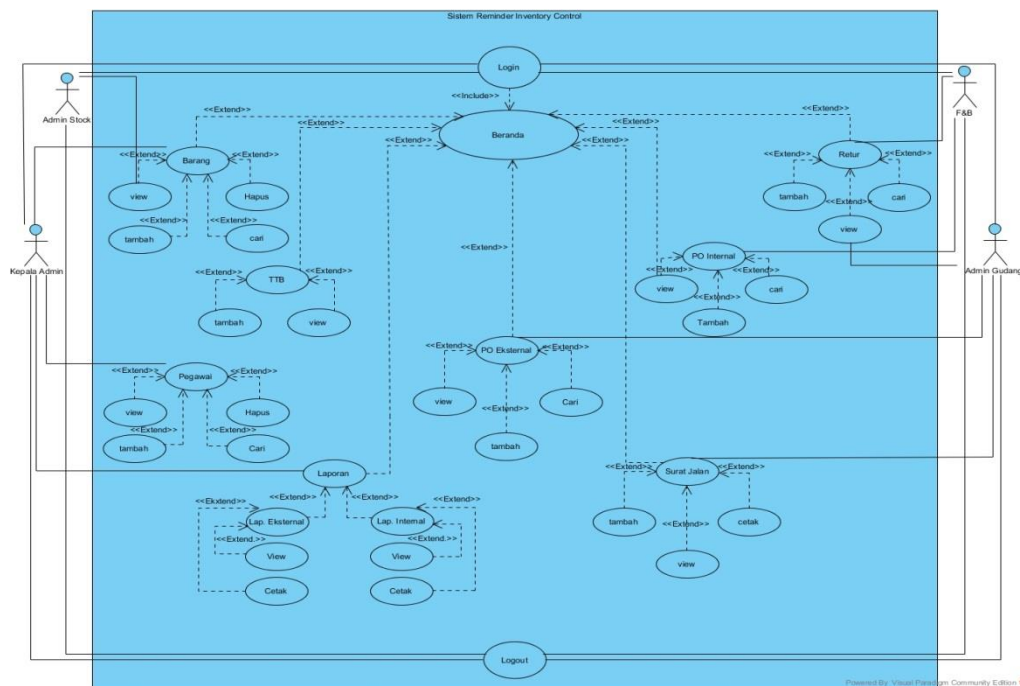


Figure 2. Use Case Diagram of Inventory Control Reminder Information System

From figure 2 above, there are 5 (five) actors, namely: F&B, Admin stock, Warehouse Admin, Chief Admin and Super admin. Then there are 11 (eleven) use cases in the system including: Login, Logout, Home, Internal PO, Returns, Goods, External PO, TTB, Employees, Travel Documents and Reports.

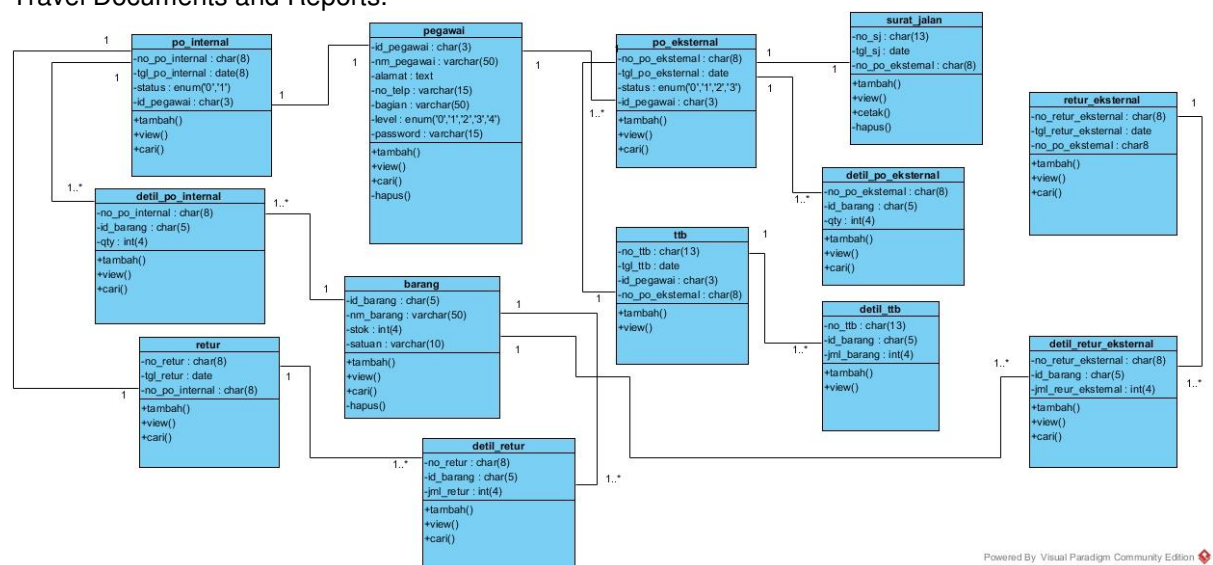


Figure 3. Class Diagram of Inventory Control Reminder Information System

From figure 3 above, there are 13 (thirteen) classes, a set of objects that share attributes and operations and there are 13 (thirteen) associations, the relationship between one object and another object.

3.8. Display System Design

Below is a look at the design of the archive service system :

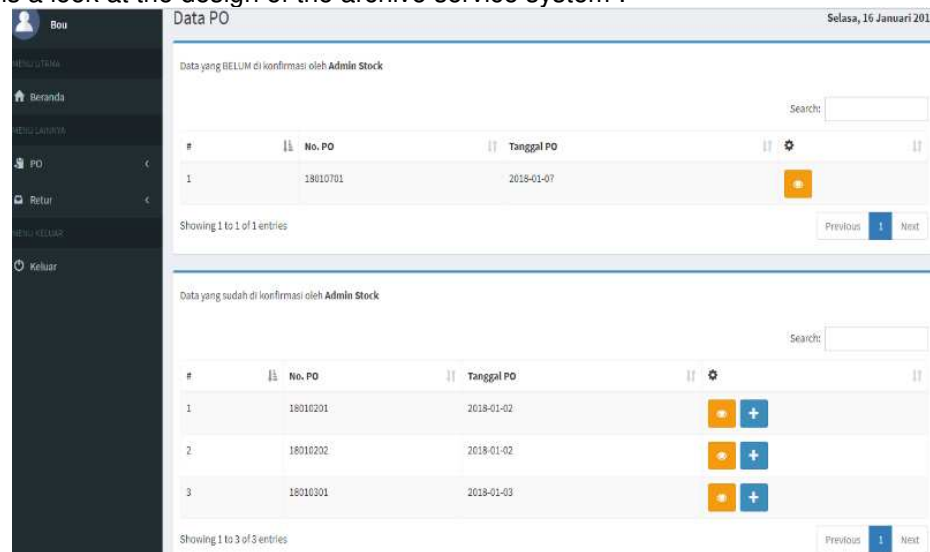


Figure 4. Display of F&B Internal PO Menu Data

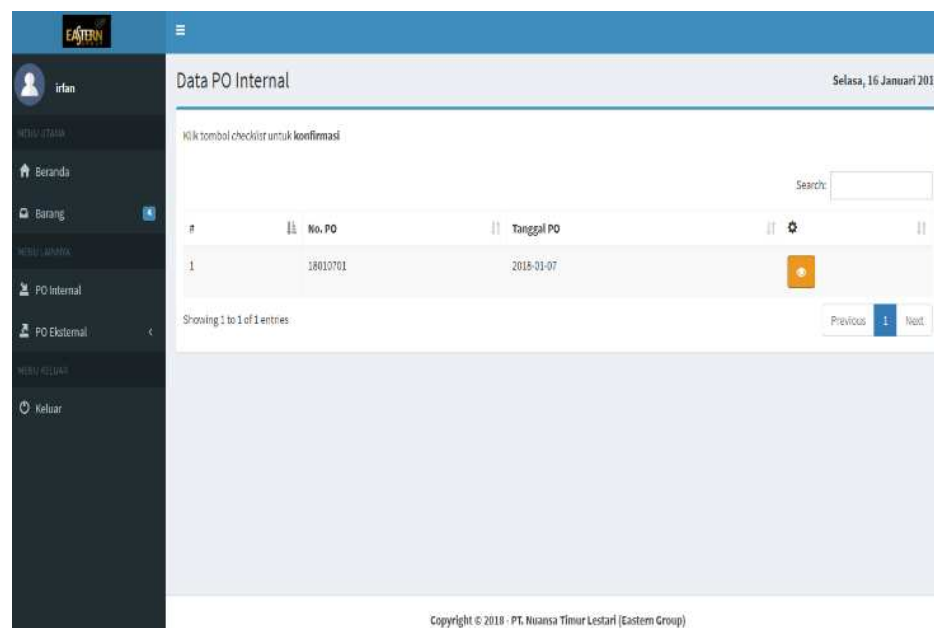


Figure 5. Display of PO Internal Admin Stock Data Menu

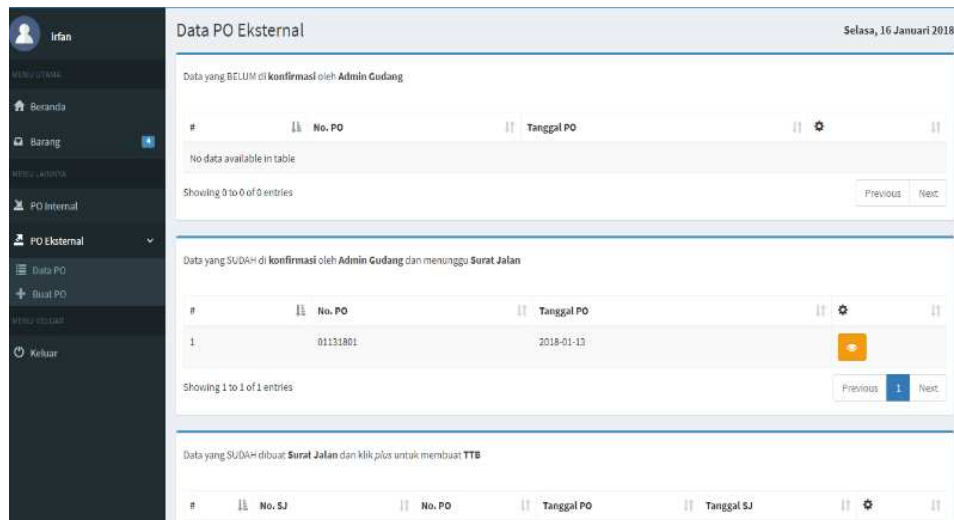


Figure 6. Display of External Admin Stock PO Menu Data

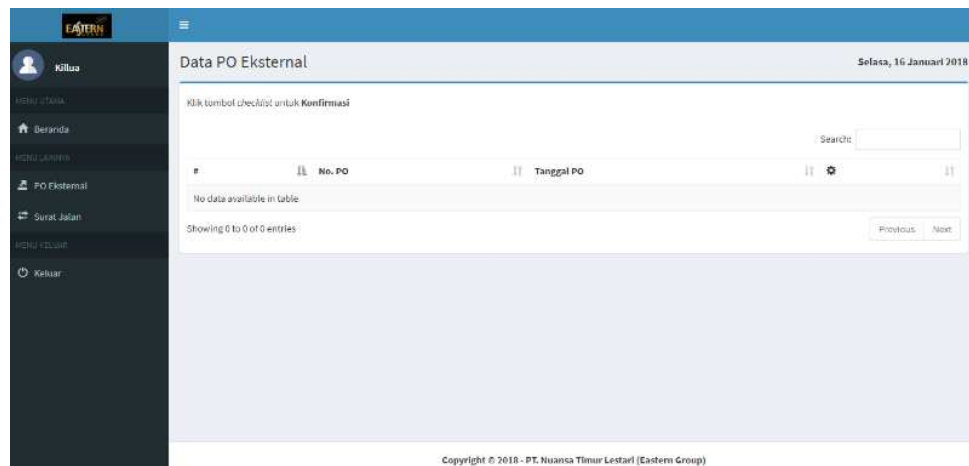


Figure 7. Display of Warehouse External PO Data Menu Display

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Laporan

PO Internal

Bulan : 01

Tahun : 2018

#	No.PO Internal	Tgl.PO Internal
1	18010201	2018-01-02
2	18010202	2018-01-02
3	18010301	2018-01-03
4	18011301	2018-01-13
5	18011302	2018-01-13
6	18012001	2018-01-20
7	18012002	2018-01-20
8	18012003	2018-01-20
9	18012004	2018-01-20
10	18012005	2018-01-20
11	18013101	2018-01-21
12	18012102	2018-01-21

Figure 8. Employee Menu Display at Admin Head

#	ID Pegawai	Nama Pegawai	Alamat	No. Telepon	Bagian	
1	P00	Kilua	Tangerang	08180009999	Admin Gudang	[Edit] [Delete]
2	P01	Irten	Jakarta	08180001111	Admin Stock	[Edit] [Delete]
3	P02	Sou	Tangerang	08180009090	F&B	[Edit] [Delete]
4	P03	Near	Jakarta	08180009090	Kepala Admin	[Edit] [Delete]
5	P05	Hardi	Perum	081266058765	F&B	[Edit] [Delete]

Showing 1 to 5 of 5 entries

Previous 1 Next

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Figure 9. Employee Menu Display in the Admin Head

4. Conclusion

Based on the research that has been done, the following conclusions are obtained Inventory control system of demand and expenditure of food raw materials that are currently running at PT Nuansa Timur Lestari still use Microsoft Excell for processing its data so that the current system is not yet running well. Constraints that occur in the inventory control system of demand and expenditure of food raw materials that run currently there are shortages including requiring a long time to find out the amount of inventory of raw materials because the warehouse admin must calculate directly the amount of physical stock, the difference in the amount of material demand raw with the expenditure of raw materials due to miscalculations by the warehouse admin, requires a long time to make a report on the demand and expenditure of raw materials, causing company performance to be hampered, there is no Reminder to remind the warehouse admin about the amount of raw material stock so that when raw materials are needed by the chef stock does not exist.

References

- [1] Harfizar, H., Yuliana, K., & Afiffudin, M. (2017). PERANCANGAN SISTEM INFORMASI PENDATAAN KARYAWAN PADA PERUSAHAAN JASA BERBASIS WEB. *SENSI Journal*, 3(2), 190-207.
- [2] Authority, I Gusti Made Satriya. 2015. Aplikasi Sistem Reminder Masa Kadaluaarsa Berbasis GIS dengan Platform Android. *Merpati Vol.3, No.1, April 2015 ISSN: 2251-3006 Udayana University*.
- [3] Karundeng, A., Saerang, D., & Gamaliel, H. (2017). Analisis Perlakuan Akuntansi Atas Persediaan Barang Jadi Sesuai Dengan PSAK No. 14 Pada PT. Fortuna Inti Alam. *Jurnal Riset Akuntansi Going Concern*, 12(01).
- [4] Parry, Glenn. Linda Newnes and Xiaoxi Hung. 2011. Goods, products and services. In *Service Design and Delivery*. US: Springer.
- [5] Mulyani, S., Suzan, L., Dagara, Y., Yuniarti, E., & Alam, M. (2019). *Sistem Informasi Akuntansi: Aplikasi Di Sektor Publik: Panduan Praktis Analisis dan Perancangan Implementasi SIA di Sektor Publik*. Unpad Press.
- [6] Waspodo, B., Fajar, A. N., & Prayitno, N. H. (2015). Sistem informasi pelayanan izin mendirikan bangunan dan peruntukan penggunaan tanah pada badan penanaman modal dan pelayanan perizinan kabupaten sumedang. *STUDIA INFORMATIKA: JURNAL SISTEM INFORMASI*, 8(2).